Pacific Gateway Project

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Draft Environmental Impact Report

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Prepared by

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Pacific Gateway Project
Draft Environmental Impact Report

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1. Introduction

1. INTRODUCTION

1.1 TYPE AND PURPOSE OF THE EIR

The Pacific Gateway Project Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, Public Resources Code (PRC) Section 21000-21189, as amended, and the Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations (CCR) Title 14, Section 15000-15387 (CEQA Guidelines). San Joaquin County is the lead agency for the environmental review of the Pacific Gateway Project (proposed project) evaluated herein and has the principal responsibility for approving the proposed project. As required by Section 15121 of the CEQA Guidelines, this EIR will (a) inform public agency decision-makers, and the public generally, of the environmental consequences of approving the proposed project, (b) identify possible ways to minimize the significant adverse environmental effects, and (c) describe reasonable and feasible project alternatives which reduce environmental effects. The public agency shall consider the information in the EIR along with other information that may be presented to the agency.

As provided in the CEQA Guidelines Section 15021, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. The public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social issues. CEQA requires the preparation of an EIR prior to approval of any project that may have a significant effect on the environment. For the purposes of CEQA, the term "*project"* refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]). With respect to the proposed project, the County has determined that the proposed development is a "*project"* within the definition of CEQA, which has the potential for resulting in significant environmental effects.

The lead agency is required to consider the information in the EIR along with any other available information in deciding whether to approve the proposed project. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, alternatives, growth inducing impacts, and cumulative impacts.

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. San Joaquin County's overall strategy for structuring the EIR will be to comprehensively evaluate the potential physical environmental impacts of the proposed project so as to minimize, and to the extent feasible, avoid, the need for future environmental review as the proposed project builds out over time. This type of EIR is typically referred to as a *project-level EIR* (CEQA Guidelines Section 15161). As stated in Section 15161 of the CEQA Guidelines, a project-level EIR should focus primarily on the changes in the environment that would result from a specific development project, and shall examine all phases of the project, including planning, construction, and operation.

The proposed project includes project-level detail for the Initial Phase of the project. While a comparable level of detail is not yet available for subsequent components of the Pacific Gateway Specific Plan, San Joaquin County has provided meaningful and programmatic environmental

review related to construction and operations of the balance of full project buildout, thus minimizing the need for future phase-specific environmental review. As explained in *Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) (227 Cal.App.4th 1036, 1047-1048), courts strive to avoid attaching too much significance to titles in ascertaining whether a legally adequate EIR has been prepared for a particular project. The level of specificity of an EIR is determined by the nature of the project and the "rule of reason," rather than any semantic label accorded to the EIR.

1.2 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

"Responsible agency" means a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purpose of CEQA, the term responsible agency includes all California public agencies other than the lead agency that have discretionary approval power over the project or an aspect of the project. The U.S. Army Corps of Engineers (USACE), U.S. Bureau of Reclamation, San Luis and Delta-Mendota Authority, Department of Water Resources, San Joaquin Valley Air Pollution Control District (SJVAPCD), Central Valley Regional Water Quality Control Board (CVRWQCB), California Department of Transportation (Caltrans), City of Tracy, San Joaquin County Local Agency Formation Commission (LAFCo), San Joaquin Council of Governments (SJCOG), San Joaquin Airport Land Use Commission (SJALUC), and Byron-Bethany Irrigation District (BBID) are identified as responsible agencies.

"Trustee agency" means a State agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. The only known possible trustee agency is the California Department of Fish and Wildlife (CDFW).

Although not subject to California law and, thus, outside the definitions of responsible agency or trustee agency, the U.S. Army Corps of Engineers (USACE) and U.S. Fish and Wildlife Service (USFWS) may also be called upon to grant approvals under federal law necessary for the development of the proposed project. The above agencies do not have duties under CEQA but, rather, are governed by a variety of federal statutes, such as the Clean Water Act, which governs the dredging and filling of waters of the U.S. (e.g., wetlands), and the federal Endangered Species Act, which requires USACE to consult with the USFWS as part of the review process for any wetland or fill permits that may be required.

1.3 PROJECT SUMMARY

The following includes a discussion of the project background, as well as a summary of the proposed project.

Project Background

A previous application was proposed for the Pacific Gateway Project to develop a 1,612.90-acre site generally located east of Interstate 580 (I-580) and north of State Route (SR) 132 with a range of warehousing, office, limited industrial, and commercial uses, along with a university and Veterans of Foreign Wars (VFW) post.

The Pacific Gateway applicants, in response to community and staff feedback, withdrew the previous application, and filed new applications on September 27, 2024, for a 1,576.70-acre site located generally south of the lands part of the previous application. The applicants indicated their primary intent in relocating the project was to address concerns about potential for extensive truck traffic along Durham Ferry Road, as well as potential land use compatibility questions.

The currently proposed project continues to include a range of warehousing, office, limited industrial, and commercial uses, along with the university and VFW post, as discussed in further detail below.

Proposed Project

The approximately 1,576.70-acre project site is located south of the City of Tracy in an unincorporated area of San Joaquin County, California. The project site is generally located north of I-580 and SR 132. The site is identified by the 34 Assessor's Parcel Numbers (APNs) listed within Table 3-1 in Chapter 3, Project Description, of this EIR.

The project site is generally bound by Bird Road to the east; the Delta-Mendota Canal to the north; Tracy Boulevard to the west; and the California Aqueduct and SR 132 to the south. South Chrisman Road is a designated Surface Transportation Assistance Act (STAA) Truck Route and provides north-to-south circulation within the area, while east/west access is limited to private, unimproved farm roads. The project site is currently comprised of agricultural land and an agricultural machinery manufacturing facility. Surrounding existing land uses include agricultural land to the north, south, and east; rural single-family residences to the north; a gas station to the southwest; and commercial and rural residential uses, as well as a surface mining operation and Tracy Municipal Airport, to the northwest.

In addition, the Delta-Mendota Canal is located near the northern boundary of the Pacific Gateway West, Central and East Specific Plan areas, the Banta-Carbona Irrigation District Canal runs north of the project site through the University Center area of the proposed Pacific Gateway Specific Plan, and the California Aqueduct is located adjacent to the southern boundary and north of the Gateway Center area of the Specific Plan. Furthermore, the portions of the project site west of South Chrisman Road are located within Airport Compatibility Zone 8 of the Airport Influence Area (AIA) of Tracy Municipal Airport, which is located approximately 1.18 miles north of the project site boundaries.

The County's General Plan designates the majority of the site as General Agriculture (A/G). In addition, APN 253-290-130, which represents approximately 19 acres located at the furthest eastern point of the project site, is designated Resource Conservation (OS/RC), and a 1.09-acre parcel in the southernmost portion of the site (APN 253-260-050) is designated Rural Service Commercial (C/RS). The project site is zoned by the County as AG-40-acres (AG-40), with the exception of APN 253-260-050, which is zoned Rural Service Commercial (C-RS).

The proposed project includes implementation of a Specific Plan that would result in construction at project buildout of up to 24,675,000 square feet (sf) of limited industrial use, 160,000 sf of general commercial use, 93,000 sf of industrial park use, a 66.5-acre university campus with 9.8 acres reserved for university expansion, a VFW post, a fire station, and various open space, park, pedestrian, and bicycle facilities. This EIR will analyze the impacts of full buildout of the Specific Plan at a programmatic level, and the Initial Phase will be evaluated at a project-level, with the intent that this EIR will provide full environmental clearance for the project-level entitlements associated with the Initial Phase, such that if the Board of Supervisors approves the requested entitlements, the applicant could proceed with constructing the Initial Phase. The Initial Phase would include development of approximately four million sf of industrial buildings situated on 181.26 net acres, a 25,000-sf university facility, the VFW post (Tracy Post 1537), and construction of the necessary backbone infrastructure to serve the proposed Initial Phase.

In general, the proposed project requests approval of a General Plan Text Amendment, General Plan Map Amendment, Specific Plan, Administrative Use Permits, Zone Reclassification, Zone Compliance at the site plan level, Subdivision Applications, Development Agreement, and Williamson Act Contract Cancellations. The proposed project may also require annexation to County Service Area 16 (CSA-16), subject to San Joaquin LAFCo approval.

The details of the proposed project, including required approvals, are described in further detail in Chapter 3, Project Description, of this EIR.

1.4 EIR PROCESS

The EIR process begins with the decision by the lead agency to prepare an EIR, either during a preliminary review of a project or at the conclusion of an Initial Study. Once the decision is made to prepare an EIR, the lead agency sends a Notice of Preparation (NOP) to appropriate government agencies and, when required, to the State Clearinghouse (SCH) in the Office of Land Use and Climate Innovation (LCI), which will ensure that responsible and trustee State agencies reply within the required time. The SCH assigns an identification number to the project, which then becomes the identification number for all subsequent environmental documents on the project. Commenting agencies have 30 days to respond to the NOP and provide information regarding alternatives and mitigation measures they wish to have explored in the Draft EIR and to provide notification regarding whether the agency will be a responsible agency or a trustee agency for the project. The NOP completed for the proposed project was circulated to the public; local, State, and federal agencies; and other known interested parties for a 30-day review period from December 20, 2024, to January 21, 2025 (see Appendix A).

Upon completion of the Draft EIR, and prior to circulation to State and local agencies and interested members of the public, a Notice of Completion (NOC) is filed with the SCH and a public Notice of Availability (NOA) is published to inform interested parties that a Draft EIR is available for agency and public review. In addition, the notice provides information regarding the location where copies of the Draft EIR are available for public review and any public meetings or hearings that are scheduled. The Draft EIR is circulated for a minimum period of 45 days, during which time reviewers may submit comments on the document to the lead agency. The lead agency must respond to comments in writing. If significant new information, as defined in CEQA Guidelines Section 15088.5, is added to an EIR after public notice of availability is given but before certification of the EIR, the revised EIR or affected chapters must be recirculated for an additional public review period with related comments and responses.

A Final EIR will be prepared, containing public comments on the Draft EIR and responses to those comments. The Final EIR will also include any changes to the Draft EIR text made as a result of public comments, as warranted, as well as the Mitigation Monitoring and Reporting Program (MMRP) prepared in accordance with PRC Section 21081.6. Before approving a project, the lead agency must certify that the EIR (including both the Draft EIR and the Final EIR) has been completed in compliance with CEQA and that the EIR has been presented to the decision-making body of the lead agency, which has reviewed and considered the EIR. The lead agency must also consider certifying that the EIR reflects the lead agency's independent judgment and analysis.

The findings prepared by the lead agency must be based on substantial evidence in the administrative record and must include an explanation that bridges the gap between evidence in the record and the conclusions required by CEQA. If the decision-making body elects to proceed with a project that would have unavoidable significant impacts, then a Statement of Overriding

Considerations explaining the decision to balance the benefits of the project against unavoidable environmental impacts must be prepared.

1.5 SCOPE OF THE EIR

An Initial Study has not been prepared for the proposed project, as the EIR addresses all CEQA-required environmental topics identified in the CEQA Guidelines. The following environmental issue areas are addressed in the EIR:

- Aesthetics;
- Agricultural Resources;
- Air Quality, Greenhouse Gas Emissions, and Energy;
- Biological Resources;
- Cultural and Tribal Cultural Resources;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Public Services/Utilities and Service Systems;
- Transportation;
- Urban Decay; and
- Wildfire.

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4.1 through 4.14 of the Draft EIR. Each chapter is divided into the following four sections: Introduction, Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures. Impacts that are determined to be significant in Chapters 4.1 through 4.14, and for which feasible mitigation measures are not available to reduce those impacts to a less-than-significant level, are identified as *significant and unavoidable*. In addition to the foregoing resource areas, Chapter 5, Effects Not Found to be Significant, has been prepared to present information regarding resource areas that do not have the potential to be affected by the proposed project. Chapter 6 of the EIR presents a discussion of growth-inducing impacts, summary of cumulative impacts, and significant irreversible environmental changes associated with the project. Alternatives to the proposed project are discussed in Chapter 7 of the Draft EIR.

1.6 DEFINITION OF BASELINE

According to CEQA Guidelines Section 15125, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the “baseline physical conditions” against which project-related changes could be compared. In addition, CEQA Guidelines Section 15126.2(a) states that an EIR shall identify and focus on the significant environmental effects of the proposed project. The CEQA Guidelines, Section 15126.2(a), states:

> An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the Lead Agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.

An NOP for the proposed project was published by the County on December 20, 2024. Therefore, conditions existing at the time the NOP was published (December 20, 2024) are considered the baseline against which changes that would result from the proposed project are evaluated. Impacts could include both direct and indirect physical changes to the baseline condition. The baseline condition for the project site is described in Chapter 3, Project Description, of this EIR. The baseline conditions pertaining to each resource area are described in the "Existing Environmental Setting" section of Chapter 4.1 through Chapter 4.14 of this EIR.

1.7 NOTICE OF PREPARATION AND SCOPING

In accordance with CEQA Guidelines Section 15082, an NOP was circulated to the public, local, State, and federal agencies, as well as other known interested parties, for a 30-day public and agency review period from December 20, 2024, to January 21, 2025 (see Appendix A of this EIR). The purpose of the NOP was to provide notification that an EIR for the proposed project was being prepared and to solicit public input on the scope and content of the document.

In addition, the County held an NOP scoping meeting during the NOP review period on January 9, 2025, for the purpose of receiving comments on the scope of the environmental analysis to be prepared for the proposed project. Agencies and members of the public were invited to attend and provide input on the scope of the EIR. All comments were taken into consideration during the preparation of this EIR. A summary of the NOP comments received is provided in Section 1.8.

1.8 SUMMARY OF COMMENTS RECEIVED ON THE NOP

During the NOP public review period from December 20, 2024, to January 21, 2025, the County received 43 comment letters and email messages. In addition, verbal and written comments were received at the public scoping meeting held on January 9, 2025. A copy of each letter and written comment is provided in Appendix B of this EIR. The comment letters received were authored by the following representatives of public agencies and groups, as well as individual members of the general public:

Agencies

- California Department of Conservation;
- Central Valley Regional Water Quality Control Board;
- Del Puerto Water District;
- Pacific Gas and Electric Company (PG&E) (2);
- SJCOG;
- San Joaquin Farm Bureau Federation;
- San Joaquin LAFCo (2);
- SJVAPCD (2);
- San Luis and Delta-Mendota Water Authority;
- South San Joaquin County Fire Authority;
- Stanislaus County Environmental Review Committee (3); and
- State of California Department of Justice (2).

Groups

- Center for Biological Diversity; and
- United Auburn Indian Community (UAIC).

Individuals

- Adam Wipfli;
- Alicia Wipfli;
- Amy Krista;
- Brian and Rebecca Jackman;
- Danielle Fetterman Smith (2);
- David Laird;
- Dennis Colombo;
- Diane Dance;
- Donal and Susan Johnston;
- George Curry;
- Grant M. Davis;
- Jenni Brandon;
- Jose Chavez;
- Justin Frazier;
- Kelly Moran;
- Marcina Moreno;
- Margie Sainz;
- Margo Little;
- Marie Baretta;
- Mark and Gayle Knize;
- Mason Laird;
- Melanie Frazier;
- Michelle Colombo;
- Miguel Contreras;
- Nellie Baretta;
- Randy Sainz;
- Sheila Chartier;
- Stefanie Adams;
- Steve Little;
- Ubbo Coty;
- Vicki Huerta;
- Wanda and James Lenhardt; and
- Zachary Koster.

The following list, categorized by issue, summarizes the concerns brought forth in the comment letters and verbal comments received on the scope of the EIR:

Project Description *(c.f. Chapter 3)*	Concerns related to: • Long-term plans for limited industrial and commercial uses on-site. • The timing of the proposed development entitlements and construction phases. • Any annexation requests related to the City of Tracy.
Aesthetics *(c.f. Chapter 4.1)*	Concerns related to: • The visual impact of industrial facilities on the existing landscape.

Agricultural Resources *(c.f. Chapter 4.2)*	Concerns related to: • Redesignation and rezoning of agricultural land to industrial and commercial uses. • Permanent conversion of prime farmland to non-agricultural uses. • Potential conflicts with Williamson Act contracts. • Conflicts with existing County policies related to preserving agricultural land. • Use of buffer zones and setbacks to reduce conflicts between agricultural and other land uses.
Air Quality, GHG Emissions, and Energy *(c.f. Chapter 4.3)*	Concerns related to: • Increased air pollution as a result of increased traffic. • Lack of existing infrastructure to support electric vehicles. • Mobile emissions and resultant health effects upon sensitive receptors. • Construction emissions without sufficiently clean off-road construction equipment. • Preparation of a Health Risk Assessment (HRA). • Incorporation of emission reduction strategies. • Nitrogen oxides (NO_X) emissions from heavy duty trucks. • Incorporation of zero-emission technologies into vehicle fleets. • Idling trucks contributing to localized emissions impacts. • Char broiler emissions associated with the proposed restaurants. • Vegetative barriers to reduce downwind pollutant concentrations. • Use of on-site solar and electric infrastructure. • Consideration of all recommended mitigation measures outlined by the California Attorney General's Office in "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act." • Consistency with the State's goal to be net-zero carbon emissions by 2045. • Exacerbation of climate change effects due to removal of trees. • Nuisance odors due to industrial uses. • Potential conflicts with SJVAPCD rules and regulations.
Biological Resources *(c.f. Chapter 4.4)*	Concerns related to: • Impacts to threatened, endangered, and sensitive wildlife and loss of wildlife habitat. • Reduction in local biodiversity. • Participation in the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).
Cultural and Tribal Cultural Resources *(c.f. Chapter 4.5)*	Concerns related to: • Accidental discovery of cultural or tribal cultural resources during ground-disturbing activities associated with the project.
Geology and Soils *(c.f. Chapter 4.6)*	Concerns related to: • Potential for groundwater wells to increase subsidence. • Potential for subsidence to damage existing water conveyance infrastructure, including the Delta-Mendota Canal. • Erosion and sediment discharge into the Delta-Mendota Canal.
Hazards and Hazardous Materials *(c.f. Chapter 4.7)*	Concerns related to: • Increased release of industrial waste. • Appropriate abandonment of existing wells.

Hazards and Hazardous Materials *(c.f. Chapter 4.7)*	• Location of existing pipelines within the project site. • Conflicts with a local hazard mitigation plan or safety element of the County's General Plan.
Hydrology and Water Quality *(c.f. Chapter 4.8)*	Concerns related to: • Adequate surface water and groundwater supplies. • Increased severity of existing water shortages and rationing. • Increased potential flooding along existing local streets. • Impacts to groundwater levels associated with additional wells. • Release of contaminants into the aquifer located beneath the proposed off-site basin. • Groundwater quality impacts resulting from development of urban uses on-site. • Increased runoff into local waterways. • Sufficient on-site retention of runoff flows. • Water quality impacts from industrial runoff. • Impacts to groundwater recharge. • Potential impacts to drainage structures at the project site. • Erosion and sediment discharged into the Delta-Mendota Canal during construction, and trash during operations. • Compliance with Senate Bill (SB) 610 and preparation of a water supply analysis. • Potential conflicts with permitting requirements. • Potential conflicts with the Sustainable Groundwater Management Act. • Potential conflicts with the U.S. Bureau of Reclamation's guidelines related to the Delta-Mendota Canal. • Potential conflicts with the local Groundwater Sustainability Plan.
Land Use and Planning *(c.f. Chapter 4.9)*	Concerns related to: • Inconsistency with San Joaquin County General Plan policies. • Project conflicts with adjacent land uses. • Impacts associated with leapfrog development and urban sprawl. • Potential effects on the City of Tracy's boundaries, sphere of influence, and planning area. • Regional fair share housing needs.
Noise *(c.f. Chapter 4.10)*	Concerns related to: • Increases in noise levels from increased traffic. • Increased vibration at sensitive receptors from increased traffic. • Increases in noise levels associated with industrial operational and loading activities. • Consideration of all recommended mitigation measures outlined by the California Attorney General's Office in "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act."
Public Services/Utilities and Service Systems *(c.f. Chapter 4.11)*	Concerns related to: • Increased need for public parks and other public facilities. • Whether the proposed project would require new utility districts. • Decrease in police response times. • Lack of adequate public infrastructure to serve the project. • Sufficient funding for the proposed fire station. • Increased wear and tear on existing local infrastructure.

Public Services/Utilities and Service Systems *(c.f. Chapter 4.11)*	• The provision of adequate fire flow. • The provision of gas or electric easements on-site. • Identifying maintenance entities for utilities and public services.
Transportation *(c.f. Chapter 4.12)*	Concerns related to: • Traffic increases associated with the proposed university. • Impacts of increased traffic on smaller secondary rural roads. • Traffic increases in the project vicinity, including on South Chrisman Road, Durham Ferry Road, and on the State highway system. • The need for off-site roadway widening improvements along South Chrisman Road. • Increases in heavy truck traffic on the surrounding roads. • More rapid deterioration of roadways due to increased traffic. • Cumulative traffic impacts on the local and regional transportation system. • Conflicts with San Joaquin and Stanislaus County General Plan circulation element policies. • Increased need for bicycle and pedestrian trails. • Increased potential for vehicle-pedestrian accidents, posing a public hazard to residences and school zones, including the nearby Jefferson Middle School. • High vehicle miles travelled due to workforce commute and delivery trips. • Potential conflicts with the SJCOG Regional Transportation Plan/Sustainable Communities Strategy. • Potential conflicts with planned transportation projects. • Impacts to existing yards due to road widening improvements. • Consideration of all recommended mitigation measures outlined by the California Attorney General's Office in "Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act."
Urban Decay *(c.f. Chapter 4.13)*	Concerns related to: • Lack of need for the proposed project, given existing warehouse developments in the area. • Expanding industrial zones and urban sprawl. • Decreased property values.
Wildfire *(c.f. Chapter 4.14)*	Concerns related to: • The project site being located within or adjacent to a Very High Fire Hazard Severity Zone.
Statutorily Required Sections *(c.f. Chapter 6)*	Concerns related to: • Growth inducing impacts associated with the proposed project.
Alternatives Analysis *(c.f. Chapter 7)*	Concerns related to: • Inclusion of alternatives directing development away from prime farmland sites.

Concerns related to the issues above are addressed in this EIR, in the relevant sections identified in the first column.

1.9 DRAFT EIR AND PUBLIC REVIEW

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and agencies can submit comments to the Lead

Agency on the Draft EIR's accuracy and completeness. Release of the Draft EIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105.

The public can review the Draft EIR on the County's website at:

https://www.sjgov.org/department/cdd/planning/documents

or at the following address during normal business hours:

San Joaquin County Community Development Department
1810 East Hazelton Ave
Stockton, CA 95205

All comments or questions regarding the Draft EIR should be submitted in written form and addressed to:

Brian Millar, Contract Planner
San Joaquin County Community Development Department
1810 East Hazelton Ave
Stockton, CA 95205
bmillar@sjgov.org

1.10 ORGANIZATION OF THE DRAFT EIR

The Draft EIR is organized into the following sections:

Chapter 1 – Introduction

The Introduction chapter of the EIR provides an introduction and overview describing the intended use of the Draft EIR and the review and certification process, as well as summaries of the chapters included in the Draft EIR and summaries of the issues and concerns received from the public and public agencies during the NOP review period.

Chapter 2 – Executive Summary

The Executive Summary chapter of the EIR summarizes the elements of the project and the environmental impacts that would result from development of the proposed project, describes proposed mitigation measures, and indicates the level of significance of impacts after mitigation. In addition, the Executive Summary includes a summary of the project alternatives and areas of known controversy.

Chapter 3 – Project Description

The Project Description chapter of the EIR provides a detailed description of the proposed project, including the project's location, background information, objectives, technical characteristics, and required entitlements and approvals.

Chapter 4 – Existing Environmental Setting, Impacts, and Mitigation

Contains project-level and cumulative analysis of environmental issue areas associated with the proposed project. The section for each environmental issue contains an introduction and description of the setting of the project site, identifies impacts, and recommends appropriate mitigation measures.

Chapter 5 – Effects Not Found to be Significant

The Effects Not Found to be Significant chapter of the EIR addresses the project's effects that were determined not to be significant. CEQA Guidelines Section 15128 requires a brief discussion explaining why these effects were not found to be significant.

Chapter 6 – Statutorily Required Sections

The Statutorily Required Sections chapter of the EIR provides discussions required by CEQA regarding impacts that would result from the proposed project, including a summary of cumulative impacts, potential growth-inducing impacts, significant and unavoidable impacts, and significant irreversible changes to the environment.

Chapter 7 – Alternatives Analysis

The Alternatives Analysis chapter of the EIR provides a comparative analysis of the alternatives to the proposed project, their respective comparative environmental effects, and a determination of the environmentally superior alternative. The alternatives are analyzed at a level of detail less than that of the proposed project; however, the analyses include sufficient detail to allow for a meaningful comparison of impacts.

Chapter 8 – References

The References chapter provides bibliographic information for all references and resources cited.

Chapter 9 – EIR Authors and Persons Consulted

The EIR Authors and Persons Consulted chapter of the EIR lists EIR and technical report authors who provided technical assistance in the preparation and review of the EIR.

Appendices

The Appendices include the NOP, comments received during the NOP comment period, and technical reports prepared for the proposed project.

2. Executive Summary

2. EXECUTIVE SUMMARY

2.1 INTRODUCTION

The Executive Summary chapter of the EIR provides an overview of the proposed project (see Chapter 3, Project Description, for further details) and provides a table summary of the conclusions of the environmental analysis provided in Chapters 4.1 through 4.14. This Chapter also summarizes the alternatives to the proposed project that are described in Chapter 7, Alternatives Analysis, and identifies the Environmentally Superior Alternative. Table 2-1 contains the environmental impacts associated with the proposed project, the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The approximately 1,576.7-acre project site is generally located north of Interstate 580 (I-580) and State Route (SR) 132 in an unincorporated area of San Joaquin County, California. The site is identified by Assessor's Parcel Numbers (APNs) as listed in Table 3-1 in Chapter 3, Project Description.

The project site is generally bound by Bird Road to the east; the Delta-Mendota Canal to the north; Tracy Boulevard to the west; and the southern boundary is formed by the California Aqueduct, west of South Chrisman Road, and SR 132, east of South Chrisman Road. South Chrisman Road, a designated Surface Transportation Assistance Act (STAA) Truck Route, provides north-to-south circulation access through the Specific Plan area. East/west access is limited to private, unimproved farm roads. The project site is currently developed with active agricultural land, including almond and cherry orchards, and an agricultural machinery manufacturing facility (A.B. FAB, Inc.).

The project site, at its nearest point, is approximately one mile from the southern boundary of the City of Tracy and is generally located in an existing agricultural area with agricultural uses located to the north (e.g., orchards, Crown Nut almond processing plant), to the south between the Aqueduct and I-580, and to the east of Bird Road.

Several established surface mining operations are located to the northwest of the project site. Finally, within the project site, two existing single-family homes front South Chrisman Road and one parcel with three homes fronting on MacArthur Drive. The Tracy Municipal Airport is located approximately one mile northwest of the project site.

The County's General Plan designates the majority of the project site as General Agriculture (A/G). In addition, APN 253-290-130, which represents approximately 19 acres located at the furthest eastern point of the project site, is designated Resource Conservation (OS/RC), and a 1.09-acre parcel in the southernmost portion of the site (APN 253-260-050) is designated Rural Service Commercial (C/RS). The project site is zoned by the County as AG-40-acres (AG-40), with the exception of APN 253-260-050, which is zoned Rural Service Commercial (C-RS).

The proposed project includes implementation of a Specific Plan that would result in up to 24,675,000 square feet (sf) of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.5-acre university campus plus 9.8 acres for future expansion, a Veterans of Foreign Wars (VFW) post, and various open space, parks, a new fire station, stormwater management basins, and pedestrian and bicycle facilities within the 1,576.7-acre project site. The proposed project includes site plan level entitlements at this time to allow development of an Initial Phase subsequent to EIR Certification and Specific Plan approval.

In order to guide the underlying land use planning and development patterns, the project applicant team has developed a Specific Plan. The Pacific Gateway Specific Plan establishes site and architectural design, includes backbone infrastructure to support the proposed development, and provides for a mechanism to finance further site improvements to ensure the adequate provision of necessary infrastructure in a timely manner. The Specific Plan area is divided into five distinct development areas: University Center, Pacific Gateway West, Pacific Gateway Central, Pacific Gateway East, and Gateway Center. Each development area would be connected by a network of roads, and pedestrian and bike paths, which would provide alternatives to vehicle trips.

The University Center would include the parcels located north of the Delta-Mendota Canal to provide for a new university campus, which would expand access to education and research opportunities in the Central Valley. The University Center would also include a small business park (Industrial Park zone), a new home for the VFW, and small commercial services and uses that would front South Chrisman Road. These ancillary uses would provide service uses focused on the university staff and students.

Pacific Gateway West is located south of the Delta-Mendota Canal, north of the California Aqueduct, and between Tracy Boulevard and MacArthur Drive. This area makes up one of three predominantly industrial development areas in the project. This region would be developed primarily with industrial uses and also include mini-park uses, and the necessary road improvements, and utility infrastructure.

Pacific Gateway Central is also located south of Delta-Mendota Canal, with MacArthur Drive to the west, South Chrisman Road to the east, and the California Aqueduct to the south. This area makes up the second of three industrial development areas in the project. This development area would also include mini-park uses, and the necessary road improvements and utility infrastructure. An approximately 11.87-acre Central Park would be located at the intersection of South Chrisman Road and proposed A Street, which would include community amenities such as open space gathering areas, picnic areas, sport courts (e.g., pickleball and basketball), and parking spots for food trucks.

Pacific Gateway East includes the area east of South Chrisman Road, between the Delta-Mendota Canal and SR 132. This area makes up the final industrial development area for the project. This development area would also include mini-parks and the necessary road infrastructure improvements. The “Initial Phase” of Limited Industrial development would be located within the Pacific Gateway East development area, including the backbone infrastructure needed to serve the project (e.g., water, wastewater, fire protection, and improvements for the construction of treatment facilities and storage tanks). These treatment and storage facilities have been sized to serve the Initial Phase, including the proposed university and VFW sites. As development progresses, these facilities would be expanded to accommodate future development.

The Gateway Center development area is south of the California Aqueduct and east of South Chrisman Road at the SR 132 interchange. This development area would consist of general commercial and retail uses, smaller industrial and warehouse uses, a truck and auto EV charging area, and a mini-park. Gateway Center would provide services to Pacific Gateway employees and university students, as well SR 132 commuters and travelers.

With respect to off-site improvements, the Local Transportation Analysis (LTA) prepared for the proposed project identifies a range of intersection and roadway improvements that would be triggered by full buildout of the proposed project. These prospective intersection and roadway improvements are under the control of various agencies (Caltrans, San Joaquin County, City of Tracy). The feasibility of the improvements is unknown at this time for various reasons, which, depending upon the improvement, may include (but not be limited to) extra territorial impacts, lack of funding mechanism to ensure full funding is ultimately collected, right-of-way (ROW) constraints, etc. Notwithstanding, this EIR will study the potential physical environmental effects associated with the prospective improvements with the intent to provide environmental clearance of said improvements should they be determined feasible by the agencies in whose jurisdiction each improvement is located. The analysis of these prospective improvements will be conducted at a programmatic level, as is appropriate given that the roadway improvements have not yet been sufficiently designed and many require coordination with other agencies for purposes of design and engineering.

San Joaquin County is the lead agency for the proposed project. In addition to certification of this EIR and the associated Mitigation Monitoring and Reporting Program, the proposed project requests approval of the following entitlements by the County:

- General Plan Text Amendment No. PA-2400364;
- General Plan Map Amendments No. PA-2400363;
- Zone Reclassification No. PA-2400363;
- Specific Plan No. PA-2400365;
- Zoning Compliance Review (Site Plan Level Entitlements) Nos. PA-2400369, 2400371, and 2400372;
- Subdivision Application Nos. PA-2400367 to subdivide the entire Project site into 27 lots to create a master lotting configuration and PA-2400368 to create 12 parcels to facilitate the Initial Phase of the Limited Industrial area and backbone infrastructure;
- Development Agreement No. PA-2400366; and
- Williamson Act Contract Cancellations No. PA-24-00500.

For the purposes of CEQA, the term “Responsible Agency” includes all public agencies (other than federal agencies) beyond the Lead Agency that have discretionary approval power over the Project (CEQA Guidelines Section 15381). Discretionary approval power may include such actions as issuance of a permit, authorization, or easement needed to complete some aspect of the Project. Responsible Agencies may include, but are not limited to, the following:

- U.S. Army Corps of Engineers (USACE);
- U.S. Bureau of Reclamation (Project Design Review and Approval, Temporary Construction Permit related to future South Chrisman Road bridge replacement over the Delta-Mendota Canal);
- San Luis & Delta-Mendota Authority (Project Design Review and Approval related to future South Chrisman Road bridge replacement over the Delta-Mendota Canal);

- California Department of Transportation (Caltrans);
- Central Valley Regional Water Quality Control Board (CVRWQCB);
- Department of Water Resources (encroachment permit related to future South Chrisman Road bridge replacement over the California Aqueduct);
- San Joaquin Valley Air Pollution Control District (SJVAPCD);
- City of Tracy;
- San Joaquin County Local Agency Formation Commission (LAFCo) (potential annexation of project site into County Service Area [CSA] #16 for water service);
- San Joaquin Council of Governments (SJCOG);
- San Joaquin Airport Land Use Commission (SJALUC); and
- Byron-Bethany Irrigation District (BBID).

Please refer to Chapter 3, Project Description, of this EIR for a detailed description of the proposed project and entitlements.

2.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Mitigation measures must be implemented as part of the proposed project to reduce potential adverse impacts to a less-than-significant level. Such mitigation measures are noted in this EIR and are found in the following technical chapters: Aesthetics; Agricultural Resources; Air Quality, Greenhouse Gas Emissions, and Energy; Biological Resources; Cultural and Tribal Resources; Geology and Soils; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; and Transportation. The mitigation measures required for the proposed project, as presented in this EIR, will form the basis of the Mitigation Monitoring and Reporting Program. Any impact that remains significant after implementation of mitigation measures is considered a significant and unavoidable impact.

A summary of the proposed project impacts are identified for each technical chapter (Chapters 4.1 through 4.14) of the EIR is presented in Table 2-1 at the end of this chapter. In addition, Table 2-1 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

2.4 PROJECT OBJECTIVES

The following project objectives have been developed by the project applicant:

1. Identify a site that would support an industrial and university-focused project with supportive business, commercial, and recreational uses.
2. Establish development of a commercially sufficient scale to be self-supporting, in terms of infrastructure and public service needs.
3. Accommodate a mix of industrial designated uses supporting future advanced manufacturing, e-commerce, and related distribution opportunities.
4. Establish a four-year university campus serving the post-secondary educational needs of residents within South San Joaquin County.
5. Create a mix of jobs that will contribute to economic development within the County.

6. Establish site-specific wet and dry utility infrastructure, including water and wastewater treatment infrastructure designed and developed to meet project demands at all phases of development.
7. Locate on an established STAA-designated transportation corridor or established truck route with access to a federal interstate and/or State highway system serving the Bay Area and greater Central Valley communities.
8. Locate on a site that is sufficiently distant from the urban core to reduce the potential impacts on sensitive receptors and other incompatible urban land uses.
9. Establish agricultural buffers and "right to farm" policies to protect existing agricultural operations and Williamson Act designated lands outside of the project boundary.
10. Implement a range of sustainability measures aimed at conserving resources, decreasing energy and water consumption, and reducing the impact on air quality, greenhouse gases, and water pollution.

2.5 SUMMARY OF PROJECT ALTERNATIVES

The following section presents a summary of the alternatives evaluated in this EIR for the proposed project, which include the following:

- No Project (No Build) Alternative;
- Reduced Project Alternative 1 (32 Percent); and
- Reduced Project Alternative 2 (56 Percent).

For a more thorough discussion of project alternatives that were evaluated in this EIR, including alternatives considered but dismissed, please refer to Chapter 7, Alternatives Analysis.

No Project (No Build) Alternative

The No Project (No Build) Alternative assumes that the current conditions of the project site would remain and the site would not be developed. As described in this EIR, the project site is currently developed with active agricultural land, including almond and cherry orchards, and an agricultural machinery manufacturing facility (A.B. FAB, Inc.). Under the No Project (No Build) Alternative, the existing on-site agricultural operations would continue. As such, under the Alternative, the entire project site is conservatively assumed to be subject to continuous disturbance through agricultural activities such as planting and harvesting. The No Project (No Build) Alternative would not meet any of the project objectives. Because changes would not occur to the project site under the No Project (No Build) Alternative, impacts would not occur related to the majority of issue areas, and mitigation would not be required. The following impacts could be greater than the project under the Alternative, as follows:

- Impacts related to subsidence induced by groundwater pumping;
- Impacts related to groundwater pumping within the Tracy and Delta-Mendota Subbasins and groundwater supplies; and
- Impacts related to water supplies.

Under the No Project (No Build) Alternative, all significant and unavoidable impacts would be reduced or eliminated.

Reduced Project Alternative 1 (32 Percent)

The Reduced Project Alternative 1 (32 Percent) would eliminate the entire Pacific Gateway West Development Area and the far southeastern corner of the Pacific Gateway East Development Area to reduce the project site size from approximately 1,576.70 acres to 1,283.22 acres. In comparison to the proposed project, Reduced Project Alternative 1 would result in an approximately 32 percent reduction in industrial building square footage, for a developed total of approximately 16,704,335 sf of industrial building space (7,970,665 sf less than the proposed project). Similar to the proposed project, this Alternative would include 93,000 sf of Industrial Park space and 160,000 sf of General Commercial space, inclusive of the VFW post, hotel, and other related uses, as well as Public Facilities uses, inclusive of the University and fire station.

This Alternative would also include similar utility systems to support development, inclusive of an on-site wastewater treatment package plant, water treatment infrastructure, and an off-site stormwater retention basin. Because the Reduced Project Alternative 1 would include development of similar uses as the proposed project, albeit, at a reduced scale, the project objectives would be met. The significant impacts that would be reduced under the Alternative are as follows:

- Have a substantial adverse effect on a scenic vista or, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) (remains significant and unavoidable);
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area;
- Long-term changes in visual character associated with development of the proposed project in combination with future buildout of San Joaquin County General Plan (remains significant and unavoidable);
- 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, or conflict with existing zoning for agricultural use, or a Williamson Act contract (remains significant and unavoidable);
- Impacts related to the cumulative loss of agricultural land (remains significant and unavoidable);
- Conflict with or obstruct implementation of the applicable air quality plan (remains significant and unavoidable);
- Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project construction;
- Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project operation (remains significant and unavoidable);
- Expose sensitive receptors to substantial pollutant concentrations (remains significant and unavoidable);
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (remains significant and unavoidable);
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment (remains significant and unavoidable);

- Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk and white-tailed kite;
- Have a substantial adverse effect, either directly or through habitat modifications, on song sparrow (Modesto population);
- Have a substantial adverse effect, either directly or through habitat modifications, on northern harrier;
- Have a substantial adverse effect, either directly or through habitat modifications, on Crotch's bumble bee;
- Have a substantial adverse effect, either directly or through habitat modifications, on nesting songbirds and other raptors protected under the MBTA and CFGC;
- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan;
- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5 (remains significant and unavoidable);
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries;
- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction;
- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operation;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (remains significant and unavoidable);
- Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (remains significant and unavoidable);
- Generation of excessive groundborne vibration or groundborne noise levels;
- Generation of a substantial permanent increase in ambient noise levels associated with development of the proposed project in combination with future development (remains significant and unavoidable);

- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (remains significant and unavoidable); and
- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) under cumulative conditions (remains significant and unavoidable).

Though the abovementioned significant and unavoidable impacts would be reduced under the Reduced Project Alternative 1 (32 Percent), the associated mitigation measures would still be required, and the impacts would remain significant and unavoidable. Overall, all other impacts would remain similar to the proposed project under the Reduced Project Alternative 1 (32 Percent), including the other identified significant and unavoidable impacts.

Reduced Project Alternative 2 (56 Percent)

The Reduced Project Alternative 2 (56 Percent) would consist of buildout of approximately 659.66 acres of the 1,576.70-acre project site. In comparison to the proposed project, Reduced Project Alternative 2 would result in a 56 percent reduction in industrial building square footage for a developed total of 10,891,518 sf of industrial building space (13,783,482 sf less than the proposed project). In general, this Alternative would achieve this reduction by eliminating the Pacific Gateway West and Central Development Areas. The University Center Development Area and VFW Post would be shifted south of the Delta Mendota Canal, such that this Alternative would be located entirely "between the canals" (Delta Mendota and California Aqueduct), with the exception of the Gateway Center Development Area. The new University location would result in a greater buffer between the University and the existing agricultural lands to the north due to the intervening Delta Mendota Canal. In addition, a new open space area would be located between the existing residences fronting South Chrisman Road adjacent to the site and the new University location.

Similar to the proposed project, this Alternative would include 93,000 sf of Industrial Park space and 160,000 sf of General Commercial space, inclusive of the VFW post, hotel, and other related uses, as well as Public Facilities uses, inclusive of the University and fire station. This Alternative would also include similar utility systems to support development, inclusive of an on-site wastewater treatment package plant, water treatment infrastructure, and an off-site stormwater retention basin.

Because the Reduced Project Alternative 2 (56 Percent) would include development of similar uses as the proposed project, albeit, at a reduced scale, the project objectives would be met. The significant impacts that would be reduced under the Alternative are as follows:

- Have a substantial adverse effect on a scenic vista or, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) (remains significant and unavoidable);
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area;
- Long-term changes in visual character associated with development of the proposed project in combination with future buildout of San Joaquin County General Plan (remains significant and unavoidable);
- 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, or conflict with existing zoning for agricultural use, or a Williamson Act contract (remains significant and unavoidable);

- Impacts related to the cumulative loss of agricultural land (remains significant and unavoidable);
- Conflict with or obstruct implementation of the applicable air quality plan (remains significant and unavoidable);
- Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project construction;
- Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project operation (remains significant and unavoidable);
- Expose sensitive receptors to substantial pollutant concentrations (remains significant and unavoidable);
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (remains significant and unavoidable);
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment (remains significant and unavoidable);
- Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk and white-tailed kite;
- Have a substantial adverse effect, either directly or through habitat modifications, on song sparrow (Modesto population);
- Have a substantial adverse effect, either directly or through habitat modifications, on northern harrier;
- Have a substantial adverse effect, either directly or through habitat modifications, on Crotch's bumble bee;
- Have a substantial adverse effect, either directly or through habitat modifications, on nesting songbirds and other raptors protected under the MBTA and CFGC;
- 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;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan;
- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5 (remains significant and unavoidable);
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries;
- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction;
- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operation;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (remains significant and unavoidable);
- Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (remains significant and unavoidable);
- Generation of excessive groundborne vibration or groundborne noise levels;
- Generation of a substantial permanent increase in ambient noise levels associated with development of the proposed project in combination with future development (remains significant and unavoidable);
- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (remains significant and unavoidable); and
- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) under cumulative conditions (remains significant and unavoidable).

Though the abovementioned significant and unavoidable impacts would be reduced under the Reduced Project Alternative 2 (56 Percent), the associated mitigation measures would still be required, and the impacts would remain significant and unavoidable. Overall, all other impacts would remain similar to the proposed project under the Reduced Project Alternative 2 (56 Percent), including the other identified significant and unavoidable impacts.

Environmentally Superior Alternative

An EIR is required to identify the Environmentally Superior Alternative from among the range of reasonable alternatives that are evaluated. Section 15126(e)(2) of the CEQA Guidelines requires that an Environmentally Superior Alternative be designated and states, “If the Environmentally Superior Alternative is the ‘no project’ alternative, the EIR shall also identify an Environmentally Superior Alternative among the other alternatives.” In this case, the No Project (No Build) Alternative would be considered the Environmentally Superior Alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, the significant impacts resulting from the proposed project would not occur under the Alternative.

The No Project (No Build) Alternative would not meet any of the project objectives. Because Reduced Project Alternatives 1 and 2 would include development of portions of the project site with the proposed uses, the project objectives would be met.

As discussed in detail in the Alternatives Analysis Chapter of this EIR and presented in Table 7-5 therein, the Reduced Project Alternatives 1 and 2 would result in fewer impacts than the proposed project in all of the CEQA topic areas for which the proposed project would have significant impacts. None of the significant and unavoidable impacts identified for the proposed project would be fully avoided by either Reduced Project Alternative, but many of them would be substantially lessened. For example, the proposed project’s significant and unavoidable impact regarding impacts to Prime Farmland would be reduced by approximately 20 percent for Reduced

Project Alternative 1 and 38 percent by Reduced Project Alternative 2. Another example relates to the reduction in trips associated with these alternatives – Reduced Project Alternative 1 would reduce total daily trips by approximately 23 percent, which equates to a reduction of an estimated 12,115 daily trips, and Reduced Project Alternative 2 would reduce daily trips by approximately 40 percent, which equates to a reduction of an estimated 20,950 daily trips. Reduced Project Alternative 2, in particular, could be considered to substantially lessen the relative intensity of the significant transportation impact identified for the proposed project pertaining to substantially increasing hazards to vehicle safety.

Because Reduced Project Alternative 2 would reduce identified impacts to a larger degree than Reduced Project Alternative 1 due to the greater reduction in site acreage and industrial development potential, Reduced Project Alternative 2 would be considered the Environmentally Superior Alternative.

2.6 AREAS OF CONTROVERSY

The CEQA Guidelines, Section 15123(b), require that this EIR consider areas of controversy known to the lead agency, including issues raised by agencies and the public. Areas of controversy that were identified in NOP comment letters on the proposed project should be considered, as well. The areas of known controversy for the proposed project relate to the following:

- Timing of proposed development entitlements and Specific Plan Buildout;
- Impacts to scenic quality;
- Conversion of agricultural land to non-agricultural uses;
- Increases in air quality and greenhouse gas emissions;
- Impacts to wildlife and plant habitats;
- Impacts to water conveyance infrastructure;
- Industrial waste and other hazards;
- Impacts to water quality and drainage;
- Sufficient water supply;
- Impacts to adjacent land uses;
- Growth-inducing impacts;
- Inconsistencies with San Joaquin County General Plan policies;
- Increase in noise levels associated with traffic and industrial operational activities;
- Traffic increases along surrounding roadways;
- Provision of emergency services;
- Transport of students to schools;
- Increase in vehicle miles traveled (VMT);
- Vehicle safety hazards due to access along Chrisman Road and Durham Ferry Road;
- Urban decay; and
- Proximity to Very High Fire-Hazard Severity Zone.

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	4.1 Aesthetics			
4.1-1	**Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.**	LS S	*Initial Phase, Off-Site Improvements Study Area* *None required.* *Specific Plan Buildout* *None feasible.*	LS SU
4.1-2	**Have a substantial adverse effect on a scenic vista or, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point).**	S LS	*Initial Phase, Specific Plan Buildout* *None feasible.* *Off-Site Improvements Study Area* *None required.*	SU LS
4.1-3	**Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**	S	*Initial Phase, Specific Plan Buildout* *4.1-3 Prior to Improvement Plan approval for each building, the project applicant shall submit a lighting plan for the project to San Joaquin County Community Development Department for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association. The lighting plan shall include, but not necessarily be limited to, the following provisions:* • *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;*	LS

N/A = *Not Applicable*; LS = *Less Than Significant*; LCC = *Less Than Cumulatively Considerable*; S = *Significant*; CC = *Cumulatively Considerable*; SU = *Significant and Unavoidable*

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• *Place and shield or screen area lighting needed for construction activities and/or security so as not to disturb residential areas;* • *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash; and* • *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), and appropriate signage to prevent light and glare from adversely affecting adjacent properties.* *Off-Site Improvements Study Area*	
	LS	*None required.*	N/A
4.1-4 Long-term changes in scenic resources within a state scenic highway, scenic vistas and visual character associated with development of the proposed project in combination with cumulative development.	CC/S	*None feasible.*	SU
4.1-5 Creation of new sources of light or glare associated with	LS	*None required.*	N/A

N/A = *Not Applicable*; LS = *Less Than Significant*; LCC = *Less Than Cumulatively Considerable*; S = *Significant*; CC = *Cumulatively Considerable*; SU = *Significant and Unavoidable*

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	development of the proposed project in combination with cumulative development.			
	4.2 Agricultural Resources			
4.2-1	**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, or conflict with existing zoning for agricultural use, or a Williamson Act contract.**	S	*Initial Phase, Specific Plan Buildout* *4.2-1 Consistent with the County's Agricultural Mitigation Ordinance, prior to issuance of grading permits for each phase, the project applicant shall either pay for a farmland conservation easement to protect the same number of acres proposed to be changed to a non-agricultural use, as well as an administrative fee to cover the costs of administering, monitoring, and enforcing the farmland conservation easement, subject to review by the County Agricultural Technical Advisory Committee, or pay an in-lieu fee in an amount determined by the County Board of Supervisors.*	SU
		LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.2-2	**Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.**	LS	*None required.*	N/A
4.2-3	**Impacts related to the cumulative loss of agricultural land.**	CC/S	*Initial Phase, Specific Plan Buildout* *4.2-3 Implement Mitigation Measure 4.2-1.*	SU

N/A = *Not Applicable*; LS = *Less Than Significant*; LCC = *Less Than Cumulatively Considerable*; S = *Significant*; CC = *Cumulatively Considerable*; SU = *Significant and Unavoidable*

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.3 Air Quality, GHG Emissions, and Energy			
4.3-1 Conflict with or obstruct implementation of the applicable air quality plan.	S	*Initial Phase, Specific Plan Buildout* *4.3-1(a) Implement Mitigation Measures 4.3-2(a), 4.3-2(b), and 4.3-3(a) through 4.3-3(c).* *Off-Site Improvements Study Area* *4.3-1(b) Implement Mitigation Measure 4.3-2(c).*	SU
4.3-2 Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project construction.	S	*Initial Phase, Specific Plan Buildout* *4.3-2(a) The following requirement shall be noted on project improvement plans for all industrial warehouse buildings: Only architectural coatings with a VOC content of a maximum of 15 grams per liter (g/L) shall be used for the interior and exterior of all industrial warehouse buildings on the project site. Prior to approval of improvement plans for each phase of the proposed project, draft language shall be provided to the San Joaquin County Community Development Department for review and approval.* *4.3-2(b) Prior to the initiation of ground disturbance for each phase of development, the project applicant shall show on project improvement plans via notation that the contractor shall ensure that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction of the proposed project, including owned, leased, and subcontractor vehicles, shall be Tier 4 final off-road construction equipment. In*	LS

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		addition, all off-road equipment operating at the construction site must be maintained in proper working condition according to manufacturer's specifications. *Idling shall be limited to five minutes or less in accordance with the In-Use Off-Road Diesel Vehicle Regulation as required by CARB. Clear signage regarding idling restrictions shall be placed at the entrances to the construction site.* *Portable equipment over 50 horsepower must have either a valid SJVAPCD Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.* *The aforementioned requirements shall be noted on grading plans and submitted for review and approval by the San Joaquin County Community Development Department.* *Off-Site Improvements Study Area* *4.3-2(c)* *Prior to issuance of a grading permit associated with any off-site improvement, the project applicant shall retain a qualified air quality consultant to conduct an analysis to quantify the off-site improvement's construction emissions and compare the emissions to the applicable SJVAPCD thresholds of significance. Quantified emissions and identified*	

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		reduction measures, if warranted, shall be submitted to the San Joaquin County Community Development Department for review and approval, or for roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. If emissions are determined to be below the applicable SJVAPCD thresholds of significance, further mitigation is not required. *If emissions are determined to exceed the applicable thresholds of significance, the qualified air quality consultant shall identify measures sufficient to reduce the project's construction emissions to below the SJVAPCD's thresholds of significance. Emission reduction measures may include, but are not limited to, use of heavy-duty off-road vehicles (50 horsepower or more) with late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.* *If on-site emissions reduction measures are not sufficient to achieve a fleet-wide average reduction in construction-related emissions to below the applicable SJVAPCD thresholds of significance, the project applicant shall pay a mitigation fee based on the equivalent amount of the project's contribution of criteria pollutant emissions that exceeds the*	

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		applicable threshold of significance, as well as the per ton cost-effectiveness identified by the CARB's most current Carl Moyer Program Guidance. The final details of the mitigation fee shall be determined in coordination with, and reviewed and approved by, the SJVAPCD and San Joaquin County Community Development Department, or for roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. Proof of payment shall be submitted to the San Joaquin County Community Development Department, City of Tracy, or Caltrans, as applicable.	
4.3-3 Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project operation.	S	*Initial Phase, Specific Plan Buildout* *4.3-3(a) The following requirement shall be noted on any Tenant/Lease Agreement and/or Purchase and Sale Agreement for all on-site industrial warehouse buildings: Only architectural coatings with a VOC content of a maximum of 15 grams per liter (g/L) shall be used for the interior and exterior of all industrial warehouse buildings on the project site. Proof of compliance with the above requirement shall be provided to the San Joaquin County Community Development Department for review and approval.* *4.3-3(b) Prior to approval of any Improvement Plans for each phase of development, the project applicant shall provide proof of compliance with the following to the*	SU

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		satisfaction of the San Joaquin County Community Development Department: • *The project applicant shall show on the Improvement Plans via notation that all forklift equipment and yard mules at all industrial warehouse buildings greater than 300,000 sf shall be zero emission equipment. Additionally, all landscape equipment used to maintain individual on-site and all on-site landscaping, parks, and open space shall be zero emission equipment.* *4.3-3(c) Implement Mitigation Measures 4.12-4(a) through 4.12-4(f).*	
	LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.3-4 Expose sensitive receptors to substantial pollutant concentrations.	LS	*Initial Phase* *None required.*	N/A
	S	*Specific Plan Buildout* *4.3-4 Prior to approval of project improvement plans for the first phase of development subsequent to the Initial Phase, the project applicant shall install a central heating, ventilation and air conditioning (HVAC) system or other air intake system at the maximally exposed residences (see Figure 4.3-3 of this EIR), that includes high efficiency particulate air (HEPA)*	SU

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		filters. The project applicant shall also prepare an operation and maintenance manual for the HVAC system and the filter. The manual shall include the operating instructions and the maintenance and replacement schedule. Proof of compliance with the above requirements shall be submitted to the San Joaquin County Community Development Department.	
	LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.3-5 Result in other emissions (such as those leading to odors) affecting a substantial number of people.	LS	*None required.*	N/A
4.3-6 Result in the inefficient or wasteful use of energy, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	LS	*None required.*	N/A
4.3-7 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard.	S	*Initial Phase, Specific Plan Buildout* *4.3-7 Implement Mitigation Measures 4.3-3(a) through 4.3-3(c).*	CC/SU
	LS	*Off-Site Improvements Study Area* *None required.*	N/A

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4.3-8 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	CC	*Initial Phase, Specific Plan Buildout* *4.3-8(a) Prior to approval of any Improvement Plans for each phase of development, the project applicant shall provide proof of compliance with the following to the satisfaction of the San Joaquin County Community Development Department:* • *The project applicant shall show on the Improvement Plans via notation that solar PV panels shall be incorporated for "Base Building" energy needs for limited industrial (I-L) zoned buildings. Additional forklift charging anticipated as part of Mitigation Measure 4.3-3(b) shall also be met by solar PV.* *4.3-8(b) Implement Mitigation Measure 4.3-3(b).* *4.3-8(c) Implement Mitigation Measures 4.12-4(a) through 4.12-4(f).*	CC/SU
	LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.3-9 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.	CC	*Initial Phase, Specific Plan Buildout* *4.3-9 Implement Mitigation Measures 4.3-8(a), 4.3-3(b), and 4.12-4(a) through 4.12-4(f).*	LCC
	LS	*Off-Site Improvements Study Area* *None required.*	N/A

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4.3-10 Result in a cumulatively considerable inefficient or wasteful use of energy or conflict with a State or local plan for renewable energy or energy efficiency.	LS	*None required.*	N/A
4.4 Biological Resources			
4.4-1 Have a substantial adverse effect, either directly or through substantial habitat modifications, on any plant species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	LS	*None required.*	N/A
4.4-2 Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk and white-tailed kite.	S	*Initial Phase, Specific Plan Buildout* *4.4-2(a)* *Swainson's hawk. Pursuant to subsection 5.2.4.11 of the SJMSCP, the project applicant shall consult with a qualified biologist prior to any vegetation activities or ground-disturbing work associated with each phase of the proposed project to determine if any known or potential nesting trees are located within the project site boundaries. Known or potential nesting trees can be either retained or removed from the project site. If identified nesting trees are retained and occupied during construction activities, then a buffer of twice the dripline of the tree shall be established until the nest is no longer occupied.*	LS

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		However, nesting trees may also be removed while trees are not occupied from September 1 to February 15. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department. *4.4-2(b)* *White-tailed kite. Pursuant to subsection 5.2.4.19 of the SJMSCP, prior to any vegetation clearing or ground-disturbing activities associated with each phase of the proposed project that would occur during the nesting season (February 15 to September 15), a nesting preconstruction survey shall be conducted within and adjacent (as feasible) to the project to determine the presence of nesting white-tailed kites. If an active nest is identified as part of the preconstruction survey, a 100-foot non-disturbance buffer from the nesting area shall be established and maintained until the nest has been deemed inactive by the qualified biologist. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.* *Off-Site Improvements Study Area* *None required.*	
	LS		N/A

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4.4-3 Have a substantial adverse effect, either directly or through habitat modifications, on song sparrow (Modesto population).	S	*Initial Phase, Specific Plan Buildout* *4.4-3 Prior to commencement of construction activities that occur during the nesting season (February 15 to August 31) for each phase of the proposed project, a qualified biologist shall conduct a nesting bird survey to determine if any nests or nesting activity is present within or adjacent to (as feasible) the project site. Pursuant to the Migratory Bird Treaty Act (MBTA), birds or their nests may not be harmed or disturbed if observed within the project site. If nests are observed, then a minimum 100-foot buffer shall be established by the biologist that shall remain in effect until the nest becomes inactive. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.*	LS
	LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.4-4 Have a substantial adverse effect, either directly or through habitat modifications, on northern harrier.	LS	*Initial Phase* *None required.*	N/A
	S	*Specific Plan Buildout* *4.4-4 Pursuant to subsection 5.2.4.17 of the SJMSCP, prior to any vegetation activities or ground-disturbing activities that occur within the proposed Gateway Center Development Area, a nesting survey shall be conducted by a qualified biologist consistent to determine if any northern harrier nests or nesting*	LS

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		activity is present within the project site and a surrounding 500-foot radius, as feasible. If nesting is observed, then a 500-foot buffer shall be applied during all vegetation activities or ground-disturbing activities that occur during the nesting season (February 15 – August 31). Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.	
	LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.4-5 Have a substantial adverse effect, either directly or through habitat modifications, on Crotch's bumble bee.	LS	*Initial Phase* *None required.*	N/A
	S	*Specific Plan Buildout* *4.4-5 Prior to any ground-disturbing activities that occur within the proposed Gateway Center Development during the colony active period (April through August) and when floral resources are present, focused surveys shall be performed within both foraging and nesting habitats by a qualified biologist pursuant to the CDFW Survey Considerations for CESA Candidate Bumble Bee Species protocols (June 6, 2023). If Crotch's bumble bees or their nests are not observed on-site, further mitigation shall not be required. If Crotch's bumble bees or their nests are observed, then the project applicant shall consult with CDFW. Such consultation may require an Incidental Take Permit (ITP) if any bees are expected to be*	LS

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		harmed during project construction. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.	
	LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.4-6 Have a substantial adverse effect, either directly or through habitat modifications, on nesting songbirds and other raptors protected under the MBTA and CFGC.	S	*Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area* *4.4-6 Consistent with the MBTA and CFGC, the following measures shall be implemented prior to site disturbance to avoid impacts to nesting raptors and other birds on-site or within off-site improvement study areas. All survey results shall be provided to the San Joaquin County Community Development Department.* • *Prior to commencing construction activities for each phase of the proposed project and if such activities would begin during the typical nesting season (between February 1 and August 31), a nesting bird survey shall be conducted by a qualified biologist within the project site and any off-site improvements study areas for raptor and non-raptor specie* • *If nesting birds are identified during the preconstruction survey, the qualified biologist shall determine an appropriate disturbance-free avoidance buffer between*	LS

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		100 and 500 feet, depending on the species and as described in Subsections 5.2.4.16 through 5.2.4.22 of the SJMSCP. Buffer zones shall be clearly demarcated in the field for avoidance by construction activities. *The size of an established buffer may be altered if the qualified biologist conducts behavioral observations and determines the nesting birds are well acclimated to disturbance. If this occurs, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting birds. If the buffer is reduced, the qualified biologist shall remain on-site to monitor the behavior of the nesting birds during construction to ensure that the reduced buffer does not result in take of eggs or nestlings.* • *Construction or earth-moving activities shall not occur within the established nest avoidance buffer until the qualified biologist determines that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If a qualified biologist is not hired by the project applicant or the contractor to monitor the active nesting birds/raptors, then the full buffer(s) shall be maintained in place from February 1 to August 31. The buffer may be removed*	

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		and work may proceed as otherwise planned within the buffer on September 1.	
4.4-7 Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	S	*Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area* *4.4-7(a) Prior to initiation of any ground disturbance activities within each phase of development, including off-site improvements study areas, containing aquatic features identified in Figure 4.4-10 through Figure 4.4-17 of the EIR, the project applicant shall submit to the Central Valley Regional Water Quality Control Board (CVRWQCB) an application for Clean Water Act Section 401 Water Quality Certification and/or Waste Discharge Requirements for Projects Involving Discharge of Dredged and/or Fill Material to Waters of the State. The project proponent shall be responsible for conducting all project activities in accordance with the permit provisions outlined in the applicable CVRWQCB permit. Written verification of the 401 Water Quality Certification; or if a 401 Water Quality Certification is not required, written correspondence from CVRWQCB to this effect, shall be provided to the San Joaquin County Community Development Department, prior to issuance of a building and/or grading permit.* *4.4-7(b) The CDFW maintains jurisdiction over the bed and bank of the bed, channel, and banks of any river, stream, or lake (Fish and Game Code Section 1602) and impacts to these areas may require a Lake or Streambed Alteration Agreement. Prior to initiating*	LS

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		construction activities within each phase of development, including off-site improvements study areas, containing aquatic features identified in Figure 4.4-10 through Figure 4.4-17 of the EIR, the project shall notify CDFW of the intentions of the project to determine if a Lake or Streambed Alteration Agreement (LSAA) is required. If required, mitigation may include restoration or enhancement of resources on-site. Written verification of the Section 1600 LSAA; or if a LSAA is not required, written correspondence from CDFW to this effect, shall be provided to the San Joaquin County Community Development Department, prior to issuance of a building and/or grading permit.	
4.4-8 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.	LS	*None required.*	N/A
4.4-9 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	S	*Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area* *4.4-9(a) Prior to commencement of any ground-disturbing activities for each phase of the proposed project, the project applicant shall participate in the SJMSCP and obtain Incidental Take Minimization Measures (ITMMs) from the San Joaquin Council of*	LS

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		Governments (SJCOG). The project applicant shall sign the ITMMs prior to any ground disturbance within six months from receipt of the ITMMs. If ITMMs are not signed within six months, the applicant shall reapply for SJMSCP coverage. *Upon receipt of signed ITMMs from project applicant, SJCOG staff shall sign the ITMMs, creating the effective date of the ITMMs.* 1. *Ground disturbance shall not occur without compliance and satisfaction of the ITMMs.* 2. *Upon issuance of fully executed ITMMs and prior to any ground disturbance, the project applicant shall:* a. *Post a bond for payment of the applicable SJMSCP fee covering the entirety of the project acreage being covered (the bond shall be valid for a maximum of a six-month period); or* b. *Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or* c. *Dedicate land in-lieu of fees, either as conservation easements or fee title; or* d. *Purchase approved mitigation bank credits.*	

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		3. Within six months from the effective date of the ITMMs or issuance of a building permit, whichever occurs first, the project applicant shall: *a. Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or* *b. Dedicate land in-lieu of fees, either as conservation easements or fee title; or* *c. Purchase approved mitigation bank credits.* *Failure to satisfy the obligations of the mitigation fee shall subject the bond to be called.*	
	S	*Specific Plan Buildout, Off-Site Improvements Study Area* *4.4-9(b)* *Burrowing Owl. Within 14 days prior to the commencement of any grading activities associated with the proposed project subsequent to Initial Phase development, a preconstruction clearance survey for burrowing owl shall be conducted within the work area and a 300-foot buffer, as accessible, to confirm absence or presence of burrowing owl. The survey shall be conducted by a qualified biologist with experience in surveying for and identifying burrowing owl signs and burrowing owl individuals. If construction pauses for more than 14 days after grading is complete, an additional preconstruction*	LS

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		clearance survey shall be conducted. Furthermore, the project shall comply with Subsection 5.2.4.15 of the SJMSCP, which provides guidelines for avoiding impacts and protecting burrowing owls. The guidelines state that burrowing owls may be discouraged from entering a potential construction site by preventing ground squirrels from creating these burrows through planting or maintaining vegetation covering the site at a height of approximately 36 inches above the ground, discing or plowing the project site to destroy any burrows, and removing ground squirrels. Pursuant to the current guidance from CFDW regarding how to proceed if active burrows are located within and around 150 meters of the work area (CDFW 2024), project activities conducted during the breeding (February 1 through August 31) and non-breeding seasons should delineate a 150-meter protective buffer with high-visibility material be established around occupied burrows and burrow complexes until the completion of the project when delineation material can be removed. Furthermore, any burrowing owl observed within the project site or within 150 meters adjacent to the site shall be allowed to leave on their own and any project activities that could result in harm shall cease until the owl has left the work area. The designated biologist shall locate the burrow or burrow complex and delineate using high-visibility material, as previously described, until work in the area has	

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		ceased. A designated biologist shall be present during all project activities if active burrowing owl complexes are observed within 150 meters of the work area to conduct biological monitoring as prescribed by CDFW (CDFW 2024) and determine if burrowing owl behavior is affected during construction activities. The designated biologist shall have the authority to cease construction activities if burrowing owl are being negatively affected by the work and shall consult with CDFW to determine proper protocols before work activities may recommence. All active burrowing owl complexes shall be avoided unless the burrow location or ground disturbing work pose a risk to individual burrowing owls. However, if burrowing owl complexes are located within an area of temporary disturbance and are not active at the time of work (as determined by the designated biologist), CDFW shall be consulted and an approved exclusion object may be inserted into the entrance of the burrow to ensure burrowing owls do not occupy potential burrows within the project site. If burrowing owls are found present on-site or within 150 meters of project activities, and such activities would result in direct impacts to occupied habitat or burrowing owl individuals (as determined by the designated project biologist), CDFW shall be notified immediately to discuss whether an Incidental Take Permit (ITP) would be required prior to work. Any measures or recommendations prescribed by CDFW to avoid and	

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		minimize impacts to burrowing owl shall be required. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.	
		4.4-9(c) *San Joaquin kit fox. In accordance with Section 5.2.4.25 of the SJMSCP, a qualified biologist shall conduct preconstruction surveys at least two calendar weeks and at maximum 30 calendar days prior to the commencement of ground-disturbing activities associated with the proposed project subsequent to Initial Phase development. If individual kit foxes are observed during the survey, then an additional protocol level survey shall be conducted consistent with the USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance protocol (January 2011).* *Additionally, if dens with openings four inches in diameter that open within two feet inside of the den are observed on-site, then a qualified biologist shall dust the opening of the den for tracks and monitor the den for three calendar days to determine if the den is occupied. If the den is occupied by a single adult kit fox, then the den may be destroyed when the fox either moves or leaves the den. If the den is discovered to be a natal den, a 250-foot non-disturbance buffer shall be maintained around the den until the qualified biologist determines the den*	

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		has been vacated. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.	
4.4-10 Cumulative loss of habitat for special-status species.	LCC	*None required.*	N/A
4.5 Cultural and Tribal Cultural Resources			
4.5-1 Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5.	LS S	*Initial Phase* *None required.* *Specific Plan Buildout* *4.5-1(a) The proposed widening of the crossings of the California Aqueduct and the Delta-Mendota Canal shall be designed in keeping with the guidelines outlined in The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings (2017). An architectural historian shall review the design of the crossings prior to approval of improvement plans associated with such improvements to ensure that the guidelines are met. The proposed crossings shall also be reviewed by the State Historic Preservation Officer (SHPO) prior to approval of plans associated with such improvements to ensure that the construction of the crossings would not have an adverse effect on the structures.* *In addition, any proposed development and construction that encroaches adjacent to or within the*	N/A SU

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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Delta-Mendota Canal right-of-way shall meet the requirements of the Engineering and Operations and Maintenance (O&M) Guidelines for Crossings as enforced by the San Luis & Delta-Mendota Water Authority (SLDMWA). Any crossings shall be designed in such a way to avoid adverse effects on the NRHP eligibility of the Delta-Mendota Canal and avoid affecting the character-defining features of the Delta Mendota Canal, including the historical alignment and ability to convey water as part of a largescale water conveyance system. Pursuant to the SLDMWA, the proposed bridge shall span the Delta-Mendota Canal without affecting the alignment or function. Pursuant to the Bureau of Reclamation's Guidelines, all new bridge crossings associated with the proposed project shall fully span the Delta-Mendota Canal. Final Delta-Mendota Canal bridge design shall be subject to approval by the SLDMWA and the San Joaquin County Department of Public Works. *The California Department of Water Resources (DWR) manages the California Aqueduct and requires that an encroachment permit be obtained for any crossing above or below the California Aqueduct. The crossing shall avoid adverse effects on the NRHP eligibility of the California Aqueduct and the character-defining features of the California Aqueduct, including the historical alignment and ability to convey water as part of a largescale water*	

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		conveyance system. Typically, character preservation is accomplished by creating a crossing that spans the California Aqueduct and would not affect the alignment or function. Final California Aqueduct bridge design shall be subject to approval by the DWR and San Joaquin County Department of Public Works. *Proof of compliance with the aforementioned standards shall be submitted to the San Joaquin County Community Development Department for review and approval.*	
	S	*Off-Site Improvements Study Area* *4.5-1(b) Prior to construction of the off-site improvements within study areas identified in Table 4.5-2 of this EIR, additional survey work shall be conducted on the 32 buildings and structures within or abutting such improvements to determine if the buildings and structures would meet criteria for inclusion on the CRHR. In addition, the buildings and structures shall be subjected to an evaluation by an architectural historian who meets the Secretary of the Interior's Standards.* *Evaluation of the buildings and structures shall include: the development of an appropriate historical context applicable to the building/structure type and potential period of significance; an examination of the architecture or engineering of the building/structure;*	SU

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		and sufficient historical research about the property to establish the potentially important people associated with the building/structure. Once completed, a determination of the building/structure's eligibility for inclusion on the CRHR shall be made, as well as a determination of the building/structure's integrity. All work shall be overseen by an architectural historian that meets the Secretary of the Interior's Standards and shall be documented in a report and on appropriate Department of Parks and Recreation (DPR) 523 forms. All materials shall be submitted to the San Joaquin County Community Development Department as proof of compliance. In addition, if the building/structure is located within another agency's jurisdiction, the materials shall also be submitted to the relevant agency. *If a formal evaluation finds that a building and/or structure meets criteria for listing on the CRHR and would be impacted by the off-site improvements, and protection and/or preservation is not possible, then mitigation shall include, but is not limited to: relocation of the building/structure; intensive documentation of the building prior to demolition, such as documentation promulgated by the Historic American Buildings Survey and the Historic American Engineering Record; and site interpretation. Specific and appropriate mitigation shall be developed by the architectural historian relative to the specific project impacts.*	

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	S	*South Chrisman Road/Eastbound I-580 Ramp* *4.5-1(c) Roadway improvements located above the underground San Joaquin Pipelines 1 and 2 of the Hetch Hetchy Aqueduct shall be subject to the guidelines outlined in The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings (2017). An architectural historian shall review the design of the crossings prior to approval of improvement plans to ensure that the guidelines are met and the construction of the off-site improvements would not have an adverse effect on the structures. Final design of the roadway improvements shall be subject to approval by Caltrans and the San Joaquin County Department of Public Works. Proof of compliance with this measure shall be submitted to the San Joaquin County Community Development Department.*	SU
4.5-2 Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries.	S	*Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area* *4.5-2(a) Pursuant to CCR Section 15064.5(f) of the CEQA Guidelines, if archaeological resources are discovered during project-related activities, all ground-disturbing work shall be halted immediately until a qualified archaeologist who meets the Secretary of the Interior's Professional Qualification Standards can evaluate the find.*	LS

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		Construction may continue on other parts of the project site while evaluation of the find is being made, provided that ground-disturbing activities are conducted at least 50 feet from the location of the potential archaeological resource while the archaeologist is evaluating its importance. Should the potential archaeological resource be determined significant, then the archaeologist shall develop appropriate mitigation measures specific to the resource, which may include, but not be limited to, measures similar to Mitigation Measure 4.5-2(c) below.	
		4.5-2(b) The following language shall be noted on Improvement Plans for any future development, subject to review and approval by the San Joaquin County Community Development Department or another agency within whose jurisdiction the off-site improvement study area is located:	
		If articulated or disarticulated human remains are encountered within the proposed project site during construction activities, excavation or disturbance of the location shall be halted within 100 feet of the find. The San Joaquin County Coroner shall be immediately notified. If the Coroner determines the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall determine and notify a Most Likely Descendant	

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		(MLD). Further actions shall be determined, in part, by the desires of the MLD. The MLD shall be afforded 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendant may request mediation by the NAHC. *Specific Plan Buildout* *4.5-2(c) Prior to construction activities within the areas of the project site with high buried site potential, such areas shall be subject to a subsurface investigation conducted by a qualified archaeologist that meets the Secretary of the Interior's Standards for Archaeology to look for buried archaeological site indicators. The subsurface study shall include the excavation of soils to the maximum depth of proposed disturbance or to a depth where soils formed prior to the occupation of California is reached to investigate the areas for the presence of buried archaeological site indicators.* *If buried archaeological site indicators are found and would be impacted by the proposed development, the preferred treatment of the resource is protection and preservation. Protection and preservation shall*	

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		be achieved in one of two ways: direct avoidance (i.e., not developing within the boundaries of the archaeological site); or by protecting intact archaeological deposits through the placement of sufficient fill over the deposit during and after construction. *If protection and preservation are not possible, then a subsurface testing program shall be conducted to determine if the archaeological site is eligible for inclusion on the California Register. The subsurface testing program shall be overseen by an archaeologist who meets the Secretary of the Interior's Standards and shall be outlined in a Subsurface Testing Program Plan for Archaeological Resources. The plan shall include the following: a research design appropriate for the archaeological site type; a discussion and rationale of the investigation's field and laboratory methods; and an identification of the planned treatment and disposition of any recovered cultural materials, including the steps that shall be followed in the event of discovery of human remains. The identified steps shall be consistent with Health and Safety Code Section 7050.5. Following the completion of the subsurface testing program, a report shall be prepared that documents the methods of investigation, the types of analyses conducted, and a determination of the archaeological site's eligibility for inclusion on the California Register of Historic*	

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		Resources (CRHR). The report shall include completed appropriate Department of Parks and Recreation (DPR) 523 forms for the archaeological site. *If the testing program finds that an archaeological site eligible for listing on the CRHR would be impacted, and protection and preservation is not possible, then data recovery of the impacted locations shall be necessary. Data recovery shall be performed by a qualified archaeologist that meets the Secretary of the Interior's Standards using appropriate archaeological techniques. Data recovery shall include processing and analysis of recovered cultural materials using appropriate archaeological methods, as well as the preparation of the recovered materials for permanent disposition pursuant to the requirements of the Archaeological Resources Treatment Plan. Monitoring may also be recommended by the archaeologist, but the decision to recommend monitoring as a mitigation measure shall be dependent upon the findings of the testing program.* *Proof of compliance with the aforementioned standards shall be submitted to the San Joaquin County Community Development Department for review and approval.*	

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		Off-Site Improvements Study Area *4.5-2(d)* *Prior to any proposed off-site intersection or roadway improvements, with the exception of any improvements at the South Corral Hollow Road/West Linne Road intersection, a cultural resources study shall be conducted to determine if any archaeological sites are present. The study shall be conducted by a qualified archaeologist that meets the Secretary of the Interior's Standards for Archaeology. In addition, the locations of high buried site potential identified in the Archival Research and Windshield Survey report prepared for the proposed project by Tom Origer and Associates (see Figure 4.5-2 of this EIR) shall be subjected to a subsurface investigation to determine the presence of buried archaeological site indicators in the event that development is proposed. The subsurface study shall include the excavation of soils to the maximum depth of proposed disturbance or to a depth where soil formed prior to the occupation of California is reached. If the footprint of proposed development at any of the intersections or roads changes, the changes shall be reviewed by an archaeologist who meets with the Secretary of the Interior's Standards for Archaeology to determine if additional archaeological survey is necessary prior to any proposed improvements. The subsurface study shall be submitted to the San Joaquin County Community Development Department, as well as to other applicable agencies if the site is located within another jurisdiction.*	

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		If archaeological site indicators are found during any of the studies recommended above and would be impacted by the proposed improvements, the preferred treatment of the resource is protection and preservation. Protection and preservation shall be achieved in one of two ways: direct avoidance (i.e., not developing within the boundaries of the archaeological site); or by protecting intact archaeological deposits through the placement of sufficient fill over the deposit during and after construction. *If protection and preservation are not possible, then a subsurface testing program shall be conducted to determine if the archaeological site is eligible for inclusion on the California Register. The subsurface testing program shall be overseen by an archaeologist who meets the Secretary of the Interior's Standards and shall be outlined in a Subsurface Testing Program Plan for Archaeological Resources. The plan shall include the following: a research design appropriate for the archaeological site type; a discussion and rationale of the investigation's field and laboratory methods; and an identification of the planned treatment and disposition of any recovered cultural materials, including the steps that shall be followed in the event of discovery of human remains. The identified steps shall be consistent with Health and Safety Code Section 7050.5. Following the completion of the*	

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		subsurface testing program, a report shall be prepared that documents the methods of investigation, the types of analyses conducted, and a determination of the archaeological site's eligibility for inclusion on the California Register of Historic Resources (CRHR). The report shall include completed appropriate Department of Parks and Recreation (DPR) 523 forms for the archaeological site. *If the testing program finds that an archaeological site eligible for listing on the CRHR would be impacted, and protection and preservation is not possible, then data recovery of the impacted locations shall be necessary. Data recovery shall be performed by a qualified archaeologist that meets the Secretary of the Interior's Standards using appropriate archaeological techniques. Data recovery shall include processing and analysis of recovered cultural materials using appropriate archaeological methods, as well as the preparation of the recovered materials for permanent disposition pursuant to the requirements of the Archaeological Resources Treatment Plan. Monitoring may also be recommended by the archaeologist, but the decision to recommend monitoring as a mitigation measure shall be dependent upon the findings of the testing program.*	

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			Proof of compliance with the aforementioned standards shall be submitted to the San Joaquin County Community Development Department for review and approval. In addition, if the off-site improvement study area is located within another agency's jurisdiction, the materials shall also be submitted to the relevant agency for review and approval.	
4.5-3	**Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074.**	S	*Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area* *4.5-3 Implement Mitigation Measures 4.5-2(a) and 4.5-2(b).*	LS
4.5-4	**Cause a cumulative loss of cultural resources.**	LS	*None required.*	N/A
	4.6 Geology and Soils			
4.6-1	**Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides.**	LS	*None required.*	N/A
4.6-2	**Result in substantial soil erosion or the loss of topsoil.**	LS	*None required.*	N/A

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4.6-3 Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code.	S	*Initial Phase, Specific Plan Buildout* *4.6-3(a) The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for review and approval by the San Joaquin County Community Development Department. The report shall address and make recommendations on the following:* *A. Road, pavement, and parking area design;* *B. Structural foundations, including retaining wall design (if applicable);* *C. Structural foundations, including retaining wall design (if applicable);* *D. Erosion/winterization;* *E. Special problems discovered on-site, (i.e., open bodies of water, expansive/unstable soils, etc.);* *F. The presence of undocumented fill on-site; and* *G. Slope stability.* *Once approved by the San Joaquin County Community Development Department, a copy of the final report shall be provided to the San Joaquin County Community Development Department for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.*	LS

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			Off-Site Improvements Study Area *4.6-3(b) Prior to improvement plan approval for any roadway improvements within the Off-Site Improvements Study Area, the project applicant shall submit a site-specific, design-level geotechnical report produced by a California Registered Geotechnical Engineer to the agency within whose jurisdiction the improvement areas are located for review and approval. The geotechnical report shall include, but would not be limited to, an analysis of the on-site geologic and seismic conditions, including soil sampling and testing to determine appropriate roadway design specifications.*	
4.6-4	**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 or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.**	LS	*None required.*	N/A
4.6-5	**Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where**	No Impact	*None required.*	N/A

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	sewers are not available for the disposal of wastewater.			
4.6-6	**Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**	S	*Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area* *4.6-6 Should paleontological resources be discovered during ground-disturbing activities, work shall be halted in the area within 50 feet of the find. The applicant shall notify the San Joaquin County Community Development Department or other appropriate agency within whose jurisdiction the improvement area is located and retain a qualified paleontologist to inspect the discovery. If deemed significant under criteria established by the Society for Vertebrate Paleontology with respect to authenticity, completeness, preservation, and identification, the resource(s) shall then be salvaged and deposited in an accredited and permanent scientific institution (e.g., University of California Museum of Paleontology [UCMP] or Sierra College), where the discovery would be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any future grading plans, utility plans, and improvement plans approved by the San Joaquin County Engineering and Surveying Division or other appropriate agency within whose jurisdiction the improvement area is located for the proposed project, where excavation work would be required. Construction may continue in areas outside of the buffer zone.*	LS

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4.6-7	**Cumulative impacts to geology and soils, mineral resources, and paleontological resources.**	LS	*None required.*	N/A
	4.7 Hazards and Hazardous Materials			
4.7-1	**Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**	S	*Initial Phase, Specific Plan Buildout* *4.7-1 Prior to the approval of any grading or building permits, all plans shall identify designated work areas for servicing vehicles or construction equipment. Such work areas shall be clearly demarcated on-site and developed so as to prevent resource damage from hazardous materials, such as motor oil or gasoline.*	LS
4.7-2	**Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.**	S	*Initial Phase, Specific Plan Buildout* *4.7-2(a) Prior to the approval of any grading permits for development within the direct vicinity of the PG&E gas transmission pipeline or the Phillips 66 petroleum pipeline, as applicable, the construction contractor, a representative from PG&E and/or Phillips 66, and a representative from the San Joaquin County Public Works Department shall meet on the project site and the applicant shall prepare site-specific safety guidelines for construction in the field to the satisfaction of the San Joaquin County Public Works Department Development Services staff. The safety guidelines and field-verified location of the pipeline(s) shall be noted on the Improvement Plans and be included in all construction contracts involving the*	LS

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		project site, subject to review and approval by the San Joaquin County Public Works Department. *Specific Plan Buildout* *4.7-2(b)* *Prior to the initiation of construction of project components within the Pacific Gateway Central development area, a soil assessment of the stained and discolored soil observed surrounding the existing storage building and diesel aboveground storage tanks shall be conducted to determine the presence of potential soil contamination. Once the soils are collected, the soils are to be tested for probable contaminants of concern. If soil contaminates are not found, further action is not required; however, if concentrations of any contaminant are detected in excess of established thresholds, the assessment shall include appropriate measures, including, but not limited to, soil remediation to an acceptable total threshold limit concentration (TTLC) level according to applicable State and federal regulations or proper excavation and disposal of the soil at a licensed landfill facility. All recommended measures shall be implemented by the project applicant, subject to review and approval by the San Joaquin County Environmental Health Department.* *4.7-2(c)* *Prior to the initiation of construction of project components within the Off-Site Basin parcel, a soil assessment of the stained and discolored soil observed surrounding the aboveground storage tank*	

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		and waste oil drums shall be conducted to determine the presence of potential soil contamination. Once the soils are collected, the soils are to be tested for probable contaminants of concern. If soil contaminates are not found, further action is not required; however, if concentrations of any contaminant are detected in excess of established thresholds, the assessment shall include appropriate measures, including, but not limited to, soil remediation to an acceptable total threshold limit concentration (TTLC) level according to applicable State and federal regulations or proper excavation and disposal of the soil at a licensed landfill facility. All recommended measures shall be implemented by the project applicant, subject to review and approval by the San Joaquin County Environmental Health Department. *4.7-2(d)* *Prior to approval of any future improvement plans for the project, the existing petroleum and gas pipelines and associated easements shall be included on the utility sheets. All proposed buildings shall be located outside of existing easements and any applicable pipeline operator setback specifications and standards shall be met to the satisfaction of the San Joaquin County Public Works Department.* *4.7-2(e)* *Prior to issuance of a demolition permit by the County for any on-site structures as part of buildout subsequent to the Initial Phase, the project applicant*	

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		shall provide a site assessment that determines whether any structures to be demolished contain lead-based paint (LBP) or asbestos. If structures do not contain LBP or asbestos, further mitigation is not required; however, if LBP is found, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance with California Air Resources Board recommendations and OSHA requirements. If asbestos is found, all construction activities shall comply with all requirements and regulations promulgated through the San Joaquin Valley Air Pollution Control District (SJVAPCD) Asbestos Dust Mitigation Plan. The demolition contractor shall be informed that all paint on the buildings shall be considered as containing lead and/or asbestos. The contractor shall follow all work practice standards set forth in the Asbestos National Emission Standards for Hazardous Air Pollutants (Asbestos NESHAP, 40 CFR, Part 61, Subpart M) regulations, as well as Section V, Chapter 3 of the OSHA Technical Manual. Work practice standards generally include appropriate precautions to protect construction workers and the surrounding community, and appropriate disposal methods for construction waste containing lead paint or asbestos in accordance with federal, State, and local regulations subject to approval by the San Joaquin County Environmental Health Department.	

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		Off-Site Improvements Study Area *4.7-2(f) If indicators of apparent soil contamination (soil staining, odors, debris fill material, etc.) are encountered within the Off-Site Improvements Study Area during off-site roadway improvements, the impacted area(s) shall be isolated from surrounding, non-impacted areas. The project applicant shall hire an environmental professional to obtain samples of the potentially impacted soil for analysis of the contaminants of concern and comparison with applicable regulatory screening levels (i.e., Environmental Screening Levels, California Human Health Screening Levels, Regional Screening Levels, etc.). The results of the soil sampling shall be submitted to the San Joaquin County Environmental Health Department. Where the soil contaminant concentrations exceed the applicable regulatory screening levels, the impacted soil shall be excavated and disposed of off-site at a licensed landfill facility to the satisfaction of the San Joaquin County Environmental Health Department.*	
4.7-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	LS	*None required.*	N/A
4.7-4 Be located on a site which is included on a list of	LS	*None required.*	N/A

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	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.			
4.7-5	**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 or excessive noise for people residing or working in the project area.**	LS	*None required.*	N/A
4.7-6	**Cumulative exposure to potential hazards and increases in the transport, storage, and use of hazardous materials.**	LS	*None required.*	N/A
	4.8 Hydrology and Water Quality			
4.8-1	**Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.**	S	*Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area* *4.8-1 Prior to issuance of grading permits for each component of the proposed project, including off-site improvements, the project applicant shall prepare and submit to the Central Valley RWQCB a SWPPP*	LS

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		detailing measures to control soil erosion and waste discharges during construction. Each SWPPP shall include an erosion control and restoration plan, a water quality monitoring plan, a hazardous materials management plan, and post-construction BMPs. Specific BMPs shall be determined during the final states of project design. However, each SWPPP shall include specific practices to minimize the potential that pollutants will leave the site during construction. Such practices include, but are not limited to, establishing designated equipment staging and washing areas, protecting spoils and soil stockpile areas, and identifying equipment exclusion zones. The BMPs shall be maintained until all areas disturbed during construction have been adequately stabilized. *Prior to commencement of construction activities for each component of the proposed project, including off-site improvements within study areas greater than one acre, such as grading, the project applicant shall submit a Notice of Intent (NOI) to the SWRCB for coverage under the General Construction Permit.*	
4.8-2 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operation.	S	*Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area* *4.8-2 Prior to approval of any grading, building or encroachment permit, the project applicant shall submit a Storm Water Quality Control Plan (SWQCP) to the San Joaquin County Public Works Department for review and approval, or for roadway improvement*	LS

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	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. The SWQCP for the project and any off-site improvements within San Joaquin County, shall meet the standards of the San Joaquin County Storm Water Quality Control Criteria Plan (SWQCCP). If located in another jurisdiction, the SWQCP shall meet other applicable standards, such as the San Joaquin County SWQCCP. Site-design measures, source-control measures, hydromodification management, and Low-Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the improvement plans	
4.8-3	**Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.**	LS	*None required.*	N/A

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Table 2-1
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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.8-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	S	*Initial Phase* *4.8-4(a) As part of the Improvement Plan submittal process for the Initial Phase of the proposed project, a Final Drainage Report shall be submitted to the San Joaquin County Public Works Department. The Final Drainage Report shall require more detail than that provided in the preliminary report, and shall be reviewed in concert with the Improvement Plans to confirm conformity between the two. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: written text addressing existing conditions; watershed maps; changes in flows and patterns effected by the proposed improvements; all appropriate calculations; and proposed on- and off-site improvements to accommodate post-development flows in the 100-year, 10-day storm event for retention basin sizing; and the 100-year, 24-hour storm to convey offsite flows through the project site. The final drainage report shall be prepared in conformance with the requirements set forth by San Joaquin County at the time of Improvement Plan submittal and shall be approved by the San Joaquin County Public Works Department.* *Specific Plan Buildout, Off-Site Improvements Study Area* *4.8-4(b) In conjunction with submittal of any subsequent development applications within the proposed*	LS

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Specific Plan area, or any off-site roadway improvement plans related to the proposed project, the project applicant shall submit, for review and approval, a design-level drainage report to the San Joaquin County Public Works Department, or for roadway improvement projects, the agency (e.g., Caltrans, City of Tracy) within whose jurisdiction the improvement areas are located. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: written text addressing existing conditions; watershed maps; changes in flows and patterns effected by the proposed improvements; all appropriate calculations; and proposed on- and off-site improvements to accommodate post-development flows in the 100-year, 10-day storm event for retention basin sizing; and the 100-year, 24-hour storm to convey offsite flows through the project site, unless a different design storm is specified by the agency with review/approval authority. The final drainage report shall be prepared in conformance with the requirements set forth by San Joaquin County, or for roadway improvements within another jurisdiction, the respective jurisdiction's applicable stormwater standards.	
4.8-5 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	addition of impervious surfaces, in a manner which would impede or redirect flood flows, or in flood hazard, tsunami, or seiche zone, risk release of pollutants due to project inundation.			
4.8-6	**Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns.**	LCC	*None required.*	N/A
4.9 Land Use and Planning				
4.9-1	**Cause a significant environmental impact due to physically dividing an established community.**	LS	*None required.*	N/A
4.9-2	**Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	mitigating an environmental effect.			
4.9-3	**Cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**	LS	*None required.*	N/A
	4.10 Noise			
4.10-1	**Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**	S	*Specific Plan Buildout* *4.10-1(a) Prior to the approval of any grading and/or building permits, the San Joaquin County Community Development Department shall establish the following as a condition of approval for any permit that results in the use of construction equipment:* • *On-site construction occurring within 100 feet, or less, from existing residential uses shall be shielded by a six-foot tall temporary construction noise barrier, as shown in Figure 4.10-3. The sound barrier shall consist of ½-inch plywood or minimum sound transmission class (STC) 27 sound curtains. The barrier shall be free from gaps, opening, or penetrations to ensure maximum performance.*	SU

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Initial Phase, Specific Plan Buildout *4.10-1(b)* *Prior to the approval of any grading and/or building permits, the San Joaquin County Community Development Department, shall establish the following as conditions of approval for any permit that results in the use of construction equipment:* • *On-site construction activities shall be limited to between 7:00 AM and 7:00 PM, unless otherwise allowed within the Pacific Gateway Specific Plan;* • *All construction equipment powered by internal combustion engines shall be properly muffled and maintained;* • *Quiet construction equipment, particularly air compressors, are to be selected whenever possible;* • *All stationary noise-generating construction equipment such as generators or air compressors are to be located as far as is practical from existing residences. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site;* • *Unnecessary idling of internal combustion engines is prohibited; and* • *The construction contractor shall, to the maximum extent practical, locate on-site*	

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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction. *Off-Site Improvements Study Area* *4.10-1(c)* *Prior to the approval of any grading and/or building permits, the project applicant shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive land uses and include specific noise management measures to be included within the project plans and specifications, subject to review and approval by the San Joaquin County Community Development Department, or other appropriate agency within whose jurisdiction the construction project is located. The noise management measures may include, but are not necessarily limited to, the following:* • *Construction activities shall only take place between the hours specified by the applicable local ordinance;* • *All heavy construction shall be maintained in good operating condition, with all internal-combustion, engine-driven equipment fitted with intake and exhaust mufflers that are in good condition;*	

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		• *All mobile or fixed noise-producing equipment used on the proposed project that is regulated for noise output by a local, State, or federal agency shall comply with such regulations while in the project activity;* • *Where feasible, electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment;* • *All stationary noise-generating equipment shall be located as far away as possible from neighboring property lines;* • *Signs prohibiting unnecessary idling of internal-combustion engines shall be posted;* • *If deemed warranted by the construction noise management plan, a minimum six-foot-tall temporary construction sound wall shall be constructed along the construction area boundary adjacent to existing noise-sensitive receptors. The sound barrier fencing should consist of ½-inch plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The barriers should be free from gaps, openings, or penetrations to ensure maximum performance except where needed for access. The temporary construction sound wall shall be constructed prior to any demolition or other ground disturbing activities associated with construction and*	

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Table 2-1
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			remain in place until completion of construction activities within 100 feet of noise-sensitive receptors; and • *The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only.*	
4.10-2	**Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**	S	*Initial Phase* *4.10-2(a) To reduce traffic noise increases under Initial Phase conditions, the project applicant shall install quiet pavement overlays on the roadway segments shown in Figure 4.10-5 prior to the certificate of occupancy for the Initial Phase of the proposed project. Quiet pavement overlays shall follow industry best practices as outlined by the California Department of Transportation (Caltrans) (Quiet Pavement, Acoustic Measurement and Performance, February 2018), or a similar industry publication. Installation of quiet pavement shall be noted on Improvement Plans provided to the San Joaquin County Community Development Department for review and approval. For roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority.* *Specific Plan Buildout* *4.10-2(b) In conjunction with submittal of each future subdivision application, the project applicant shall submit a traffic noise analysis that determines which quiet pavement improvement(s) on roadway*	SU

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures		Level of Significance After Mitigation
			segments shown in Figure 4.10-12 through Figure 4.10-16 are required by that particular phase to ensure that traffic noise level increases attributable to the proposed project shall not exceed the FICON thresholds used in this EIR (see Table 4.10-9). The quiet pavement treatment shall be installed prior to certificate of occupancy for the first building within the phase under evaluation. Quiet pavement overlays shall follow industry best practices as outlined by Caltrans (Quiet Pavement, Acoustic Measurement and Performance, February 2018), or a similar industry publication. *Installation of quiet pavement shall be noted on Improvement Plans provided to the San Joaquin County Community Development Department for review and approval. For roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority.*	
		4.10-2(c)	*Prior to the approval of any grading or building permits for any components of the Specific Plan Buildout subsequent to the Initial Phase, the project applicant shall construct eight- to 12-foot-tall sound walls along portions of the project site boundaries to shield the closest sensitive receptors from project operational noise. Figure 4.10-12 shows the location of the sound walls. If desired, sound walls may also*	

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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		be placed off-site on adjacent property owner's property if preferred and agreed to by the property owner. Alternative sound wall locations on affected properties could be considered acceptable, as determined by individual property owners. The sound walls shall be noted on Improvement Plans, subject to approval by the San Joaquin County Community Development Department. Inclusion of the sound walls may be waived if a future noise study prepared by a qualified acoustical engineer, submitted to the San Joaquin County Community Development Department for review and approval, shows that such walls are unnecessary based upon the proposed future site layout(s).	
	LS	*Off-Site Improvements Study Area* *None required.*	N/A
4.10-3 Generation of excessive groundborne vibration or groundborne noise levels.	LS	*Initial Phase, Specific Plan Buildout* *None required.*	N/A
	S	*Off-Site Improvements Study Area* *4.10-3 If use of vibratory compactors is required within 25 feet or less of a residential structure, the project applicant shall ensure that preconstruction crack documentation and construction vibration monitoring is conducted to verify that construction vibrations do not cause damage to any adjacent structures. Results of the preconstruction crack documentation and construction vibration monitoring shall be*	LS

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Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			provided to the San Joaquin County Community Development Department and the San Joaquin County Department of Public Works for review and approval. For roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. Alternatively, use of hand compaction equipment could be employed to minimize ground vibrations.	
4.10-4	**For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose persons residing or working in the project area to excessive noise levels.**	LS	*None required.*	N/A
4.10-5	**Generation of a substantial permanent increase in ambient noise levels associated with development of the proposed project in combination with future development.**	LS CC/S	*Initial Phase, Off-Site Roadway Improvements Study Area* *None required.* *Specific Plan Buildout* *4.10-5 Implement Mitigation Measure 4.10-2(b).*	N/A CC/SU

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Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.11 Public Services, Utilities and Service Systems				
4.11-1	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services.**	LS	*None required.*	N/A
4.11-2	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other**	LS	*None required.*	N/A

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	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	performance objectives for law enforcement services.			
4.11-3	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for schools.**	LS	*None required.*	N/A
4.11-4	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for parks or other government services; or result in an increase in**	LS	*None required.*	N/A

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	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.			
4.11-5	**Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**	LS	*None required.*	N/A
4.11-6	**Have sufficient water supplies available to serve the project and reasonably foreseeable future development during**	LS	*None required.*	N/A

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	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	normal, dry, and multiple dry years.			
4.11-7	**Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**	LS	*None required.*	N/A
4.11-8	**Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.**	LS	*None required.*	N/A
4.11-9	**Cumulative impacts to public services.**	LS	*None required.*	N/A
4.11-10	**Increase in demand for utilities and service systems associated with the proposed project, in**	LS	*None required.*	N/A

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	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	combination with future buildout of the San Joaquin County			
			4.12 Transportation	
4.12-1	**Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities.**	S	*Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area* *4.12-1 The Improvement Plans for each component of the proposed project shall include a striping and signing plan and shall include all on- and off-site traffic control devices. Prior to the commencement of construction within the County, a construction signing and traffic control plan shall be provided to the San Joaquin County Public Works Department for review and approval. For roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. The construction signing and traffic control plan shall include (but not be limited to) items such as:* • *Guidance on the number and size of trucks per day entering and leaving the project site;* • *Identification of arrival/departure times that would minimize traffic impacts;* • *Approved truck circulation patterns only on designated truck routes (i.e., not on Durham Ferry Road);* • *Locations of staging areas;*	LS

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		• *Locations of employee parking and methods to encourage carpooling and use of alternative transportation;* • *Methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);* • *If feasible, stage the construction of bridge replacements over the California Aqueduct and Delta Mendota Canal such that a minimum of one travel lane remains open;* • *Criteria for use of flaggers and other traffic controls;* • *Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;* • *Monitoring for roadbed damage and timing for completing repairs;* • *Limitations on construction activity during peak/holiday weekends and special events;* • *Preservation of emergency vehicle access;* • *Removing traffic obstructions during emergency evacuation events; and* • *Providing a point of contact for County residents and guests to obtain construction information, have questions answered, and convey complaints.*	
4.12-2 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the	LS	*Initial Phase* *None required.*	N/A

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	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	circulation system, including roadway bicycle and pedestrian facilities, during operations.	S	*Specific Plan Buildout* *4.12-2 Prior to the issuance of a building permit for the first building whose vehicle trips would use MacArthur Drive north of the Specific Plan area, the project applicant shall implement the following Transportation Demand Management (TDM) Strategy:* • *Expand Bikeway Network – construct a Class I off-street multi-use path on the west side of MacArthur Drive or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance from the north edge of the project site to Linne Road.*	LS
		LS	*Off-Site Improvement Study Areas* *None required.*	N/A
4.12-3	**Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, during operations.**	S	*Initial Phase, Specific Plan Buildout* *4.12-3 Prior to the occupancy of the first building within the first phase of development, the project applicant shall implement Transportation Demand Management (TDM) Strategies 3 and 4 from Mitigation Measure 4.12-4(b), as follows:* • *Strategy 3: Extend Public Transit Service to Project Site – expand San Joaquin RTD fixed-route bus service to the project site.* • *Strategy 4: Operate a private employee shuttle system during peak periods that*	SU

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			circulates within the site and off-site to the Altamont Commuter Express (ACE) Station located on Tracy Boulevard at Linne Road.	
		LS	*Off-Site Improvement Study Areas* *None required.*	N/A
4.12-4	**Result in VMT which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3, subdivision (b).**	S	*Warehouse and Office Uses (Initial Phase, Specific Plan Buildout)* *4.12-4(a) Prior to issuance of first certificate of occupancy for each phase of development, the project applicant shall comply with San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 9410 (Employer Based Trip Reduction), which requires major employers to implement an Employee Trip Reduction Plan (eTRIP). Employers must complete and submit an Employer Registration form to the Air Pollution Control Officer (APCO) of the SJVAPCD within 180 days of becoming subject to the trip reduction requirements of Rule 9410. According to Rule 9410, eTRIP strategies are phased in over a period of three years. An employer may submit a single eTRIP that covers multiple worksites when those worksites are using the same eTRIP measures. If worksites are using differing eTRIP measures, then each worksite shall have its own eTRIP.* *In compliance with Rule 9410 requirements, employers shall collect information on the modes of transportation used for each employee's commute*	SU

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		each day of the Commute Verification Period, which is a period of at least one week (selected by the employer) that is representative of typical work week conditions. The employer shall submit its sampling methodology to the District 120 days prior to the start of the calendar year in which the employer intends to use the method. The APCO shall notify employers of its approval or disapproval of this method within 60 days of receipt. *By March 31st of each year, the employer shall submit a report to the APCO containing the results of the Commute Verification for the previous calendar year (including number of forms distributed, the number completed and returned, total number of trips to and from work, and the total number of each commute mode for the employees during the Commute Verification period).* *4.12-4(b) Prior to occupancy of the first building of each development phase, the project applicant shall implement the following transportation demand management (TDM) strategies, some of which may overlap with strategies selected under Rule 9410, in accordance with Mitigation Measure 4.12-4(a).* *1. Implement a Voluntary Commute Trip Reduction (CTR) program. Required elements of the program include:*	

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		○ *Commute Trip Reduction Marketing – implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program).* ○ *Ridesharing Program – implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers.* ○ *Subsidized or Discounted Transit Program - provides subsidized or discounted, or free transit passes for employees.* ○ *End-of-Trip Bicycle Facilities – installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use.* ○ *Employer-Sponsored Vanpool – implements an employer-sponsored vanpool service for employee groups of five to 15 people.* 2. *Implement Employee Parking Cash-Out program – requires project employers to offer employees the choice of foregoing their*	

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		current subsidized/free parking for a cash payment (in exchange for not driving). *3. Extend Public Transit Service to Project Site – expand San Joaquin RTD fixed-route bus service to the project site.* *4. Operate a private employee shuttle system during peak periods that circulates within the site and off-site to the Altamont Commuter Express (ACE) Station located on Tracy Boulevard at Linne Road.* *Proof of compliance shall be submitted to the County Community Development Department and Public Works Department for review and approval.* *4.12-4(c) Implement Mitigation Measure 4.12-2.* *University Component (Initial Phase, Specific Plan Buildout)* *4.12-4(d Implement Mitigation Measure 4.12-4(a).* *4.12-4(e) Implement TDM Strategies 1, 3, and 4 from Mitigation Measure 4.12-4(b).* *4.12-4(f) Prior to occupancy of the first University building, the project applicant shall either implement TDM Strategy 2 from Mitigation Measure 4.12-4(b), or charge staff and students a fee to park.*	

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Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.12-5	**Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**	S	*Vehicle Queuing: Specific Plan Buildout Only* *4.12-5(a)* *In conjunction with submittal of each future subdivision application, the project applicant shall submit a transportation phasing analysis that determines which geometric improvement(s) in the below table and Figure 4.12-17 of the EIR is triggered by the phase. The transportation phasing analysis shall be submitted for review to the appropriate agency within whose jurisdiction the improvements are located.* *The project applicant shall collaborate with that agency to implement the identified improvement (or alternative improvements that are equally effective). Collaborative efforts, which are subject to County review and acceptance, could include (but are not limited to): establishing a multi-agency fee program to fund identified improvements, contributing a fair share payment to the jurisdiction serving as the lead agency pursuing construction of said improvements, or paying the applicable San Joaquin County TIMF fee provided that said improvements are fully funded through that fee program. The following performance standards are to be made part of the project's Mitigation Monitoring Report requirements:* • *Traffic does not queue back from the SR 132/South Chrisman Road interchange onto the SR 132 mainline.*	SU

N/A = *Not Applicable*; LS = *Less Than Significant*; LCC = *Less Than Cumulatively Considerable*; S = *Significant*; CC = *Cumulatively Considerable*; SU = *Significant and Unavoidable*

Table 2-1
Summary of Impacts and Mitigation Measures

<table>
<tr><th>Impact</th><th>Level of Significance Prior to Mitigation</th><th>Mitigation Measures</th><th>Level of Significance After Mitigation</th></tr>
<tr><td></td><td></td><td>
• Traffic does not queue back from the I-580/South Chrisman Road westbound off-ramp onto the I-580 mainline.
<table>
<tr><th colspan="3">Recommended Improvements to Address Queuing Deficiencies – Existing Plus Specific Plan Buildout Conditions</th></tr>
<tr><th>Facility</th><th>Lead Agency</th><th>Description of Improve-ments</th></tr>
<tr><td colspan="3">Interchange Improvements</td></tr>
<tr><td>SR 132/South Chrisman Road Interchange</td><td>California Department of Transportation</td><td>Reconstruct with wider (six-lane) overcrossing and ramp widening and signals at both ramp intersections. Secondary improvements will likely include a deceleration lane on westbound SR</td></tr>
</table>
</td><td></td></tr>
</table>

N/A = *Not Applicable*; LS = *Less Than Significant*; LCC = *Less Than Cumulatively Considerable*; S = *Significant*; CC = *Cumulatively Considerable*; SU = *Significant and Unavoidable*

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures				Level of Significance After Mitigation
					132 at the interchange, on-ramp ramp metering, and widening of the adjacent South Chrisman Road overcrossing at I-580 (for lane alignment purposes).	
			Intersection Improvements			
			South Chrisman Road/SR 132 Westbound Ramps	*California Department of Transportation*	*Signalize with lanes shown on Figure 21 of Transportation Impact Analysis Report, operate with protected left-turn phasing, and provide a deceleration lane and a two-lane off-ramp*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures				Level of Significance After Mitigation
					approaching the interchange on westbound SR 132.	
			South Chrisman Road/SR 132 Eastbound Ramps	*California Department of Transportation*	*Signalize with lanes shown in Figure 21 of Transportation Impact Analysis Report, widen eastbound SR 132 on-ramp to accommodate two receiving lanes, and operate with protected left-turn phasing.*	
			South Chrisman Road/I-580 Westbound Off-Ramp	*California Department of Transportation*	*Widening of existing overcrossing or construction of second parallel overcrossing likely needed for lane*	
			South Chrisman Road/I-580	*California Department of Transportation*		

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation

Eastbound On-Ramp | | *alignment with widened SR 132/ South Chrisman Road interchange.*

Notes:
The improvements described above are on the State Highway System, which is owned and operated by Caltrans. However, to complete those improvements, certain County-owned roadway segments adjacent to those facilities may also need to be improved. Additional improvements may be required on County-maintained roadways to maintain consistency with General Plan LOS policy goals.

Source: Fehr & Peers, 2025.

Geometric Design Features: Initial Phase, Specific Plan Buildout

4.12-5(b) *Prior to approval of Improvements Plans for each phase, the Improvement Plans shall show that project access intersections along South Chrisman Road are designed in accordance with San Joaquin County standards. Additional considerations should be made for the need to accommodate STAA trucks, enhanced pavement structural sections, and increased truck turn lane storage. To ensure that the project roadway designs provide the necessary*

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		infrastructure improvements to accommodate the special needs of trucks, the following performance standards are established: • *All street sections that would be constructed, replaced, or widened by the project shall be designed with the appropriate Traffic Index (TI) to ensure that the structural section is capable of accommodating the added weight of trucks for the street section.* • *All left and right turn lanes constructed at intersections along South Chrisman Road and within the various project development areas shall provide adequate vehicle storage to accommodate the 95th percentile vehicle queues (considering cumulative travel demands and the effects of trucks on storage requirements).* • *Intersection designs shall consider curb return radii requirements, width of receiving travel lanes, placement of traffic control equipment, and other design parameters to ensure that trucks can perform left and right-turns without encroaching onto oncoming travel lanes, running over curbs, or colliding with signal equipment or signs.* *The roadway design review process, overseen by the San Joaquin County Public Works Department, shall ensure that the aforementioned performance standards are met.*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Incompatible Land Uses on Durham Ferry Road: Initial Phase *4.12-5(c)* *Prior to occupancy of the first industrial building, the project applicant shall coordinate with San Joaquin County to post a combination of either "No Trucks Allowed" or "Local Trucks only" signs on Durham Ferry Road between South Chrisman Road and SR 33. The project applicant shall conduct biennial monitoring of project-related truck traffic on Durham Ferry Road, and within one month of monitoring, a memo summarizing the results shall be submitted to San Joaquin County Public Works Department. Should the volume of trucks exceed the totals shown in the EIR and it is demonstrated that the added trucks are either directly (i.e., have origins or destinations at project site) or indirectly (i.e., rerouted due to project activities) associated with the proposed project, enhanced measures shall be instituted, such as additional or modified signage, increased enforcement, levying penalties on trucking companies for observed violations, etc, with subsequent monitoring to confirm required reductions.*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Incompatible Land Uses at South Chrisman Road and Linne Road Intersection: Specific Plan Buildout Only *4.12-5(d) The project applicant shall coordinate with the San Joaquin County Public Works Department and administrators at Jefferson School and Jefferson School District to identify and construct a set of improvements that minimize conflicts between project trips and motorists entering/exiting Jefferson School. Potential improvements to be considered include (but are not limited to):* • *Installation of traffic signal at Linne Road/Jefferson School Easterly Driveway;* • *Construction of westbound left-turn lanes on Linne Road at both Jefferson School Driveways;* • *Construction of southbound left-turn lane on South Chrisman Road at Jefferson School Southerly Driveway (including a guard rail or cable barrier system along the South Chrisman Road school frontage); and* • *Speed feedback signs in each direction of Linne Road approaching Jefferson School and on northbound South Chrisman Road approaching Jefferson School.* *The following performance standards have been established for this mitigation measure (presuming*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		the above or other equally effective physical improvements are chosen for construction): • *School-related trips do not queue beyond the storage provided in the left-turn lanes on westbound Linne Road constructed as part of this mitigation measure;* • *School-related trips do not queue beyond the storage provided in the southbound left-turn lane at the Jefferson School southerly driveway constructed as part of this mitigation measure;* • *The traffic signal at the Jefferson School Easterly Driveway/Linne Road does not cause undue delays (i.e., as measured by more lengthy queues forming at the north parking lot entrance) to school-related trips exiting this driveway during peak school hours; and* • *The northbound South Chrisman Road approach to Linne Road is redesigned (as part of separate applicant required widening to meet San Joaquin County General Plan LOS policies) to accommodate U-turn movements made by buses.* *The improvements that are determined acceptable by the Jefferson School District shall be completed prior to occupancy of the first industrial building for*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures		Level of Significance After Mitigation
			the second phase to the satisfaction of the San Joaquin County Public Works Department. *Vehicle/Train Conflicts: Specific Plan Buildout Only* *4.12-5(e)* *Prior to occupancy of the first industrial building of the second phase, the project applicant shall make a fair share contribution to the City of Tracy to cover the project's proportionate cost to upgrade the South Chrisman Road at Schulte Road at-grade railroad crossing.* *4.12-5(f)* *Prior to occupancy of the first industrial building of the second phase, the project applicant shall work with Union Pacific Railroad and California Public Utilities Commission (CPUC) to determine the need for appropriate upgrades to the South Chrisman Road at-grade crossing north of Linne Road and to implement such improvements during subsequent phases beyond the Initial Phase.*	
4.12-6	**Result in inadequate emergency access.**	LS	*None required.*		N/A
4.12-7	**Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, roadway bicycle, and pedestrian facilities, during operations under cumulative conditions.**	CC/S	*4.12-7*	*Implement Mitigation Measure 4.12-2 and TDM Strategies 3 and 4 from Mitigation Measure 4.12-4(b).*	CC/SU

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.12-8	**Result in cumulative conflicts or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b).**	CC/S	*Warehouse and Office Uses* *4.12-8(a) Implement Mitigation Measures 4.12-4(a) and 4.12-4(b).* *University Component* *4.12-8(b) Implement Mitigation Measure 4.12-4(a) and Mitigation Measure 4.12-4(b).*	CC/SU
4.12-9	**Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) under cumulative conditions.**	CC/S	*Cumulative Conditions: Vehicle Queuing* *4.12-9(a) In conjunction with submittal of each future subdivision application, the project applicant shall submit a transportation phasing analysis that determines which geometric improvements in the below table and Figure 4.12-19 of the EIR is triggered by the phase. For those recommended improvements that are only triggered by the project's incremental traffic in the cumulative condition (i.e., compare with Mitigation Measure 4.12-5(a)), the applicant's responsibility shall be limited to a fair share payment. The transportation phasing analysis shall be submitted for review to the appropriate agency within whose jurisdiction the improvements are located. This agency may identify other measures of equal or greater effectiveness.* ***Recommended Improvements to Address Queuing Deficiencies – Existing Plus Specific Plan Buildout Conditions***	CC/SU

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures				Level of Significance After Mitigation
			Facility	***Lead Agency***	***Description of Improve-ments***	
			Interchange Improvements			
			SR 132/ South Chrisman Road Interchange	*California Department of Transportation*	*Reconstruct with wider overcrossing and ramp widening at each ramp terminal intersection (see below for specific improvements at each ramp intersection).*	
			Intersection Improvements			
			Ahern Road/SR 33/I-5 Southbound Ramps/Lehman Road	*California Department of Transportation*	*Install traffic signal and widen westbound and eastbound approaches to consist of a left-turn lane and a shared*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures			Level of Significance After Mitigation
				through/right lane.[2]	
		South Chrisman Road/SR 132 Westbound Ramps	*California Department of Transportation*	*Same as Existing Plus Specific Plan Buildout improvement.*	
		South Chrisman Road/ SR 132 Eastbound Ramps	*California Department of Transportation*	*Same as Existing Plus Specific plan Buildout improvement.*	
		South Chrisman Road/I-580 Westbound Off-Ramp	*California Department of Transportation*	*Widening of existing overcrossing or construction of second parallel overcrossing likely needed for lane alignment with widened SR 132/South Chrisman Road interchange.*	
		South Chrisman Road/I-580 Eastbound On-Ramp	*California Department of Transportation*		
		Bird Road/SR 132 Westbound Ramps	*California Department of Transportation*	*Signalize intersection with existing*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		lane configurations. *Notes:* *[1] May require widening of at-grade railroad crossing situated on Lehman Road west of SR 33.* *Additional improvements may be required on County-maintained roadways to maintain consistency with General Plan LOS policy goals* *Source: Fehr & Peers, 2025.* *Cumulative Conditions: Incompatible Land Uses on Durham Ferry Road* *4.12-9(b) Implement Mitigation Measure 4.12-5(c).* *Cumulative Conditions: Incompatible Land Uses at South Chrisman Road and Linne Road Intersection* *4.12-9(c) Implement Mitigation Measure 4.12-5(d).* *Cumulative Conditions: Vehicle/Train Conflicts* *4.12-9(d) Implement Mitigation Measures 4.12-5(e) and 4.12-5(f).*	
4.13 Urban Decay			
4.13-1 Cause the potential for urban decay resulting from significant adverse physical impacts related to	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	economic and social changes and/or effects associated with industrial uses.			
4.13-2	**Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects associated with hotel uses.**	LS	*None required.*	N/A
4.13-3	**Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects associated with retail uses.**	LS	*None required.*	N/A
4.13-4	**Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects in combination with cumulative development associated with industrial uses.**	LS	*None required.*	N/A
4.13-5	**Cause the potential for urban decay resulting from**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	significant adverse physical impacts related to economic and social changes and/or effects in combination with cumulative development associated with hotel uses.			
	4.14 Wildfire			
4.14-1	**Substantially impair an adopted emergency response plan or emergency evacuation plan.**	LS	*None required.*	N/A
4.14-2	**Due to factors such as on-site fuel sources, slope, and prevailing winds, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.**	LS	*None required.*	N/A
4.14-3	**Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	may result in temporary or ongoing impacts to the environment.			
4.14-4	**Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.**	LS	*None required.*	N/A
4.14-5	**Increase in wildfire risk attributable to the proposed project, in combination with cumulative development.**	LS	*None required.*	N/A

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3. Project Description

3. PROJECT DESCRIPTION

3.1 INTRODUCTION

CEQA Guidelines Section 15125 requires an EIR to include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the Notice of Preparation is published, from both a local and regional perspective. Knowledge of the existing environmental setting is critical to the assessment of environmental impacts. Pursuant to CEQA Guidelines Section 15125, the description of the environmental setting shall not be longer than necessary to understand the potential significant effects of the project and its alternatives.

The Project Description chapter of this EIR provides a comprehensive description of the Pacific Gateway Project (proposed project), in accordance with the CEQA Guidelines. Please note that this chapter provides an overall general description of the existing environmental conditions; however, more detailed discussions of the existing setting as they relate to each given potential impact area are included in each technical chapter of this EIR.

Pursuant to CEQA Guidelines Section 15124, an EIR is required to include a project description that includes the following information: project location, project objectives, a general description of the project's technical, economic and environmental characteristics, and a statement briefly describing the intended uses of the EIR, including a list of agencies expected to use the EIR, a list of permits and other approvals required to implement the project, and a list of related environmental review required by federal, state or local laws, regulations or policies. According to CEQA Guidelines Section 15124, the project description is not required to supply extensive detail beyond that needed for evaluation and review of the environmental impacts.

3.2 PROJECT LOCATION

The approximately 1,576.7-acre project site is generally located east of Interstate 580 (I-580) and north of State Route (SR) 132 in an unincorporated area of San Joaquin County, California (see Figure 3-1). The site is identified by Assessor's Parcel Numbers (APNs) as listed in Table 3-1.

3.3 PROJECT SETTING AND SURROUNDING LAND USES

The project site is generally bound by Bird Road to the east; the Delta-Mendota Canal to the north; Tracy Boulevard to the west; and the southern boundary is formed by the California Aqueduct, west of South Chrisman Road, and SR 132, east of South Chrisman Road (see Figure 3-2). South Chrisman Road, a designated Surface Transportation Assistance Act (STAA) Truck Route, provides north-to-south circulation access through the Specific Plan area. East/west access is limited to private, unimproved farm roads. The project site is currently developed with active agricultural land, including almond and cherry orchards, and an agricultural machinery manufacturing facility (A.B. FAB, Inc.).

The project site, at its nearest point, is approximately one mile from the southern boundary of the City of Tracy; yet the site is generally located in an existing agricultural area with agricultural uses located to the north (e.g., orchards, Crown Nut almond processing plant), to the south between the Aqueduct and I-580, and to the east of Bird Road.

Figure 3-1
Regional Location Map

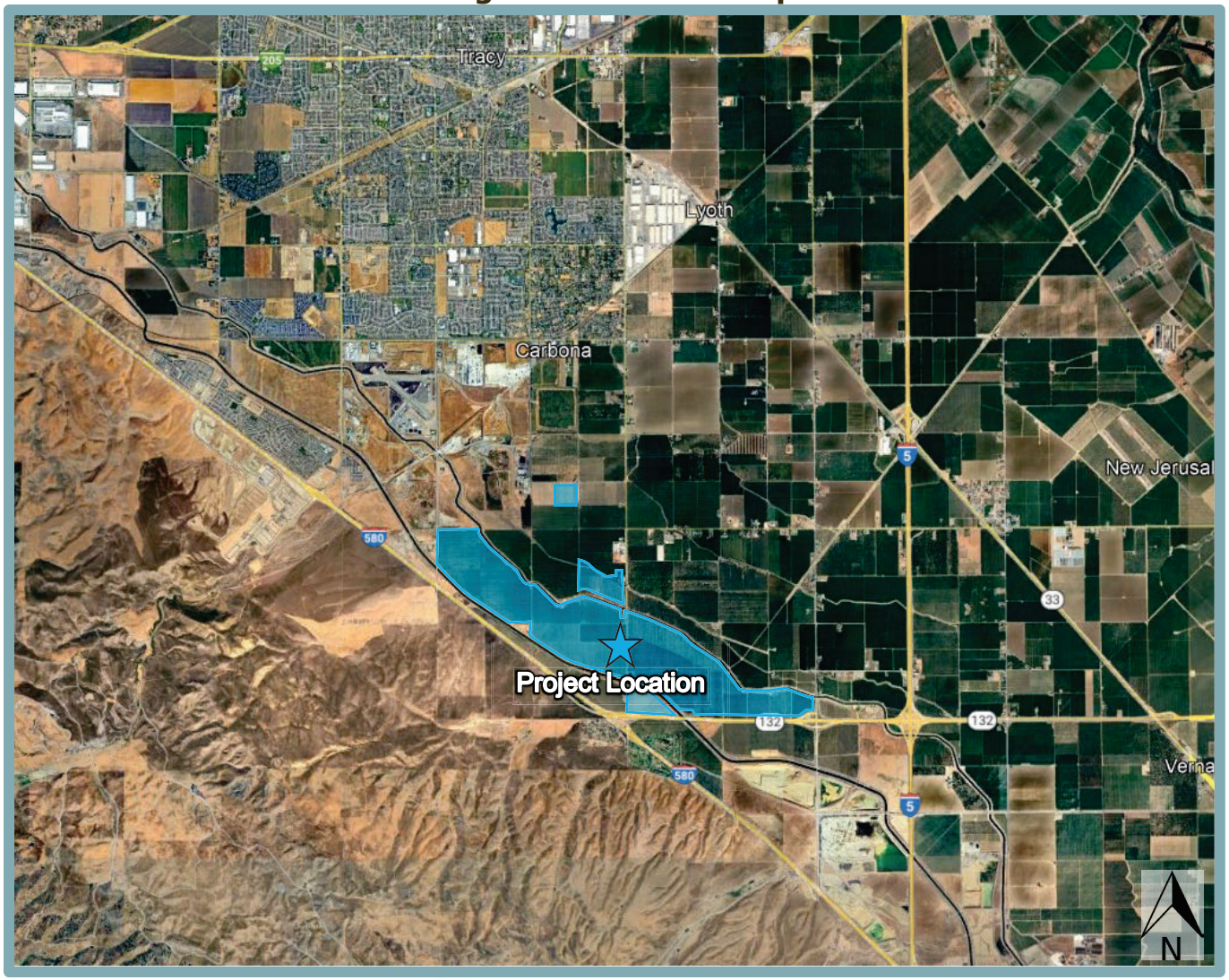


*Figure not OCR compatible.

Table 3-1
Project Assessor Parcel Numbers

Development Area*	APN
Pacific Gateway West	253-140-090
Pacific Gateway West	253-140-100
Pacific Gateway West	253-140-110
Pacific Gateway West	253-140-130
Pacific Gateway West	253-140-140
Pacific Gateway West	253-140-150
Pacific Gateway West	253-140-160
Pacific Gateway West	253-140-170
Pacific Gateway West	253-140-190
Pacific Gateway West	253-140-200
Pacific Gateway West	253-140-210
Pacific Gateway West	253-140-220
Pacific Gateway West	253-140-230
Pacific Gateway West	253-140-240
Pacific Gateway West	253-140-250
Pacific Gateway Central	253-180-020
Pacific Gateway Central	253-190-210
Pacific Gateway Central	253-190-220
Pacific Gateway Central	253-180-060
Pacific Gateway Central	253-180-110
Pacific Gateway Central	253-190-110
Pacific Gateway East	253-260-090
Pacific Gateway East	253-260-120
Pacific Gateway East	253-260-130
Pacific Gateway East	253-290-050
Pacific Gateway East	253-290-110
Pacific Gateway East	253-290-120
Pacific Gateway East	253-290-130
Gateway Center	253-260-050
Gateway Center	253-260-140
University Center	253-190-040
University Center	253-190-050
University Center	253-190-190
Off-Site Basin	253-200-190

* See Figure 3-3 for development area locations.

Figure 3-2
Project Site Boundaries

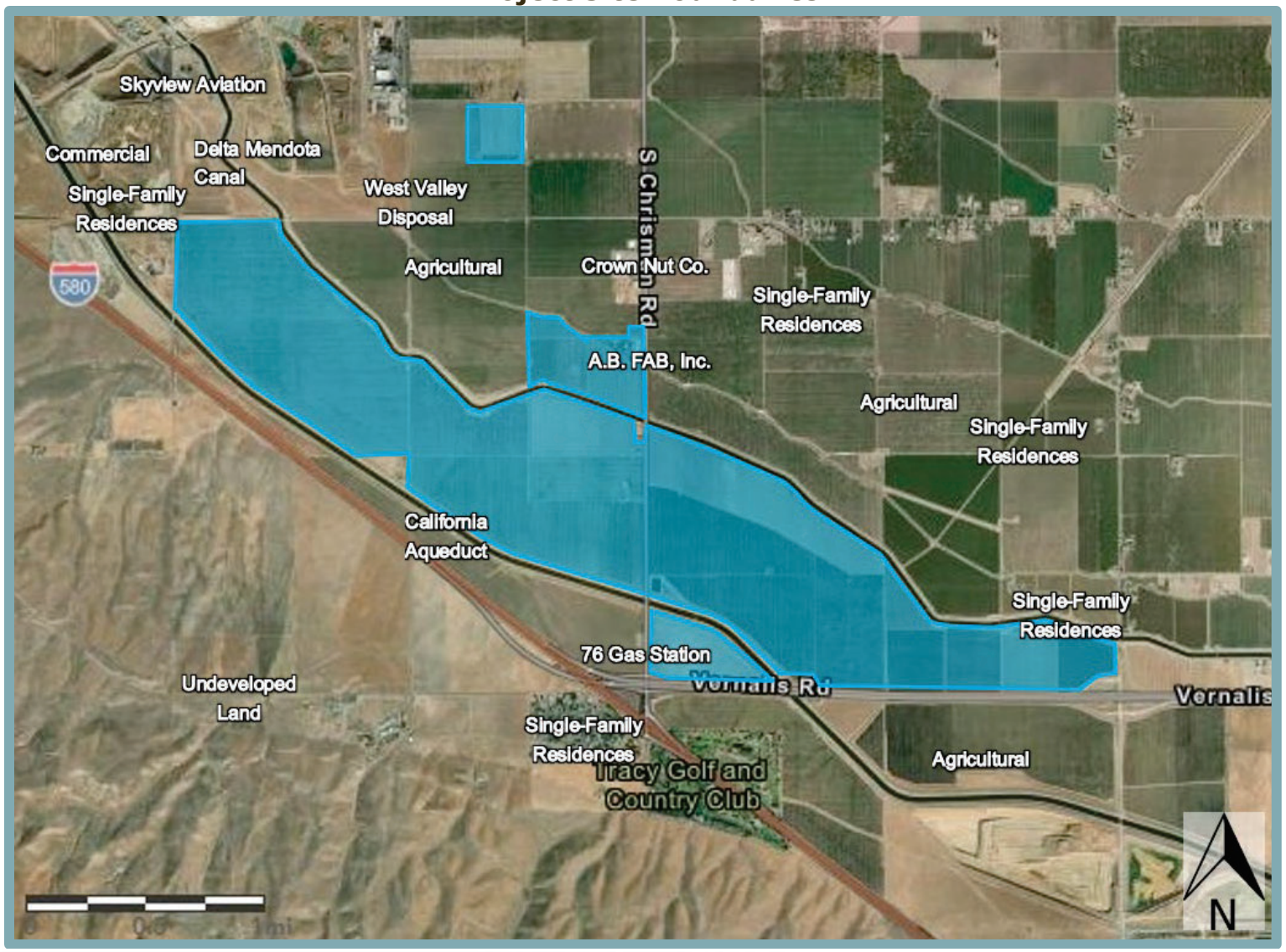


*Figure not OCR compatible.

Several established surface mining operations are located to the northwest of the project site. Finally, within the project site, two existing single-family homes front South Chrisman Road and one parcel with three homes fronting MacArthur Drive. The Tracy Municipal Airport is located approximately one mile northwest of the project site.

The County's General Plan designates the majority of the project site as General Agriculture (A/G). In addition, APN 253-290-130, which represents approximately 19 acres located at the furthest eastern point of the project site, is designated Resource Conservation (OS/RC), and a 1.09-acre parcel in the southernmost portion of the site (APN 253-260-050) is designated Rural Service Commercial (C/RS). The project site is zoned by the County as AG-40-acres (AG-40), with the exception of APN 253-260-050, which is zoned Rural Service Commercial (C-RS).

3.4 PROJECT OBJECTIVES

The following project objectives have been developed by the project applicant:

1. Identify a site that would support an industrial and university-focused project with supportive business, commercial, and recreational uses.
2. Establish development of a commercially sufficient scale to be self-supporting, in terms of infrastructure and public service needs.
3. Accommodate a mix of industrial designated uses supporting future advanced manufacturing, e-commerce, and related distribution opportunities.
4. Establish a four-year university campus serving the post-secondary educational needs of residents within South San Joaquin County.
5. Create a mix of jobs that will contribute to economic development within the County.
6. Establish site-specific wet and dry utility infrastructure, including water and wastewater treatment infrastructure designed and developed to meet project demands at all phases of development.
7. Locate on an established STAA-designated transportation corridor or established truck route with access to a federal interstate and/or State highway system serving the Bay Area and greater Central Valley communities.
8. Locate on a site that is sufficiently distant from the urban core to reduce the potential impacts on sensitive receptors and other incompatible urban land uses.
9. Establish agricultural buffers and "right to farm" policies to protect existing agricultural operations and Williamson Act designated lands outside of the project boundary.
10. Implement a range of sustainability measures aimed at conserving resources, decreasing energy and water consumption, and reducing the impact on air quality, greenhouse gases, and water pollution.

3.5 PROJECT COMPONENTS

The proposed project includes implementation of a Specific Plan that would result in up to 24,675,000 square feet (sf) of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.5-acre university campus plus 9.8 acres for future expansion, a Veterans of Foreign Wars (VFW) post, and various open space, parks, a new fire station, stormwater management basins, and pedestrian and bicycle facilities within the 1,576.7-acre project site. The proposed project includes site plan level entitlements at this time to allow development of an Initial Phase subsequent to EIR certification and Specific Plan approval, as discussed in detail below.

The following is a brief description of the entitlements being requested from San Joaquin County:

- General Plan Text Amendments for policies related to infrastructure development, agriculture development, and the provision of community services within the context of new employment-generating uses;
- General Plan Map Amendment from 1,556.61 acres of Agriculture, 19 acres of OS/RC, and 1.09 acres of C/RS to 18.5 acres of General Commercial; 4.3 acres of Industrial Park; 1,375.8 acres of Limited Industrial; 76.3 acres of Public Facilities for university campus uses, and 61.8 acres of Public Facilities for open space and parks;
- Zone Reclassification from AG-40 and C-RS to ensure conformance with the amended General Plan land use designations;
- Pacific Gateway Specific Plan adoption;
- Major Subdivisions: The first would subdivide the entire Project site into 27 lots to create a master lotting configuration that will facilitate orderly development of the overall property; and the second, a Vesting Tentative Map, would comprise the Initial Phase area and create 12 parcels to facilitate the Initial Phase of the Limited Industrial area (comprised of 181.26 net acres), as well as the acreage required for backbone infrastructure;
- Zoning Compliance review for Initial Phase development of the 181.26-acre Industrial Phase 1 area and the university campus Phase 1 area and VFW facility;
- Development Agreement; and
- Williamson Act Contract Cancellations. Approximately 789.85 acres of the project site are subject to Williamson Act contracts. Notices of Nonrenewal have been filed for the Williamson Act Parcels, and a Williamson Act Contract cancellation application was filed separately on November 8, 2024.

Specific Plan

In order to guide the underlying land use planning and development patterns, the project applicant team has developed a Specific Plan. The Pacific Gateway Specific Plan establishes site and architectural design, includes backbone infrastructure to support the proposed development, and provides for a mechanism to finance further site improvements to ensure the adequate provision of necessary infrastructure in a timely manner. The Specific Plan is divided into development areas, as discussed in further detail below.

Development Areas

The Specific Plan area is divided into five distinct development areas: University Center, Pacific Gateway West, Pacific Gateway Central, Pacific Gateway East, and Gateway Center (see Figure 3-3). Each development area would be connected by a network of roads, and pedestrian and bike paths, which would provide alternatives to vehicle trips.

University Center

The University Center would include the parcels located north of the Delta-Mendota Canal to provide for a new university campus, which would expand access to education and research opportunities in the Central Valley. The University Center would also include a small business park (Industrial Park zone), a new home for the VFW, and small commercial services and uses that would front South Chrisman Road. These ancillary uses would provide service uses focused on the university staff and students.

Figure 3-3
Development Areas Plan

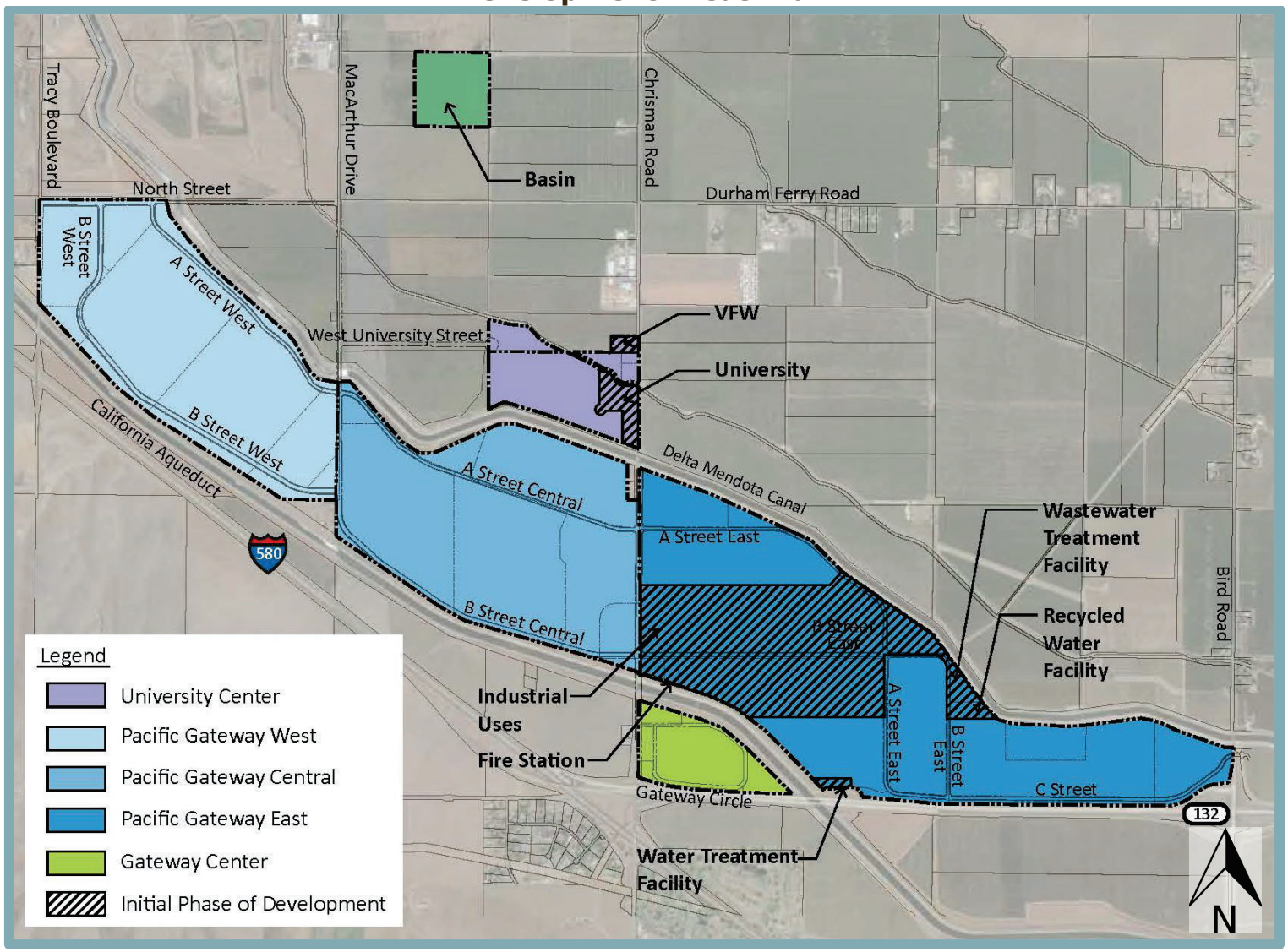


*Figure not OCR compatible.

Pacific Gateway West

Pacific Gateway West is located south of the Delta-Mendota Canal, north of the California Aqueduct, and between Tracy Boulevard and MacArthur Drive. This area makes up one of three predominantly industrial development areas in the project. This region would be developed primarily with industrial uses and also include mini-park uses, and the necessary road improvements, and utility infrastructure.

Pacific Gateway Central

Pacific Gateway Central is also located south of Delta-Mendota Canal, with MacArthur Drive to the west, South Chrisman Road to the east, and the California Aqueduct to the south. This area makes up the second of three industrial development areas in the project. This development area would also include mini-park uses, and the necessary road improvements and utility infrastructure. An approximately 11.87-acre Central Park would be located at the intersection of South Chrisman Road and proposed A Street, which would include community amenities such as open space gathering areas, picnic areas, sport courts (e.g., pickleball and basketball), and parking spots for food trucks.

Pacific Gateway East

Pacific Gateway East includes the area east of South Chrisman Road, between the Delta-Mendota Canal and SR 132. This area makes up the final industrial development area for the project. This development area would also include mini-parks and the necessary road infrastructure improvements. The “Initial Phase” of Limited Industrial development would be located within the Pacific Gateway East development area, including the backbone infrastructure needed to serve the project (e.g., water, wastewater, fire protection, and improvements for the construction of treatment facilities and storage tanks). These treatment and storage facilities have been sized to serve the Initial Phase, including the proposed university and VFW sites. As development progresses, these facilities would be expanded to accommodate future development.

Gateway Center

The Gateway Center development area is south of the California Aqueduct and east of South Chrisman Road at the SR 132 interchange. This development area would consist of general commercial and retail uses, smaller industrial and warehouse uses, a truck and auto EV charging area, and a mini-park. Gateway Center would provide services to Pacific Gateway employees and university students, as well SR 132 commuters and travelers.

Land Use Plan

The Pacific Gateway Specific Plan would include zoning designations for Limited Industrial, General Commercial, Industrial Park, and Public Facilities use types (see Figure 3-4). Each designation is discussed in further detail below.

Limited Industrial (I-L)

The majority of the project site would be zoned Limited Industrial (I-L). Pursuant to the Pacific Gateway Specific Plan, the I-L zone is intended to provide for warehouse, distribution, fulfillment center, e-commerce, and other such limited industrial uses requiring large format buildings essential to the supply chain, as well as buildings that accommodate light impact manufacturing (such as assembly) and advanced manufacturing, including for the development and manufacturing of robotics or electric vehicle components.

Figure 3-4
Land Use/Zoning Plan

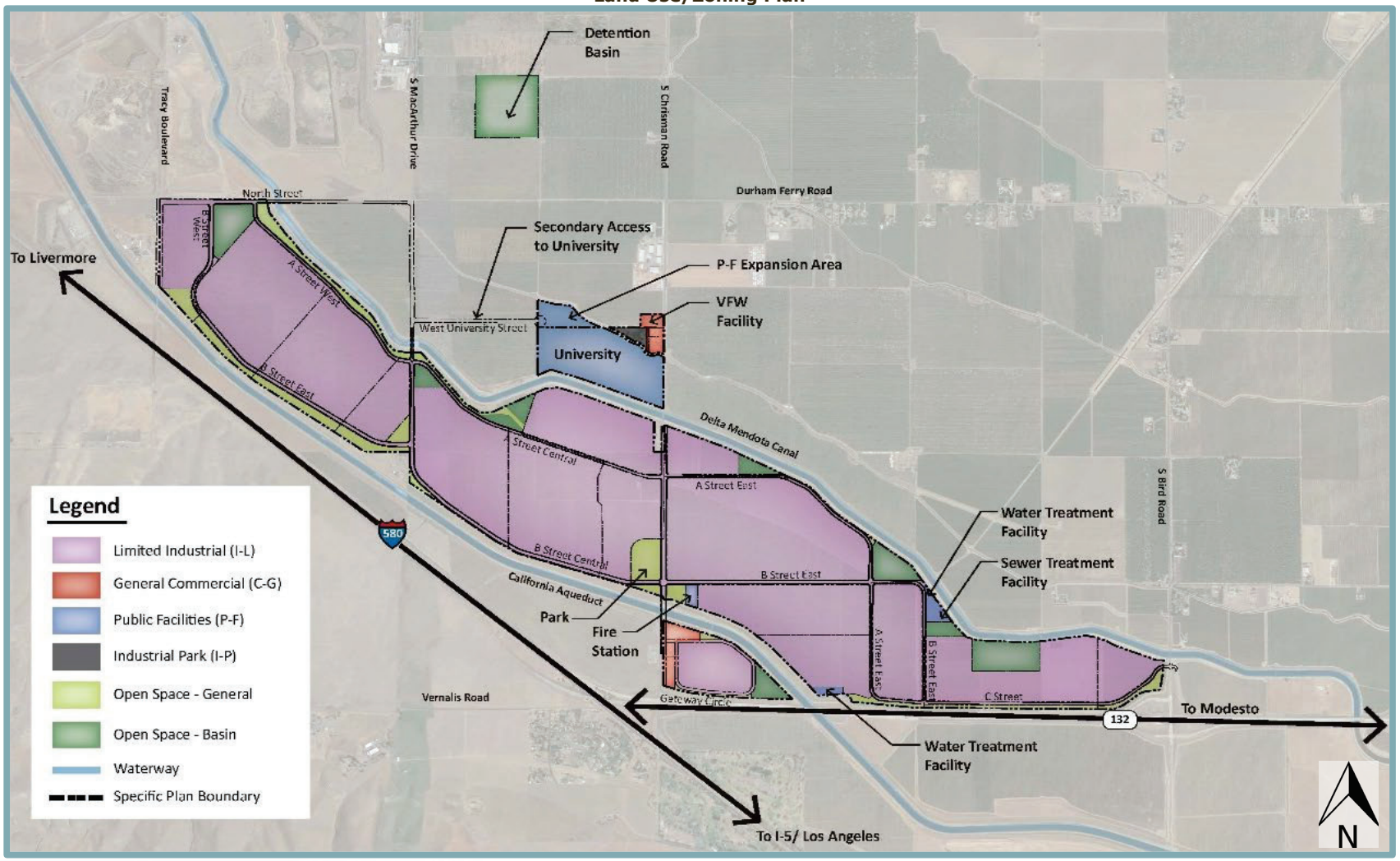


*Figure not OCR compatible.

Building types in this zone would include standard industrial structures limited to 100 feet in height west of South Chrisman Road within the Tracy Airport Land Use Compatibility Plan (TALUCP) area and otherwise limited to 120 feet east of South Chrisman Road, which are beyond the TALUCP Zone 8. The Pacific Gateway West, Central, East areas of the project, as well as the Gateway Center area, are predominately zoned I-L.

General Commercial (C-G)

The General Commercial (C-G) designation provides for a variety of retail commercial uses and business services designed to serve those working and learning within the Specific Plan area. Priority would be given to restaurants, goods and services that support those using the industrial and warehouse facilities, as well as the university. Commercial zoning immediately north of the university consists of approximately 5.88 acres of commercial, including the 2.88-acre VFW site. The Gateway Center development area, fronting SR 132 at the south end of the Specific Plan area and the east side of South Chrisman Road, is comprised of approximately 11.5 acres of commercial zoning at the southern entry to the project to provide convenient access to restaurants, services, a gas station, and hotel. Typical retail building designs would include single-story commercial structures with walk up storefronts, while the hotel is anticipated to be three to five floors depending upon demand.

Veterans of Foreign Wars Facility

The VFW of the United States is a nonprofit veteran's service organization comprised of eligible veterans and military service members from the active, guard, and reserve forces. The VFW provides a variety of programs and services that work to support veterans, service members and their families, as well as the community. The project would include development of a new building and associated parking for the new home of Tracy Post 1537. The facility would provide a meeting space and offices for the administration of service and outreach to support the veterans. The facility would be available for community events and gatherings such as weddings, receptions, and school dances. The site would also allow for the short-term parking of recreational vehicles by veterans traveling through the area.

Industrial Park (I-P)

The Industrial Park zone is intended to provide a business park environment consisting of smaller buildings to be used for combined office/warehouse uses including research and development, light impact manufacturing (such as assembly), HVAC contractors, electricians, plumbing contractors and window installation and other service-related businesses. User spaces would typically include limited warehouse area mostly serviced by grade level doors for delivery vehicle access.

Public Facility (P-F)

The Public Facility (P-F) designation applies to a variety of land uses that would serve the Specific Plan area generally or the greater public, including the university campus, open space, a central park, a network of mini-parks, a new fire station, and stormwater management basins.

University

The university would expand access to higher education in the County and Central Valley regions, which are historically underserved areas. The university would curate an educational program and curriculum suited to the specific needs of the community. Over time, the university is anticipated to offer studies and degrees in the following areas: Agricultural Economics, Innovation,

and Entrepreneurship/Biotechnology; Business Administration – Supply Chain and Logistics; Computer Science – Cyber Security and Artificial Intelligence; and Teacher Education.

The university campus would be designed to accommodate indoor and outdoor sports facilities as well as student housing offering 1,000 beds. Student housing would be constructed in phases over time depending on the needs of the campus population. The Specific Plan incorporates an additional 9.8 acres of P-F zoning to the north and adjacent to the university campus for "Expansion Area" to afford the university an opportunity for future growth. The Expansion Area would accommodate an additional 115,000 sf of facilities and another 600 beds of student housing. At full buildout, the campus is designed to accommodate a population of 5,000 students.

As part of the Initial Phase of development of the project, the first university building would encompass approximately 25,000 sf of space to accommodate up to 400 off-campus students. The building would include classrooms, administrative offices, as well as a student resource center, and offer indoor and outdoor gathering areas, including a covered roof-top atrium.

Open Space

The proposed project would also provide open space areas and community amenities, as well as recreational and park facilities throughout the project site (see Figure 3-5). Stormwater management basins would be strategically located to capture storm runoff, provide flood control, and water treatment. The parks and open spaces would be integrated throughout the project site and would be connected by way of the proposed pedestrian and bicycle networks.

Fire Station

A fire station would be constructed within the Pacific Gateway East development area to provide emergency services for the project and improve response times for South San Joaquin County. The fire station would be centrally located to provide adequate emergency service coverage to the project.

Overall Development Potential

As shown in Table 3-2 below, full buildout of the Specific Plan is anticipated to result in up to 24,675,000 sf of Limited Industrial use, 160,000 sf of General Commercial use, and 93,000 sf of Industrial Park use. Additional components of Specific Plan buildout will include the university, VFW Post, and several parks and detention basins.

Table 3-2
Projected Buildout Land Use Summary

Zoning Districts & Utilities	Gross Acreage	Max Coverage	Square Feet
Limited Industrial (I-L)	1375.8	60%	24,675,000
Industrial Park (I-P)	4.3	50%	93,000
General Commercial (C-G)	18.5	30%	160,000
Public Facilities (P-F)	138.1	50%	-
University (including Expansion)	76.3		1,379,150[1]
Parks/Detention Basins	51.7		-
Utilities/Water and Sewer Treatment Facilities/Fire Station	10.1		-
Agriculture (AG) Off-Site Stormwater Basin	40		-
Total	**1,576.7**	**-**	**26,307,150**

[1] University Beds = 1,000 with an additional 600 beds for Expansion

Figure 3-5
Conceptual Location of Public Parks

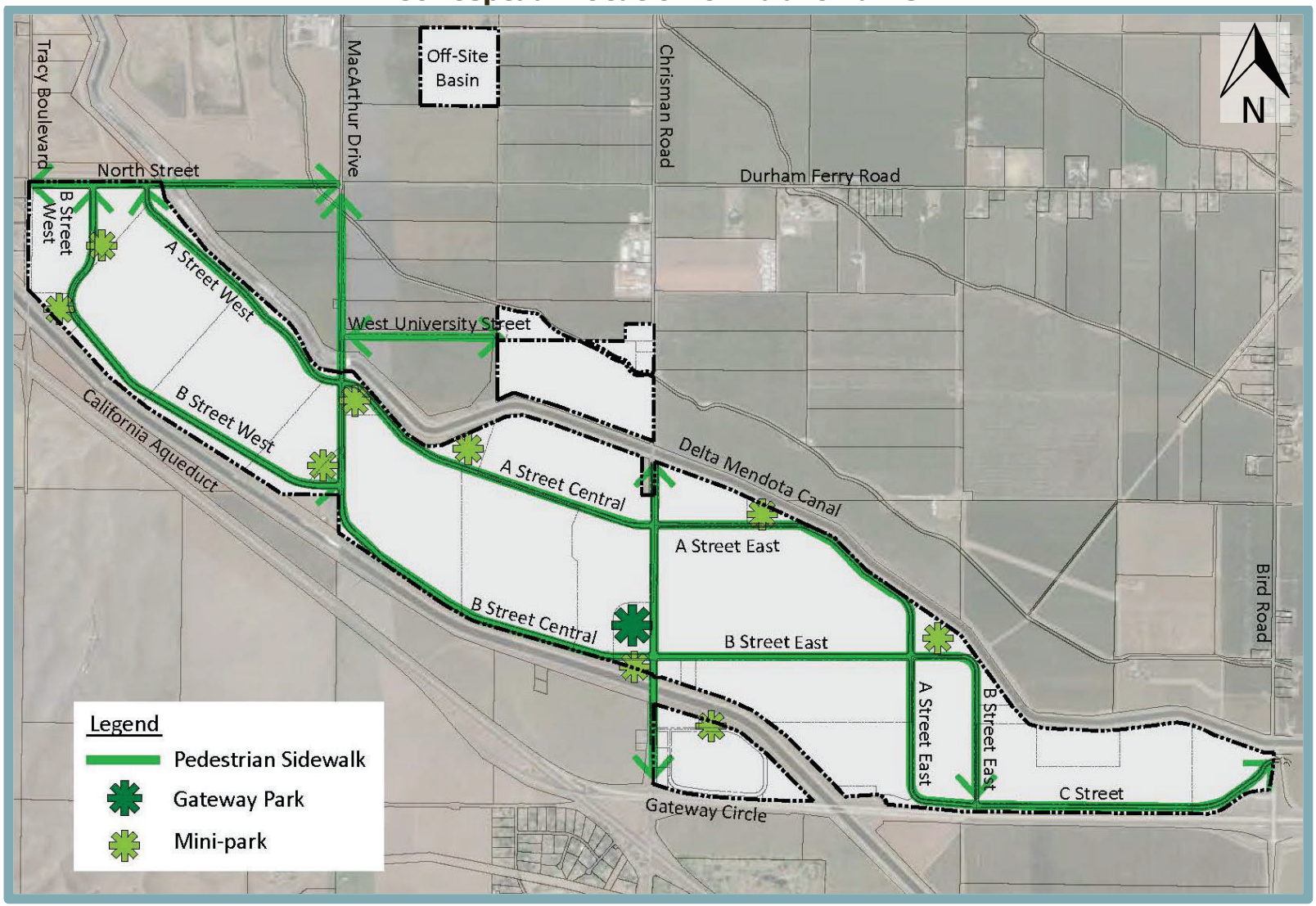


*Figure not OCR compatible.

Infrastructure Improvements

The proposed project has been designed and would be developed with infrastructure improvements to serve both the initial stages of development and full project buildout. In addition, long-term operation and maintenance of project infrastructure will be supported by a site-specific Community Services District (CSD) and related financing mechanisms formed in accordance with a project-wide public facilities financing plan developed in compliance with State planning laws and regulations.

Water Infrastructure

It is intended that the proposed project's domestic water needs would be met primarily through surface water supplied by Byron-Bethany Irrigation District (BBID), with supplemental use of groundwater, if needed, through installation of one or more new wells. Treated water would be provided by a new public water system created to serve the project and permitted through the State of California, or through County Service Area 16 (CSA-16), if it is feasible to administratively consolidate with that existing system. CSA-16 currently serves a residential and golf course community immediately west of I-580; consolidation with CSA-16 would require annexation to CSA-16 service area to include the project, which is subject to San Joaquin Local Agency Formation Commission (LAFCo) approval.

Surface water supplies would enter the development from existing turnouts off of the Delta-Mendota Canal that currently serve the property. Domestic water storage capable of storing eight hours of maximum day demand flow would be needed for the Initial Phase of the project. It is anticipated that necessary facilities would be constructed to serve the entire pressure zone for the Initial Phase and the proposed university and VFW sites. The potable water storage would be expanded as the project builds out. The water supplies would be pumped to the treatment system before the water enters the storage tank. The water would be pumped from the storage tank into the distribution system, using the booster pump station. The above-described water treatment and storage facilities would be located within the Pacific Gateway East development area on Parcel 8 of the Vesting Tentative Map (see Figure 3-6) below.

Between domestic and fire storage requirements, approximately 1.3 million gallons per day of water storage is anticipated. It may be possible to split this storage volume between pressure zones, but booster pumps capable of meeting domestic and fire flow requirements would be necessary at each tank location. The proposed location for the storage tank(s) and pump station would be located within the Initial Phase boundaries, on Parcel 8 of the Vesting Tentative Map (see Figure 3-6) below).

Wastewater Infrastructure

The proposed wastewater system for the project would be self-contained and not require service from an outside agency. Wastewater produced by the proposed project would be treated and disposed of on-site at a wastewater treatment facility (WWTP) located in the Pacific Gateway East development area, specifically Parcel 10 of the Vesting Tentative Map (see Figure 3-6).

The wastewater generated on-site would be collected from each parcel through a traditional wastewater gravity flow pipe system installed in roadway alignments. The gravity system would be supplemented with sewer lift stations, as needed, and all wastewater would be routed to the on-site WWTP.

Figure 3-6
Initial Phase Vesting Tentative Map

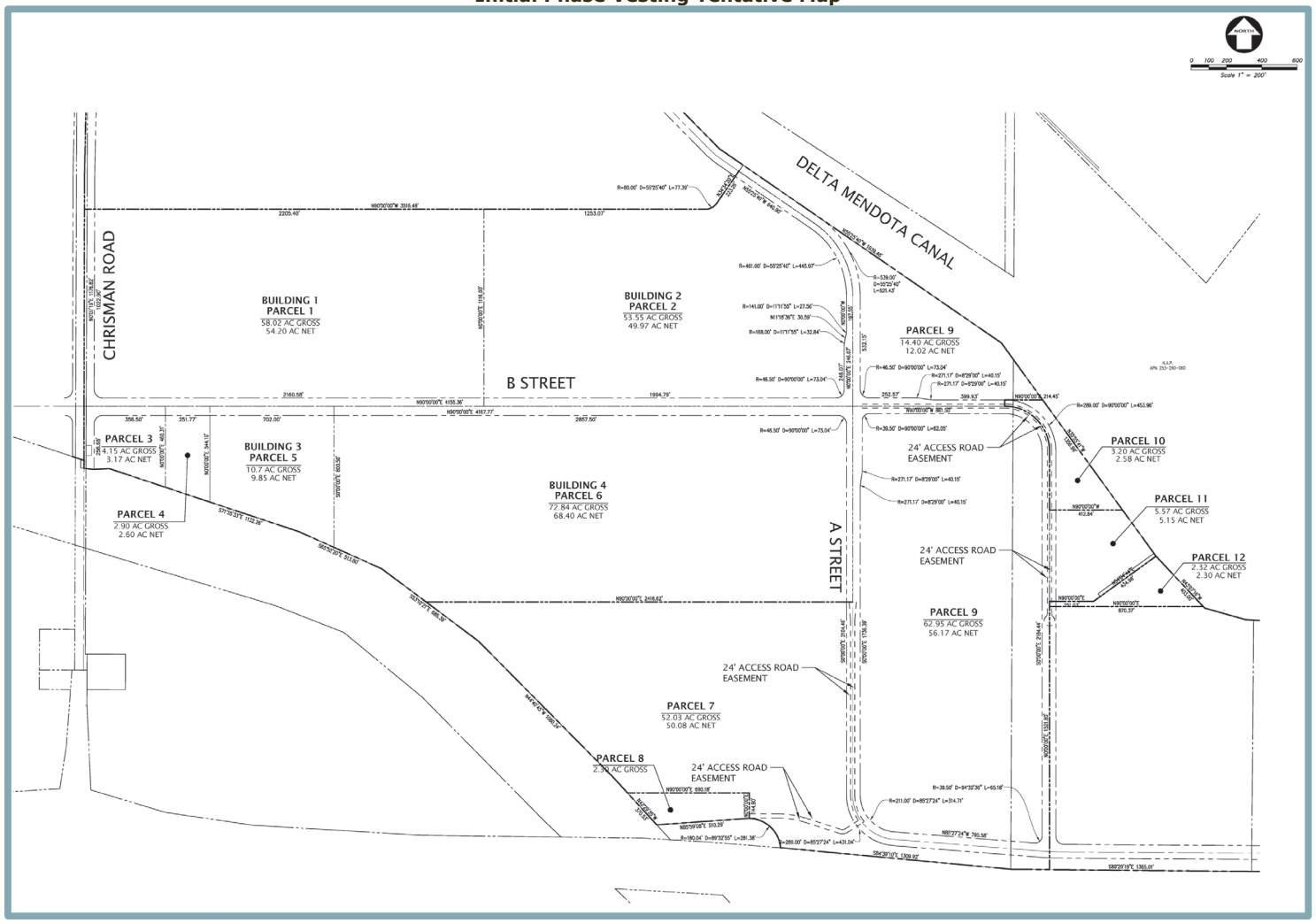


*Figure not OCR compatible.

The WWTP is anticipated to be a prepackaged facility. An operating permit issued by the Central Valley Regional Water Quality Control Board (CVRWQCB) would establish operating, performance, and reporting requirements for on-site treatment and disposal facilities. The WWTP would treat wastewater to tertiary standards, allowing treated wastewater to be used throughout the project site for landscape irrigation. Generally, the WWTP would use membrane bioreactor (MBR) technology in above-ground steel tank systems to produce treated wastewater suitable for irrigation and waste activated sludge suitable for landfill disposal.

The irrigation system would consist of a recycled water storage tank and booster pump station, located south of the WWTP (Parcel 11), with associated recycled water piping ("purple pipe") to deliver recycled water from the WWTP to landscaped areas throughout the project. Supplemental irrigation wells may be used to offset demands in excess of recycled water capacity.

To serve the Initial Phase, the sewer collection system and package wastewater treatment facility would be constructed, as would the recycled water storage and pump station. Any expansions to the wastewater system over the years of project operations would be accomplished by the addition of treatment package units.

Stormwater Infrastructure

Storm drainage for the project would consist of a system of storm drain inlets, piping, and bio-treatment and retention basins. The retention basins would not include surface discharges, but would allow treated stormwater to infiltrate underlying soils. The retention basins would be sized for the 100-year, 10-day storm, and all conveyance piping would be sized for the 100-year, 24-hour storm event. A total of 11 retention basins have been identified for the overall project, one of which would be considered off-site. The off-site basin, known as Basin 4, would be the largest retention basin and would be located north of Durham Ferry Road and west of South Chrisman Road (see Figure 3-7).

The retention basins have been designed for on-site runoff and upstream non-diverted flows. The site currently receives off-site drainage from the mountain areas, which discharge to existing canals or flow eastward. These off-site flows would still be diverted or captured in the retention basins.

Runoff from the various sites and proposed roadways would be collected by catch basins (i.e., a curb, gutter, etc. constructed to collect and direct runoff to the underground pipelines) and a pipe network for discharge into retention basins located throughout the project site. The basins would be located to independently serve each of the five development areas as each phase of the project proceeds. The Pacific Gateway East development area is designed to function independent of the other development areas, although it may be connected to the Pacific Gateway Central area should final design capacity require such. The Pacific Gateway West, Central and University Center development areas would be served by individual retention basins that are constructed and linked together to meet the needs of each successive phase. Once the capacity of the linked basins is met, the off-site basin would be constructed to facilitate the most economically and hydrodynamically efficient stormwater management system.

The Initial Phase of the project would install two retention basins (Basins 6 and 7) within the northeastern corner of Pacific Gateway East development area (see Parcels 9 and 11 on Figure 3-6) and a storm drain pipe network to route flows to the basins.

Figure 3-7
Master Tentative Map

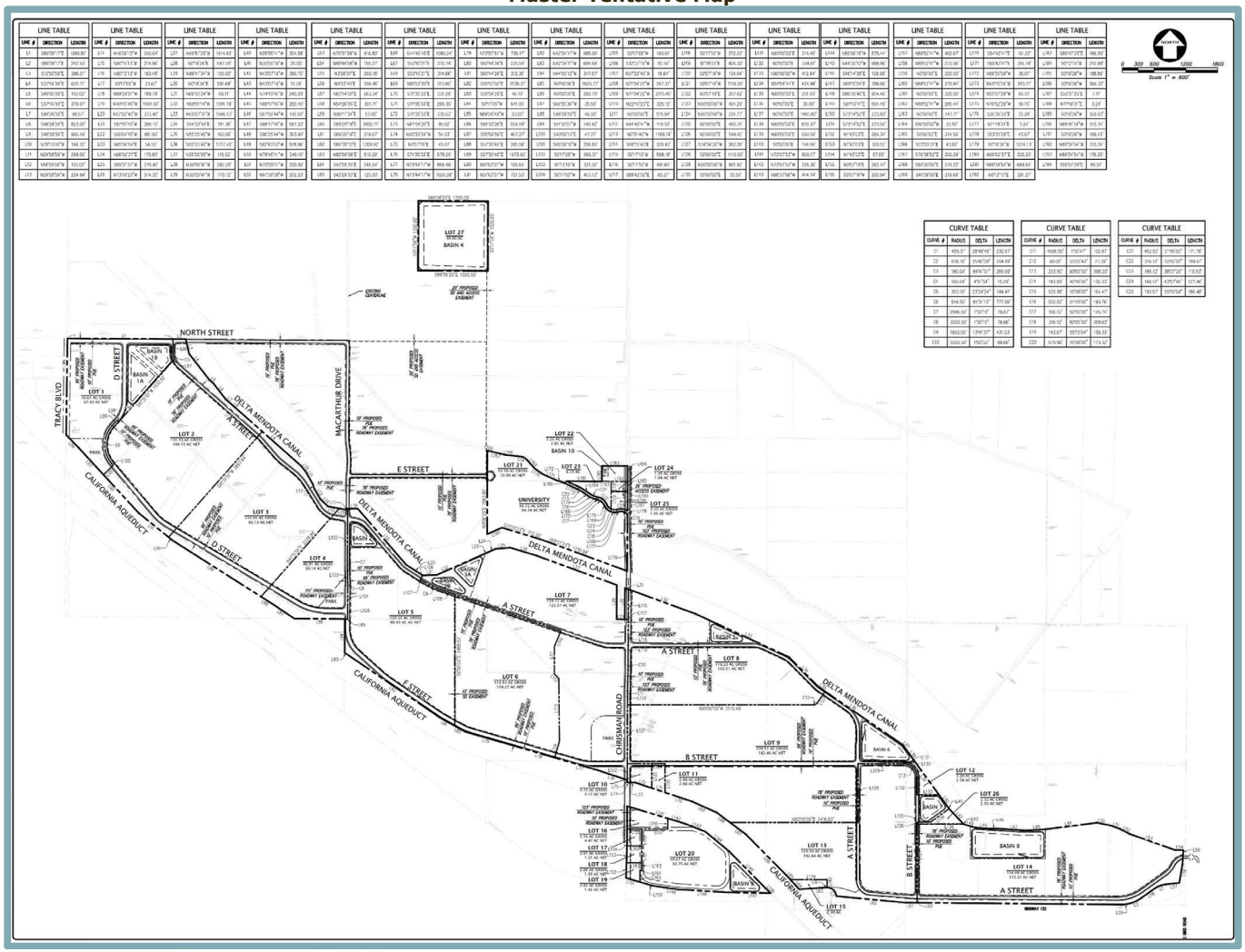


*Figure not OCR compatible.

Access and Circulation

The project is situated near major transportation corridors with primary access off of South Chrisman Road, a State designated STAA route.[1] South Chrisman Road provides direct connectivity west to the Bay Area via I-580, east to I-5 via SR 132, and south to I-5 via I-580, providing north and southbound connectivity with the California highway transportation system.

At full buildout, the following new roadways would be constructed to provide access to individual areas of the plan (see Figure 3-8):

- South Chrisman Road: Widened to a four-lane major arterial along the project frontage.
    - To accommodate project buildout, South Chrisman Road would be widened to consist of three travel lanes in each direction from SR 132 north for a distance of approximately 2,230 feet to B Street. North of B Street, two lanes would be provided in each direction along the entire project frontage, which extends for slightly greater than one mile north of B Street to just south of the Crown Nut almond processing plant. In addition, left- and right-turn lanes would be required at both signalized and unsignalized project access intersections along South Chrisman Road.

      With the Initial Phase of the project, the Pacific Gateway East development area's main access, B Street, would need to be signalized and include dedicated southbound left-turn and northbound right-turn lanes on South Chrisman Road. The university's main driveway would operate acceptably with side-street stop control but would require dedicated northbound left-turn and southbound right-turn lanes on South Chrisman Road. The VFW driveway would be stop-controlled and not require any widening along South Chrisman Road. The Initial Phase of the project would not require any widening of South Chrisman Road along the project frontage to maintain consistency with San Joaquin County level of service (LOS) policies.

- North Street: This new two-lane local industrial street with free turning median lane would extend east of Tracy Boulevard and terminate at MacArthur Drive, just north of the Pacific Gateway West development area. The street would include a 12-foot Class I bicycle and pedestrian path on its south side.
- MacArthur Drive: This segment of MacArthur Drive, from North Street to the Specific Plan Boundary, would be improved with two lanes and a 14-foot landscaped median lane.
- West University Street: This new two-lane local industrial street would extend from MacArthur Drive and provide secondary access to the university campus. The street would include a 12-foot Class I bicycle and pedestrian path on one side.
- Three new two-lane local industrial streets, labeled alphabetically from A Street to C Street, would be constructed within the Specific Plan area.

The internal two-lane local industrial streets would include two lanes with a 14-foot free turning median lane. The proposed internal circulation network would provide for multi-modal uses and accommodate vehicles and trucks, as well as pedestrians, bicycles, and public transportation, as generally illustrated in Figure 3-9.

[1] STAA Truck Routes allow larger trucks to operate on certain primary routes collectively known as the National Network. STAA trucks are longer than California legal trucks and therefore have a larger turning radius than most local roads can accommodate.

Figure 3-8
Roadway Improvement Plan

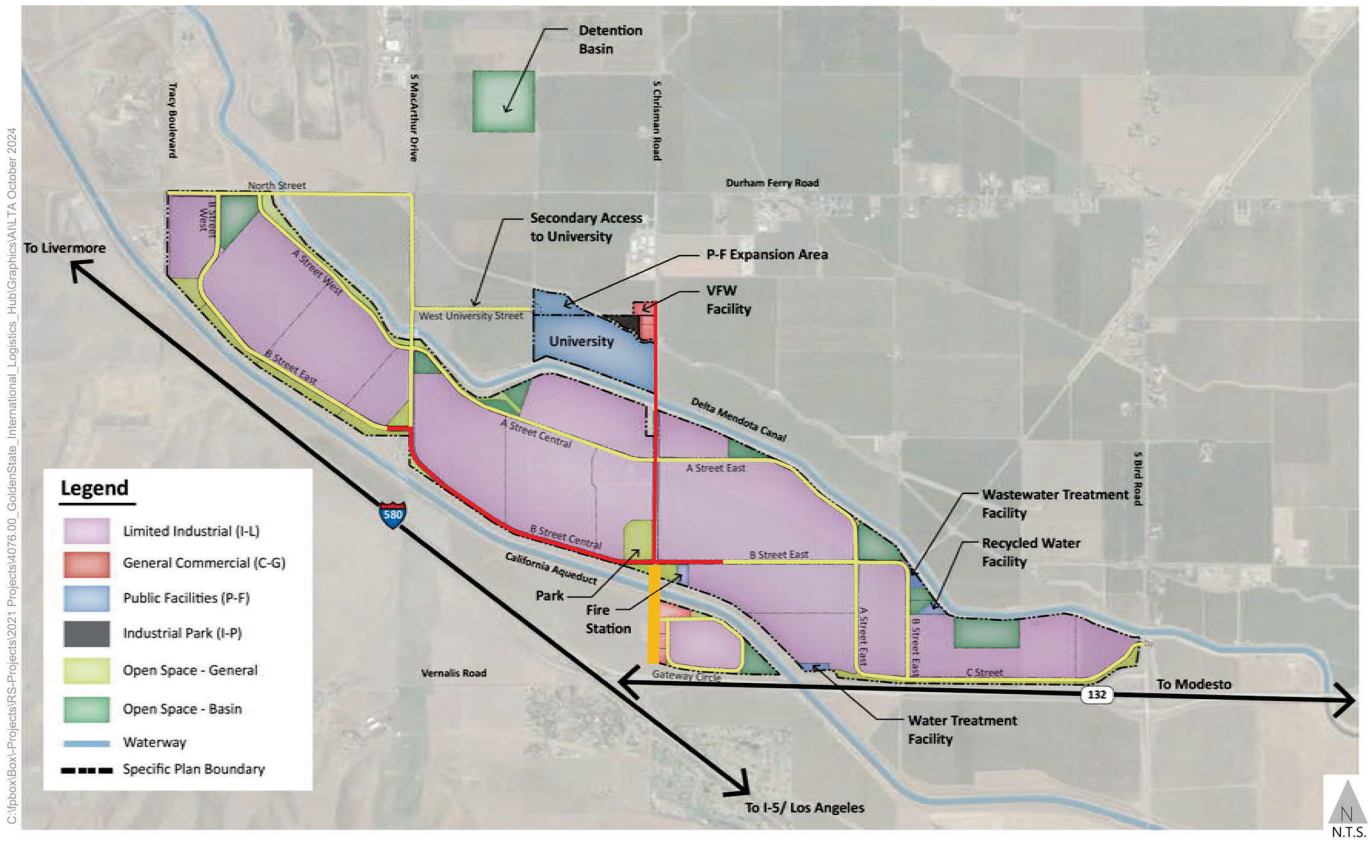


*Figure not OCR compatible.

Figure 3-9
Bicycle and Pedestrian Facilities

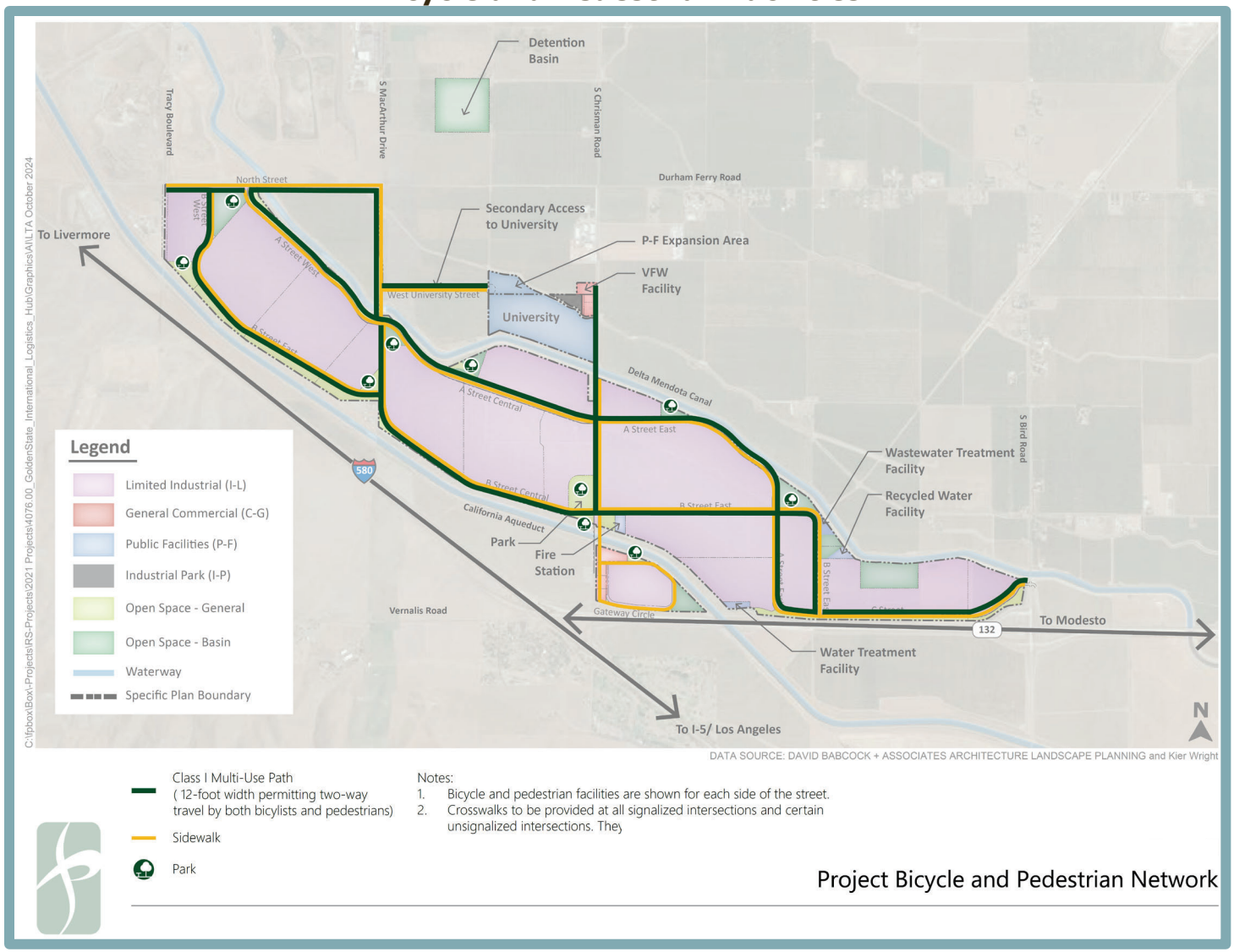


*Figure not OCR compatible.

A 12-foot Class I bicycle and pedestrian path will be included on one side of the project site's internal streets (including North Street, West University Street, A Street, B Street, C Street, South Chrisman Road, and South MacArthur Drive) to provide for a separate pedestrian and bicycle path from the travel lanes. A five-foot-wide sidewalk would be provided on the other side of the proposed streets to encourage pedestrian circulation. In addition, an 8.5-foot landscaped strip would be included within the right-of-way (ROW) to assist in screening the proposed industrial buildings and truck parking areas. All industrial streets would be designed to STAA standards to allow for truck traffic.

Other Utility Infrastructure

Electrical service would be provided by the Pacific Gas and Electric Company (PG&E). Overhead electric lines would be placed underground within the proposed roadways during the Initial Phase and any following construction phases. PG&E has sufficient existing facilities to serve the Initial Phase of the development; however, as the proposed development expands, PG&E may need to build additional substations. A typical substation would require five acres of land, and overhead poles and lines would need to be extended to the new substation location(s).

In addition, natural gas would also be provided by PG&E through two natural gas pipelines north and south of the proposed development. Connections to the existing pipelines would be extended from both South Chrisman Road (to serve the Initial Phase) and South Tracy Boulevard.

Tracy Delta Solid Waste Management Inc. currently provides solid waste disposal services to the southeastern portion of San Joaquin County and would continue to serve the proposed project. Internet services would be provided to the proposed project by AT&T and Comcast, which have existing facilities located along South Chrisman Road. Improvements to fiber communications facilities would require installation in a joint trench.

Fire Station Site

With respect to fire and emergency medical services (EMS), the proposed project is located within the jurisdiction of the South San Joaquin County Fire Authority, with fire and non-transport EMS services provided by the Tracy Rural Fire Protection District and ambulance service provided by American Medical Response. In conjunction with these services, the proposed project also incorporates dedicated groundwater wells and storage infrastructure to meet the fire water quantity and pressure needs for all phases of project development. Additionally, the project has been designed to include land for the construction of a new fire station for South San Joaquin County Fire Authority, centrally located within the site to meet the project's fire response needs.

Project Phasing

The proposed Specific Plan would be developed in the Initial Phase and then subsequent development based on market demand, as further discussed below (see Figure 3-10 below). Market demand would guide building size and site configuration at the time of development and follow Specific Plan and existing San Joaquin County requirements. In addition, subsequent development would expand upon the Initial Phase's street network and utility systems to ensure vehicle access and utilities for the development of individual parcels.

The overall objective of the proposed project is to ensure that development proceeds in an orderly and organized manner, consistent with County General Plan policies, to ensure that community needs are adequately addressed for all phases of project development through full buildout. Additional description is provided below.

Figure 3-10
Initial Phase Conceptual Plan

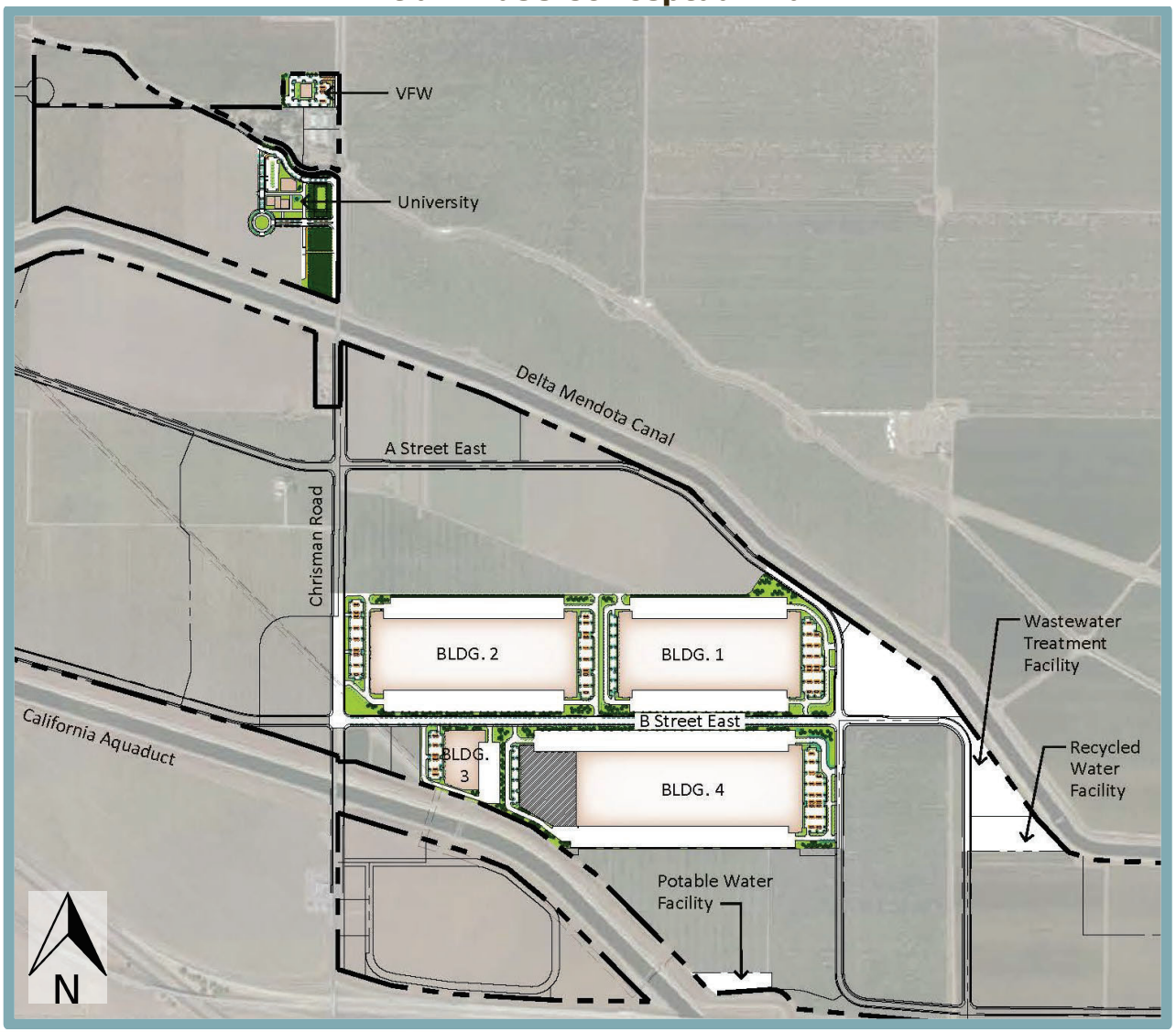


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Initial Phase

Development of the Initial Phase of industrial buildings would consist of four Class "A" facilities for a total of approximately four million sf (see Figure 3-11). The buildings would range in size from approximately 157,000 sf to 1.3 million sf, situated on 181.26 net acres immediately east of South Chrisman Road, within the Pacific Gateway East development area. The Initial Phase would be comprised of rear-loading and cross dock facilities, with the appropriate auto and truck trailer parking stalls. The Initial Phase is anticipated to be developed over five to six years, based on market demand.

The Initial Phase of the Specific Plan would also include a 25,000-sf university facility within the University Center development area, which would serve as Phase 1 of the university campus (see Figure 3-12). The VFW facility would be developed concurrently with the Industrial and university campus components of the Initial Phase (see Figure 3-13). The proposed project would include a parcel for a new building and associated parking for the new home of Tracy Post 1537.

The Initial Phase would also include construction of the necessary backbone infrastructure to serve the proposed Initial Phase development. Generally, this would include improvements to South Chrisman Road as well as the following utilities improvements: installation of a potable groundwater well and treatment facilities, construction of a pre-packaged WWTP, and construction of a large stormwater retention basin. The water and wastewater facilities would be designed to serve the project at full buildout by incorporating appropriate expansion land and system capacity.

Subsequent Development/Long-Term Buildout

Based on historic industrial demand in northern California and the Central Valley, it is anticipated that full buildout of the Industrial Project (Subsequent Development, or "Phase 2") would occur over a 25- to 30-year period. The university campus is anticipated to be developed over an estimated 20-year period based on student demand. Finally, the Industrial Park and Commercial zones would be developed based on demand generated from the Industrial and university campus, anticipated to occur over a 10- to 12-year period and expected to commence around completion of the Industrial Initial Phase.

The EIR will evaluate and identify the impacts and mitigation measures triggered by full buildout of the Specific Plan, as well as those triggered solely by the Initial Phase. As noted above, following the Initial Phase, it is anticipated that the balance of the Specific Plan would be built out over multiple phases as part of Subsequent Development, based on market demand. At the time of submittal for each phase, the development will be reviewed to ensure consistency with the buildout assumptions in the EIR and to determine which of the full buildout mitigation measures are necessary for each phase. It is anticipated that phases consistent with the Specific Plan and EIR buildout would not require additional CEQA review.

With respect to full infrastructure improvements, buildout of the Specific Plan would require additional roadway, water, sewer, and storm drainage improvements, including, but not limited to, widening of South Chrisman Road to a four-lane major arterial, installation of on-site water, sewer, stormwater, and dry utility backbone infrastructure, and construction of an off-site stormwater detention basin and associated storm drain pipe north of the Specific Plan boundaries. Wastewater treatment capacity would be added to the package plant, as necessary, to accommodate additional phases.

Figure 3-11
Initial Phase Industrial Site Plan

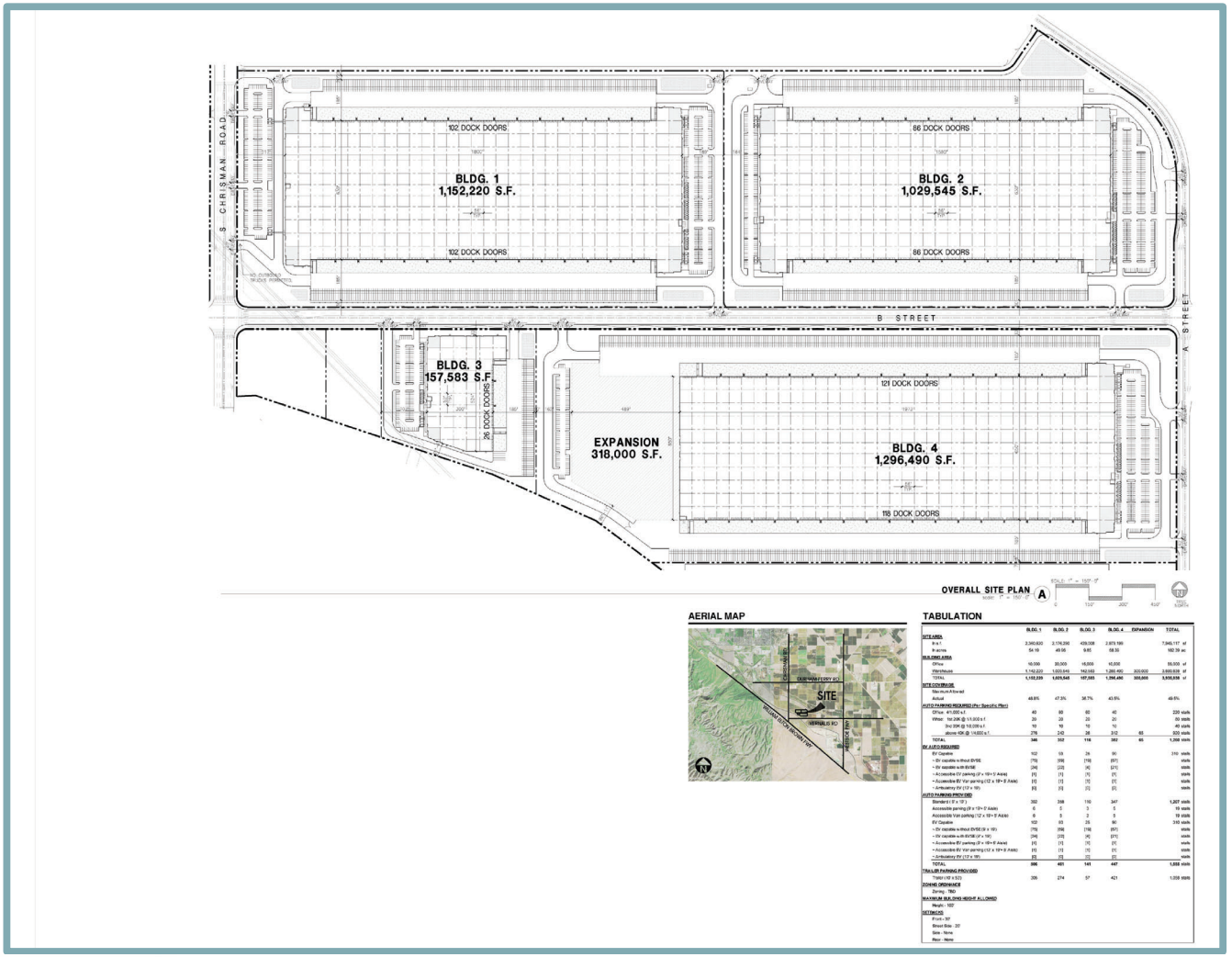


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Figure 3-12
Initial Phase University Site Plan

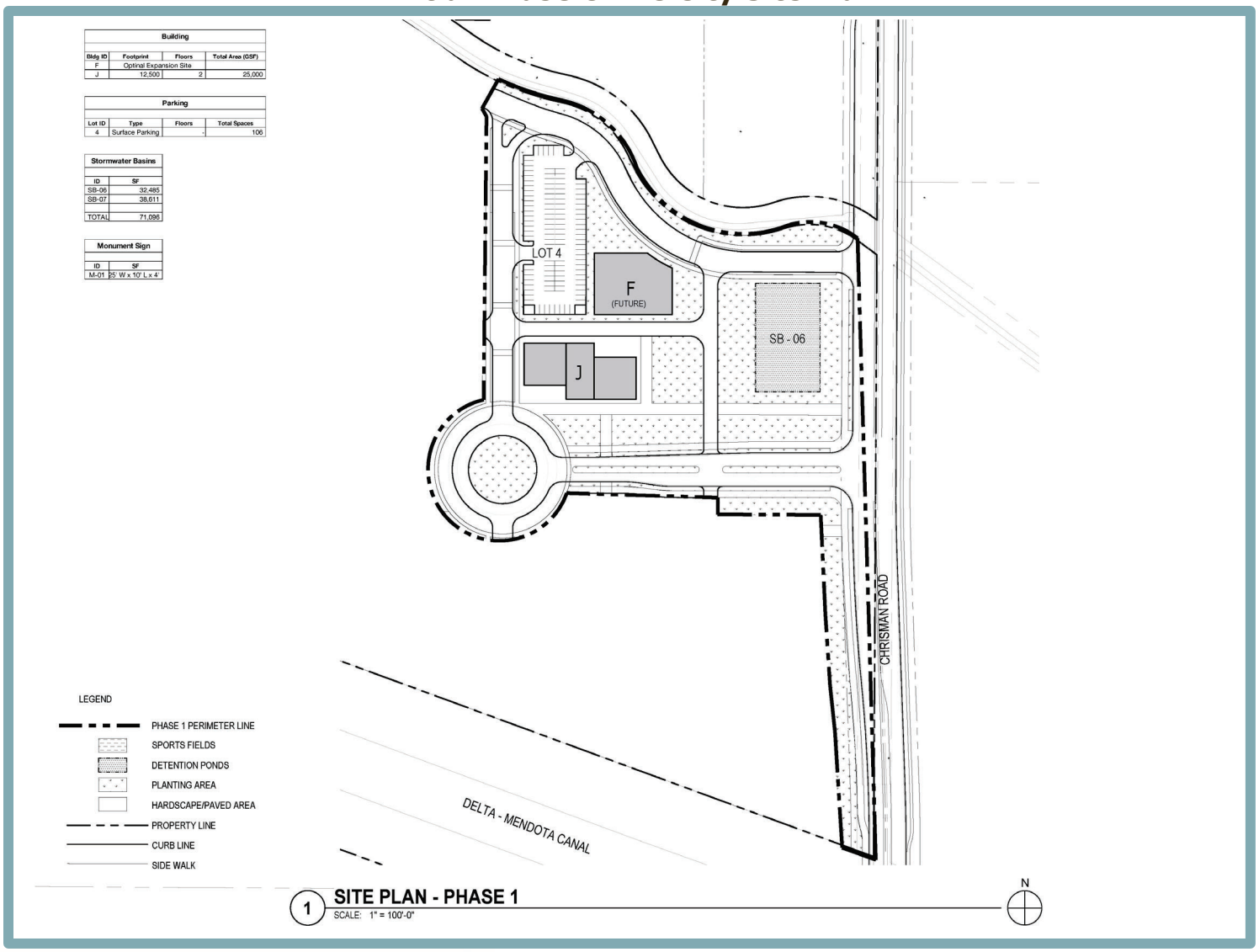


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Figure 3-13
Initial Phase VFW Site Plan

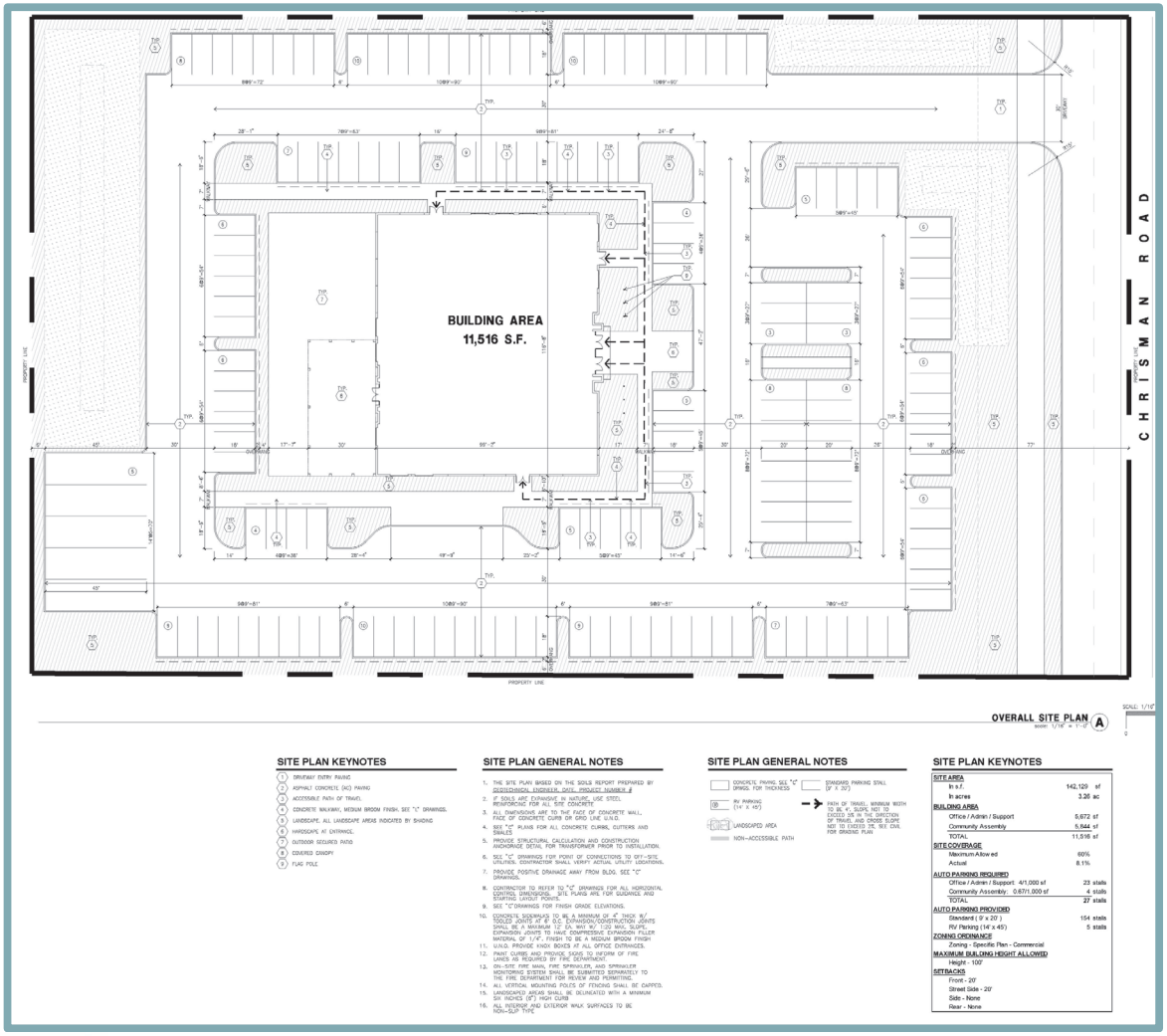


*Figure not OCR compatible.

Similarly, additional potable wells and associated wellhead treatment, if necessary, would be installed to accommodate additional phases. Treated wastewater would provide an on-site source for recycled water for use in landscape irrigation. Recycled water would be made available through installation of "purple pipe" infrastructure, a distribution system specifically designed for recycled water.

General Plan Amendments and Rezone

The proposed project would require amendments to the County's existing General Plan to support the proposed land uses. The proposed project is requesting General Plan Text Amendments to address the potential for economic development opportunities in supply chain corridors in south San Joaquin County in the areas proximate to I-580, I-5, and SR 132 that are served by an existing STAA Route to support the efficient movement of goods to and from the Port of Oakland, Port of Stockton, the Stockton Airport, and throughout the Sacramento Valley and San Joaquin County. In addition, the proposed project would include a General Plan Map Amendment to redesignate the site from 1,556.61 acres of Agriculture, 19 acres of OS/RC, and 1.09 acres of C/RS to approximately 1,387.35 acres of Limited Industrial (I/L), 18.54 acres of General Commercial (C/G), 86.13 acres of Public Facilities (P/F), 28.91 acres of Parks and Recreation (OS/PR), and 40 acres of A/G, with the remaining acreage allocated to roads (see Figure 3-14).

Additionally, as previously discussed, the project site is currently zoned General Agricultural and C-RS. Approval of the proposed Rezone would ensure conformance with the amended General Plan land use designations, as described above. The Rezone would result in 18.5 acres of General Commercial; 4.3 acres of Industrial Park; 1,375.8 acres of Limited Industrial; 76.3 acres of Public Facilities associated with the university campus uses; and 61.8 acres of Public Facilities, including open space and parks.

Major Subdivision Applications

The proposed project includes two Major Subdivision Applications. Upon County approval, the first application would subdivide the entire project site into 27 lots to create a master lotting configuration that will facilitate orderly development of the overall property (see Figure 3-7); and the second would create 12 lots within the Pacific Gateway East development area to facilitate the Initial Phase of the 181.26-acre Industrial area (see Figure 3-6), as well as the acreage required for backbone infrastructure, and the Initial Phase of the university campus.

Development Agreement

Although the County does not offer a Development Agreement application form, the applicant intends to enter into a Development Agreement for the proposed improvements.

As defined in Division 13 of the County Code of Ordinances, the proposed Development Agreement would allow the County and the applicant to enter into an agreement that the proposed project would be completed in compliance with the plans submitted by the applicant, and assure the applicant vested rights to develop the proposed project.

Given that development of the proposed project would be driven by economic conditions and market demand over the course of decades, the Development Agreement would define funding mechanisms to address overall project development and address community benefit issues associated with the proposed project.

Figure 3-14
General Plan Amendment Exhibit

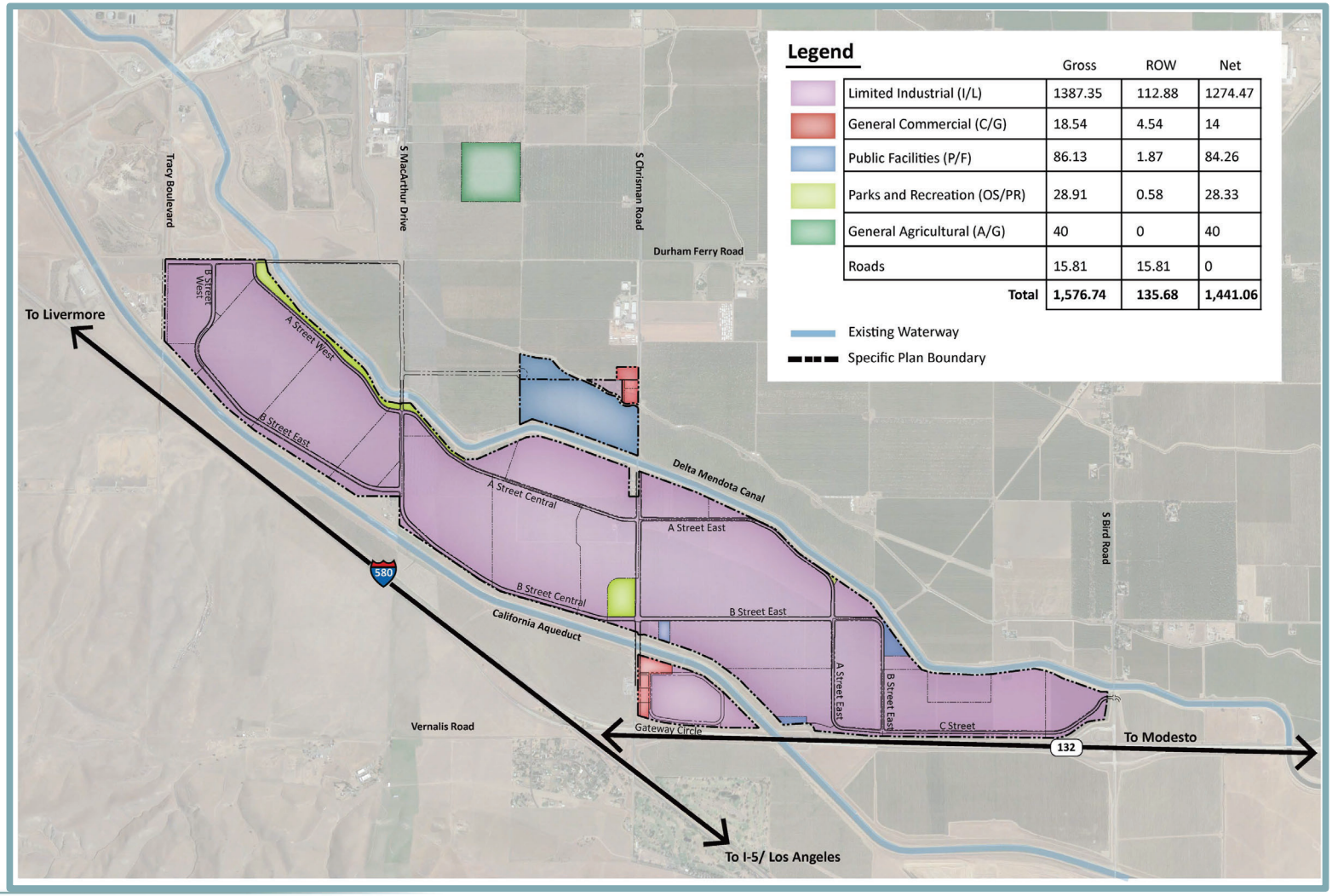


*Figure not OCR compatible.

Williamson Act Contracts

Approximately 789.85 acres of the project site are subject to Williamson Act contracts (see Table 3-3 below). Notices of Nonrenewal have been filed for the Williamson Act Parcels, and a Williamson Act Contract cancellation application was filed separately on November 8, 2024.

Table 3-3
Williamson Act Parcels

APN	Acres	Nonrenewal Filed
253-190-011	61.7	2024
253-180-060	4.47	2024
253-180-011	182.85	2024
253-260-009	119.46	2005 / 2024
253-260-120	119.46	2024
253-260-130	202.83	2024
253-260-140	59.1	2024
253-200-190	39.98	2005
Total	**789.85**	**-**

3.6 REQUIRED PUBLIC APPROVALS

San Joaquin County is the lead agency for the proposed project. In addition to certification of this EIR and the associated Mitigation Monitoring and Reporting Program, the proposed project requires approval of the following entitlements by the County:

- General Plan Text Amendment No. PA-2400364;
- General Plan Map Amendments No. PA-2400363;
- Zone Reclassification No. PA-2400363;
- Specific Plan No. PA-2400365;
- Zoning Compliance Review (Site Plan Level Entitlements) Nos. PA-2400369, 2400371, and 2400372;
- Subdivision Application Nos. PA-2400367 to subdivide the entire Project site into 27 lots to create a master lotting configuration and PA-2400368 to create 12 parcels to facilitate the Initial Phase of the Limited Industrial area and backbone infrastructure;
- Development Agreement No. PA-2400366; and
- Williamson Act Contract Cancellations No. PA-24-00500.

Review or Approvals by Other Agencies

For the purposes of CEQA, the term “Responsible Agency” includes all public agencies (other than federal agencies) beyond the Lead Agency that have discretionary approval power over the Project (CEQA Guidelines Section 15381). Discretionary approval power may include such actions as issuance of a permit, authorization, or easement needed to complete some aspect of the Project. Responsible Agencies may include, but are not limited to, the following:

- U.S. Army Corps of Engineers (USACE);
- U.S. Bureau of Reclamation (Project Design Review and Approval, Temporary Construction Permit related to future South Chrisman Road bridge replacement over the Delta-Mendota Canal);
- San Luis & Delta-Mendota Authority (Project Design Review and Approval related to future South Chrisman Road bridge replacement over the Delta-Mendota Canal);

- California Department of Transportation (Caltrans);
- Central Valley Regional Water Quality Control Board (CVRWQCB);
- Department of Water Resources (encroachment permit related to future South Chrisman Road bridge replacement over the California Aqueduct);
- San Joaquin Valley Air Pollution Control District (SJVAPCD);
- City of Tracy;
- San Joaquin County Local Agency Formation Commission (LAFCo) (potential annexation of project site into County Service Area [CSA] #16 for water service);
- San Joaquin Council of Governments (SJCOG);
- San Joaquin Airport Land Use Commission (SJALUC); and
- Byron-Bethany Irrigation District (BBID).

3.7 OFF-SITE IMPROVEMENTS STUDY AREA

The Local Transportation Analysis (LTA) prepared for the proposed project by Fehr & Peers evaluates the effects of the proposed project on traffic operations at potentially affected roadways and intersections, which is outside the scope of CEQA as of July 1, 2020 (see CEQA Guidelines Section 15064.3(a) and additional discussion in Chapter 4.12 of this EIR). Automobile delay and LOS are no longer used as a performance measure to determine the transportation impacts of proposed land developments and transportation projects under CEQA. Despite this, intersection and roadway LOS has been analyzed "outside" of the CEQA process to understand how the surrounding roadway system may be affected by the project, to determine needed infrastructure upgrades, and to evaluate consistency with applicable General Plan policies related to LOS.

The LTA identifies a range of intersection and roadway improvements that would be triggered by full buildout of the proposed project. These prospective intersection and roadway improvements are under the control of various agencies (Caltrans, San Joaquin County, City of Tracy). The feasibility of the improvements is unknown at this time for various reasons, which, depending upon the improvement, may include (but not be limited to) extra territorial impacts, lack of funding mechanism to ensure full funding is ultimately collected, ROW constraints, etc. Notwithstanding, this EIR will study the potential physical environmental effects associated with the prospective improvements with the intent to provide environmental clearance of said improvements should they be determined feasible by the agencies in whose jurisdiction each improvement is located. The analysis of these prospective improvements will be conducted at a programmatic level, as is appropriate given that the roadway improvements have not yet been sufficiently designed and many require coordination with other agencies for purposes of design and engineering.[2] Figure 3-15 illustrates the study areas associated with the intersection and roadway improvements identified in Chapter 4.12, and Figure 3-16 shows the specific study areas associated with South Chrisman Road. For a complete list of conceptual plans at each intersection, see Appendix C of this EIR.

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[2] Pursuant to CEQA Guidelines Section 15126.4(a)(D):

> If a mitigation measure would cause one or more significant effects in addition to those that would be caused by the project as proposed, the effects of the mitigation measure shall be discussed but in less detail than the significant effects of the project as proposed. (*Stevens v. City of Glendale* (1981) 125 Cal.App.3d 986.)

While the prospective intersection and roadway improvements identified in the LTA are no longer considered mitigation measures given the shift to VMT for determining traffic impact significance under CEQA, the same principle applies, meaning the potential physical environmental effects of the improvements may be evaluated in less detail than the significant effects of the project as proposed.

Figure 3-15
Off-Site Improvement Study Areas

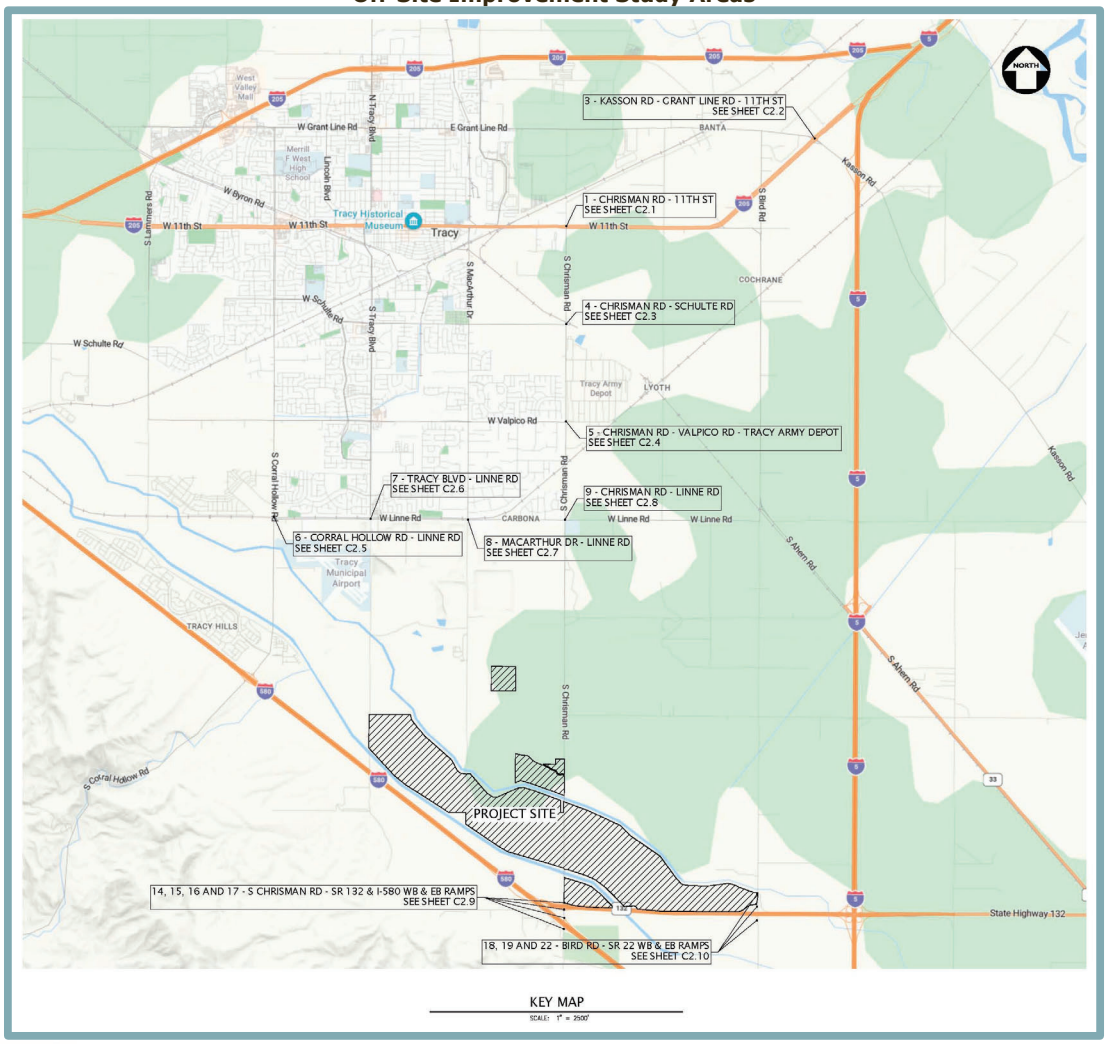


*Figure not OCR compatible.

Figure 3-16
South Chrisman Road Study Area

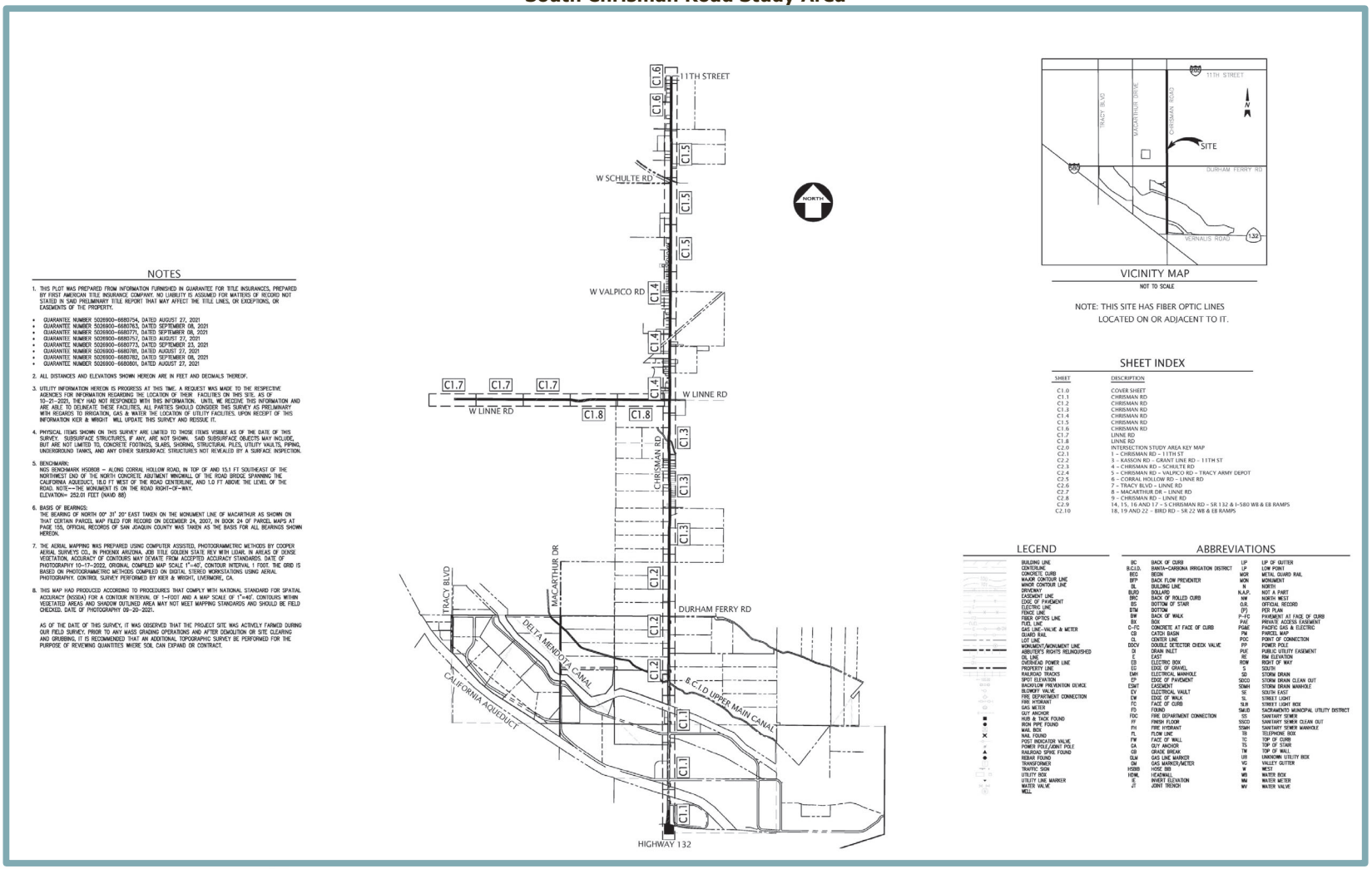


*Figure not OCR compatible.

4. Existing Environmental Setting, Impacts, and Mitigation

4.0 Introduction to the Analysis

4.0 INTRODUCTION TO THE ANALYSIS

4.0.1 INTRODUCTION

The technical chapters of the EIR analyze the potential impacts of buildout of the proposed project on a range of environmental issue areas. Chapters 4.1 through 4.14 of the EIR describe the environmental setting related to each specific issue area, method of analysis, project-specific impacts and mitigation measures, and a cumulative impact analysis for each issue area. The format of each of the technical chapters is described at the end of this chapter. It should be noted that all technical reports are either attached to this EIR, available by request from the County, or available on the County's website at:

https://www.sjgov.org/department/cdd/planning/documents

4.0.2 DETERMINATION OF SIGNIFICANCE

Under CEQA, a significant effect is defined as a substantial or potentially substantial adverse change in the environment (Public Resources Code Section 21068). The CEQA Guidelines require that the determination of significance be based on scientific and factual data. The specific criteria for determining the significance of a particular impact are identified within in each technical chapter, and are consistent with significance criteria set forth in the CEQA Guidelines or as based on the professional judgment of the EIR preparers.

Significance Criteria

The CEQA Guidelines define a significant effect on the environment as "a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance." In addition, the Guidelines state, "An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." (CEQA Guidelines Section 15382).

As presented in Section 4.0.4 below, the level of significance of an impact prior to mitigation is included at the end of each impact discussion throughout the technical chapters of this EIR. The following levels of significance prior to mitigation are used in this EIR:

1) Less than Significant: Impacts that may be adverse, but that do not exceed the specified thresholds of significance;
2) Significant: Impacts that exceed the defined standards of significance and require mitigation;
3) Less than Cumulatively Considerable: Where cumulative impacts have been identified, but the project's incremental contribution towards the cumulative impacts would not be considered significant; and
4) Cumulatively Considerable: Where cumulative impacts have been identified and the project's incremental contribution towards the cumulative impacts would be considered significant.

If an impact is determined to be significant or cumulatively considerable, mitigation is included, if available, in order to reduce the specific impact to the maximum extent feasible. A statement of the level of significance of an impact after mitigation is also included in each impact discussion throughout the technical chapters of this EIR. The following levels of significance after implementation of mitigation are used in the EIR:

1) Less than Significant: Impacts that exceed the defined standards of significance but can be eliminated or reduced to a less-than-significant level through the implementation of feasible mitigation measures;
2) Less than Cumulatively Considerable: Where the project's incremental contribution towards cumulative impacts would be eliminated or reduced to a less than cumulatively considerable level through the implementation of feasible mitigation measures; and
3) Significant and Unavoidable Impact: An impact (project-level or cumulative) that cannot be eliminated or reduced to a less-than-significant or less than cumulatively considerable level through the implementation of feasible mitigations measures.

Each environmental area of analysis uses a distinct set of significance criteria. The significance criteria are identified at the beginning of the Impacts and Mitigation Measures section in each of the technical chapters of this EIR. Although significance criteria are necessarily different for each resource considered, the provided significance levels ensure consistent evaluation of impacts for all resource areas evaluated.

4.0.3 ENVIRONMENTAL ISSUES ADDRESSED IN THIS EIR

The EIR provides the analysis necessary to address the technical environmental impacts of the proposed project. The following environmental issues are addressed in the separate technical chapters of this EIR:

- Aesthetics;
- Agricultural Resources;
- Air Quality, Greenhouse Gas Emissions, and Energy;
- Biological Resources;
- Cultural and Tribal Cultural Resources;
- Geology and Soils;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Noise;
- Public Services/Utilities and Service Systems;
- Transportation;
- Urban Decay; and
- Wildfire.

Chapter 5, Effects Not Found to be Significant, will address the project's effects that were determined not to be significant, and, thus, were not discussed in detail in a technical chapter of the EIR. See Section 6.3, Cumulative Impacts, of Chapter 6, Statutorily Required Sections, for additional information on the scope of the cumulative impact analysis for each environmental issue addressed in the EIR.

4.0.4 TECHNICAL CHAPTER FORMAT

Each technical chapter addressing a specific environmental issue begins with an **introduction** describing the purpose of the section. The introduction is followed by a description of the project's **existing environmental setting** as the setting pertains to that particular issue. The setting description is followed by the **regulatory context** and the **impacts and mitigation measures** discussion, which contains the **standards of significance**, followed by the **method of analysis**. The standards of significance section includes references to the specific checklist questions consistent with Appendix G of the CEQA Guidelines. The **impacts and mitigation measures** discussion includes impact statements prefaced by a number in bold-faced type (for both project-specific and cumulative analyses). An explanation of each impact and an analysis of the impact's significance follow each impact statement. All mitigation measures pertinent to each individual impact follow directly after the impact statement (see below). The degree of relief provided by identified mitigation measures is also evaluated. An example of the format is shown below.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance.

4.x-1 Statement of Project-Specific Impact

Discussion of impact for the proposed project in paragraph format. Impacts related to the development of the Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area may be discussed under separate sub headers or may be combined, as appropriate.

Statement of ***level of significance*** of impact prior to mitigation is included at the end of each impact discussion. The following levels of significance are used in the EIR: less than significant, significant, or significant and unavoidable. If an impact is determined to be significant, mitigation will be included in order to reduce the specific impact to the maximum extent feasible. Impacts that cannot be reduced to a less-than-significant level with implementation of all feasible mitigation would be considered to remain significant and unavoidable.

Mitigation Measure(s)

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-1(a) *Required mitigation measure(s) presented in italics and listed in consecutive order.*

4.x-1(b) *Required additional mitigation measure, if necessary.*

Cumulative Impacts and Mitigation Measures

The following discussion of cumulative impacts is based on implementation of the proposed project in combination with cumulative development within the applicable area or region.

4.x-2 Statement of Cumulative Impact

Discussion of cumulative impacts for the proposed project in paragraph format. As discussed above, impacts related to the development of the Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area may be discussed under separate sub headers or may be combined, as appropriate.

As discussed in detail in Chapter 6, Statutorily Required Sections, of the EIR, the cumulative setting for the proposed project is generally considered to be development anticipated to occur upon buildout of the San Joaquin County General Plan.

Statement of ***level of significance*** of cumulative impact prior to mitigation is included at the end of each impact discussion. The following levels of significance are used in the EIR for cumulative impacts: less than significant, less than cumulatively considerable, cumulatively considerable, or significant and unavoidable. If an impact is determined to be cumulatively considerable, mitigation will be included in order to reduce the specific impact to the maximum extent feasible. Impacts that cannot be reduced to a less-than-significant or less than cumulatively considerable levels with the implementation of all feasible mitigation would be considered to remain significant and unavoidable.

Mitigation Measure(s)

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-2(a) *Required mitigation measure(s) presented in italics and listed in consecutive order.*

4.x-2(b) *Required additional mitigation measure, if necessary.*

4.1 Aesthetics

4.1 AESTHETICS

4.1.1 INTRODUCTION

The Aesthetics chapter of the EIR describes existing aesthetic resources in the area of the proposed project and the broader region, and evaluates the potential aesthetic impacts of the project. CEQA describes the concept of aesthetic resources in terms of scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a State scenic highway), and for non-urbanized areas, the existing visual quality or character of the project area. In addition, pursuant to CEQA Guidelines, this chapter describes potential impacts related to light and glare. The following analysis is based on information drawn from the San Joaquin County General Plan,[1] the associated General Plan EIR[2], and visual simulations prepared for the proposed project.

Pursuant to the court ruling in *Preserve Poway v. City of Poway* (2016) 245 Cal. App.4th 560 [199 Cal.Rptr. 3d 600], community character is separate and apart from aesthetic impacts and, thus, is not a CEQA issue. Rather, the analysis of aesthetics should be limited to tangible, physical evidence that a project is visually inconsistent with the surrounding community (rather than a psychological "feel"). Therefore, where applicable, the analysis presented within this chapter focuses on potential physical changes to the visual character or quality of the project site and surrounding area, rather than overall community character.

4.1.2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing conditions of visual resources in the project region and within the vicinity of the project site.

Visual Character of the Region

The regional area encompassing the proposed project is rural in character with prominent geographic features, such as the Diablo Range foothills to the west across Interstate 580 (I-580). The Diablo Range consists of extensive rolling foothills with elevations ranging from near sea level to 1,652 feet above mean sea level (amsl). According to the General Plan EIR, the primarily grass-covered hillsides in the southwestern portion of the County are visible from many locations and add contrast to the predominantly level terrain associated with agricultural operations. Such agricultural lands consist of large expanses of the County and include level lands that are irrigated for row crops, vineyards, orchards, and field crops such as alfalfa. Depending on the time of year, the agricultural lands take on different visual characteristics ranging from fallow lands in mid-winter to vibrant fruit trees in bloom in early spring.

According to the General Plan, the natural, rural, and agricultural aspects of the County, as experienced through views of the Delta and the agriculturally rich valley floor, as well as panoramic views of the Coastal ranges and the Sierra Nevada foothills, when visibility conditions permit, form the primary scenic resources within San Joaquin County. Because of the flatness of

[1] San Joaquin County. *San Joaquin County General Plan.* Adopted December 2016.
[2] San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report.* Certified October 2014.

most of the County's terrain and often poor air quality, most scenic views are limited to near- and medium-range as provided by viewpoints such as public recreation areas and roadway.

The major scenic vistas in San Joaquin County are provided by east-west travel corridors that provide views of the Sierra Nevada foothills while driving eastward and views of the Diablo Range while driving westward. Less distant scenic vistas are also available while driving on two-lane roads through rural portions of the County, including views of agricultural production and river corridors. In addition to agricultural lands, hillsides, and river corridors, the General Plan EIR identifies scenic resources within the County such as significant oak groves, parklands, and, in the northwestern portion of the County, the Sacramento-San Joaquin River Delta. None of the County roads in the project vicinity are considered scenic routes in the General Plan (see Figure 4.L-1 of the General Plan EIR).

The City of Tracy is located approximately 3.5 miles north of the project site. The County's General Plan identifies several Rural Communities, defined as generally more than 50 acres in size, and have population between 100 and 1,000. Through General Plan policies, the County seeks to maintain the character of rural communities and ensure a quality living environment by improving the current state of the community. The nearest Rural Community to the project site is Chrisman, located immediately south of I-580, west of the intersection of State Route 132 (SR 132)/I-580. The community includes the Tracy Golf and Country Club and the adjacent subdivisions of Par Country Estates and Hillside Greens. Par Country Estates contains 36 homes on lots averaging 1.5 acres in size. Hillside Greens contains 14 new homes, built on 6,000 square-foot lots. The Chrisman community boundary includes about 225 acres with a population of 184 people.

State Scenic Highways

The State of California has officially designated one scenic highway within San Joaquin County, I-580, which crosses the County diagonally in the southwestern portion of the County. Motorists traversing I-580 through the County have views of the Diablo Range foothills, open agricultural lands, and, on especially clear days, the Sierra Nevada foothills. The southwestern boundary of the project site is parallel to I-580, which is located approximately 500 feet away.[3] Although not officially designated as a scenic highway by the State, the General Plan EIR considers I-5 to be a scenic roadway. The eastern-most boundary of the project site is located approximately 1.5 miles from I-5. The General Plan EIR also identifies additional road segments that are considered scenic roadways, none of which are located in the project vicinity.

Visual Character of the Project Site and Surrounding Area

The following information provides an overview of the physical conditions of the project site and surrounding area in relation to visual character.

Project Site

The approximately 1,576.7-acre project site is located south of the City of Tracy in an unincorporated area of San Joaquin County, California (see Figure 4.1-1). The project site is generally bound by Bird Road to the east; the Delta-Mendota Canal to the north; Tracy Boulevard to the west; and the southern boundary is formed by the California Aqueduct, west of South Chrisman Road, and SR 132, east of South Chrisman Road.

[3] California Department of Transportation. *California State Scenic Highway System Map.* Available at: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed January 2024.

Figure 4.1-1
Project Site Boundaries

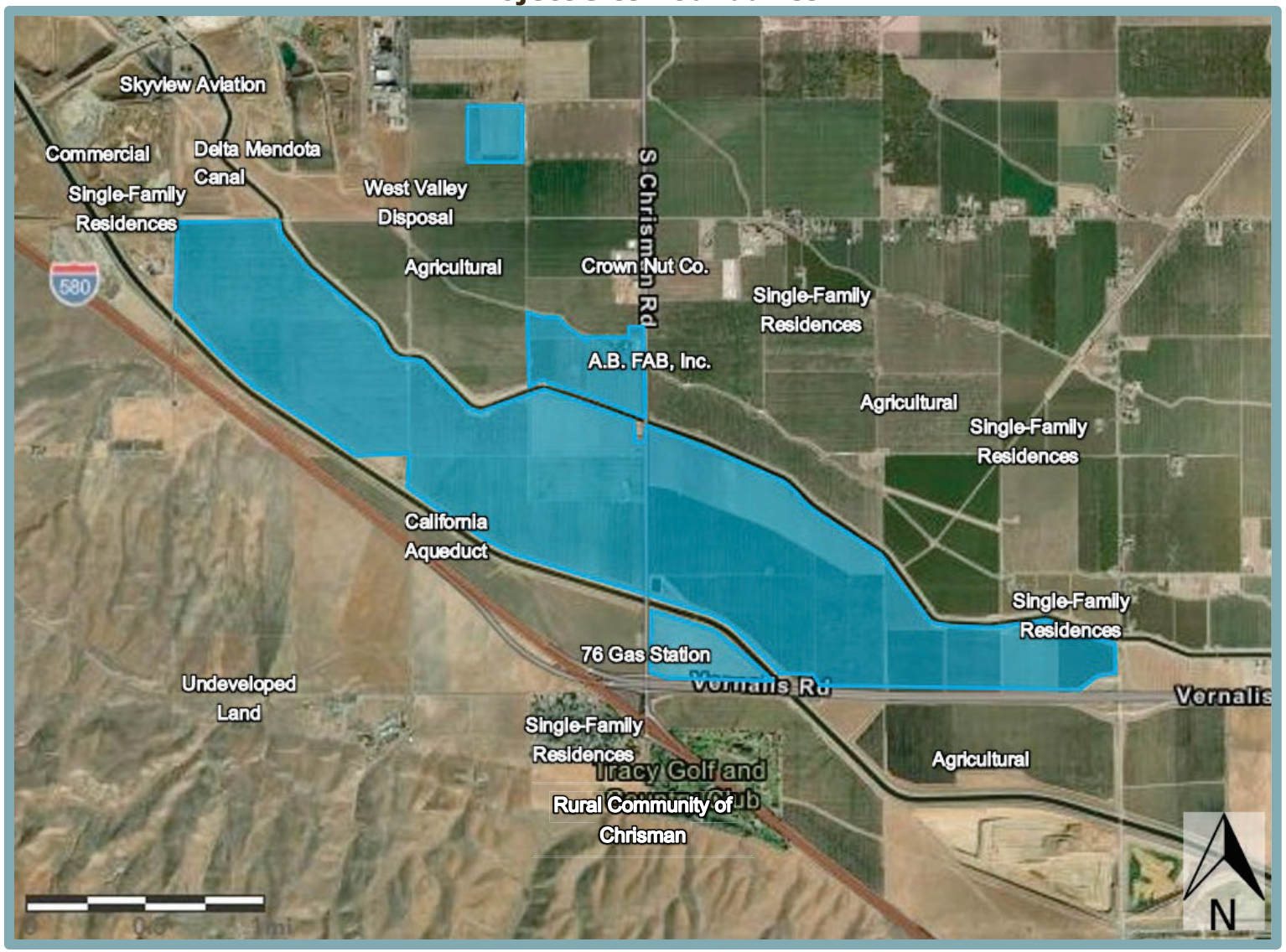


*Figure not OCR compatible.

The project site is currently developed with active agricultural land, including approximately 1,568 acres of almond and cherry orchards and vineyards, an agricultural machinery manufacturing facility (A.B. FAB, Inc.), and two existing single-family homes.

The project site is generally level with elevations ranging from approximately 200 feet amsl in the western portion of the site to approximately 150 feet amsl in the eastern portion of the site. South Chrisman Road, a designated Surface Transportation Assistance Act (STAA) Truck Route, provides north-to-south circulation access through the Specific Plan area. East/west access is limited to private, unimproved farm roads. In addition, the Delta-Mendota Canal bisects project site, the Banta-Carbona Irrigation District Canal lies north of the Delta Mendota Canal and runs northwest to southeast through the University Center of the project site. The California Aqueduct is located adjacent to the western boundary of the site.

Surrounding Areas

The landscape adjacent to the project site to the north, south, and east consists of flat agricultural lands. Other surrounding existing land uses include rural single-family residences to the northeast along Durham Ferry Road; a gas station to the south of the California Aqueduct; two rural communities, Par Country Estates and Hillside Greens, at the south end of Chrisman Road; the Rural Community of Chrisman to the southwest, across I-580 and northwest of the Tracy Golf Club; and commercial and rural residential uses, as well as a surface mining operation and the Tracy Municipal Airport to the northwest.

Public Versus Private Views

Travelers along nearby roadways, as well as the nearby residences located in the project vicinity, would be considered sensitive visual receptors. However, it is important to distinguish between public and private views. Private views are views seen from privately-owned land and are typically viewed by individual viewers, including views from private residences. Public views are views that are experienced by the collective public. In the case of the proposed project, public views would consist primarily of views from roadways in the project vicinity, including I-580, SR 132, South Chrisman Road, and Bird Road.

CEQA (Public Resources Code [PRC] Section 21000 *et seq.)* case law has established that only public views, not private views, are protected under CEQA. For example, in *Association for Protection etc. Values v. City of Ukiah* (1991) 2 Cal.App.4th 720 [3 Cal. Rptr.2d 488] the court determined that "we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general. As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: '[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.'" Such a conclusion is consistent with the thresholds of significance established in Appendix G of the CEQA Guidelines. Therefore, it is appropriate to focus the aesthetic impact analysis on potential impacts to public views, rather than private views.

Existing Conditions of Key Viewpoints

San Joaquin County, in coordination with the environmental consultant team for the project, selected key public viewpoints that would most clearly display the proposed project's potential visual effects (see Figure 4.1-2).

Figure 4.1-2
Key Public Viewpoints

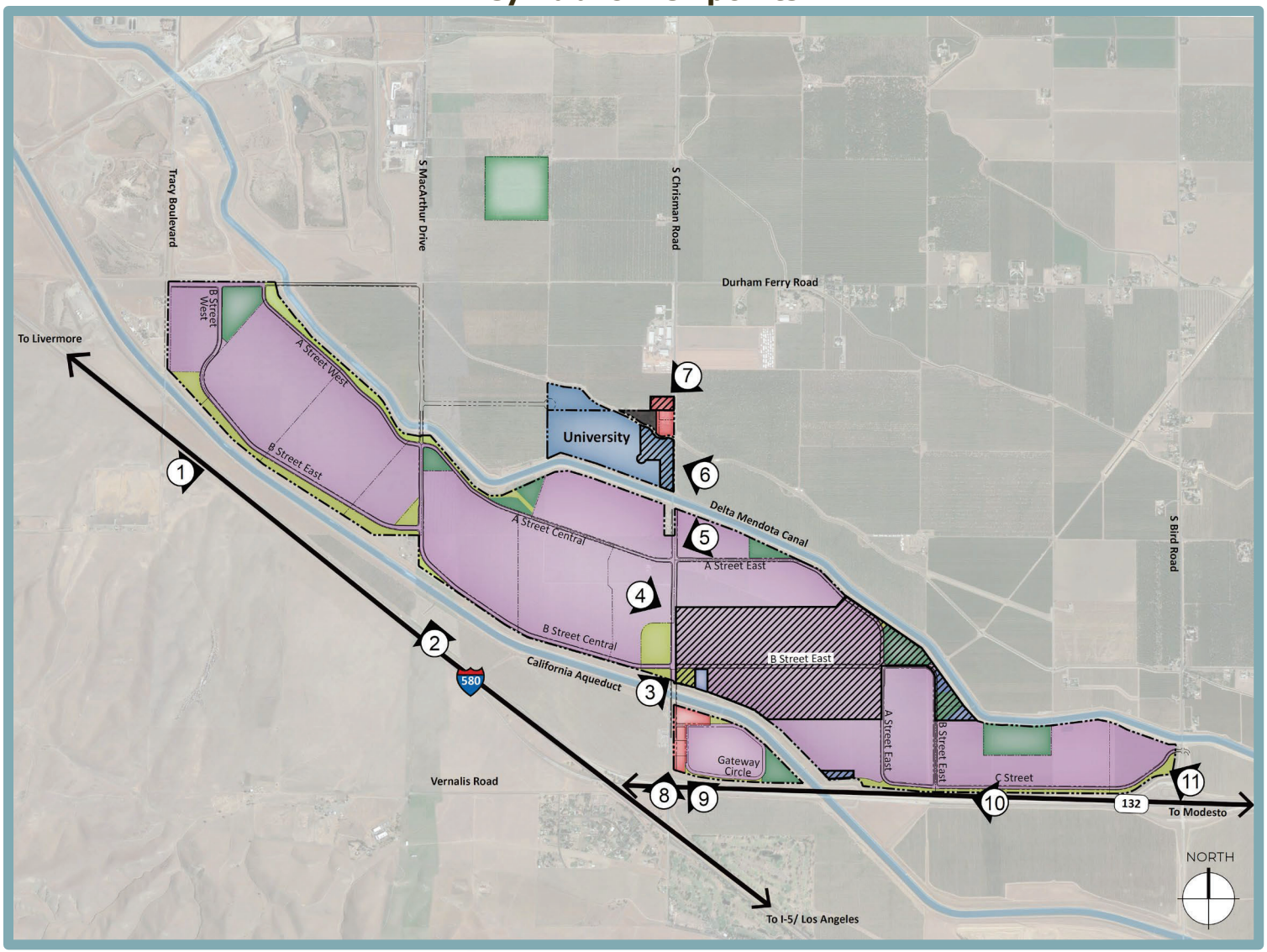


*Figure not OCR compatible.

View 1: Views from the Eastbound Lane of I-580 (Looking East Toward Project Site)

Views from the eastbound lane of I-580 looking east toward the project site are shown in Figure 4.1-3. As shown in View 1, the view from the eastbound lane of I-580 looking east toward the project site consists of a grassy median and the westbound lane in the foreground. Midground views consist of a grassy berm along the California Aqueduct and the Aqueduct itself, as well as undeveloped grassy fields. Background views consist of distant treetops, urban development, the Sierra Nevada foothills, and open sky.

View 2: Views from the Westbound Lane of I-580 (Looking North Toward Project Site)

Views from the westbound lane of I-580 looking north toward the project site are shown in Figure 4.1-4. As shown in View 2, foreground views consist of a barbed wire fence and orchards. Midground views consist of the orchards extending into the distance and a limited number of structures. Background views consist of distant treetops, urban development, and open sky.

View 3: Views from South Chrisman Road (Looking Northeast Toward Project Site)

View 3 is located along South Chrisman Road, north of the California Aqueduct, within the boundaries of the project site. The view looks northeast from the northbound travel lane (Figure 4.1-5). As shown in View 3, foreground views consist of the gravel shoulder, fenced-in utility infrastructure, and utility poles. Midground views are dominated by orchards, and background views consist of open sky.

View 4: Views from South Chrisman Road (Looking Southeast Toward Project Site)

View 4 is from South Chrisman Road, within the project site boundaries, looking southeast through the project site (Figure 4.1-6). As shown therein, View 4 consists of a paved roadway and utility poles in the foreground with orchards dominating the midground. Background views consist of the foothills of the Diablo Range and open sky.

View 5: Views from South Chrisman Road (Looking West Toward the Project Site)

View 5 is from South Chrisman Road, within the project site boundaries, looking southwest through the project site (Figure 4.1-7). Similar to View 4, this view from South Chrisman Road looking west toward the project site consists of the gravel shoulder of South Chrisman Road in the foreground, as well as a power line pole and orchards, which obscure potential midground views. Background views consist of distant views of the Diablo Range foothills and open sky.

View 6: Views from South Chrisman Road (Looking Northwest Toward the Project Site)

View 6 is from South Chrisman Road, north of the Delta-Mendota Canal, looking northwest through the project site (Figure 4.1-8). As shown in View 6, foreground views consist of a paved roadway and grassy shoulder in the foreground, a gravel access road that runs along the Delta-Mendota Canal, and orchards that are lower in elevation than South Chrisman Road. Background views consist of distant trees and urban development, as well as the Diablo Range foothills, some of which are developed with wind turbines, and open sky.

Figure 4.1-3
View 1: Existing View of Project Site from Eastbound I-580 Looking East



Figure 4.1-4
View 2: Existing View of Project Site from Westbound I-580 Looking North



Figure 4.1-5
View 3: Existing View of Project Site from the South Chrisman Road Looking Northeast



Figure 4.1-6
View 4: Existing View of Project Site from South Chrisman Road Looking Southeast



Figure 4.1-7
View 5: Existing View of Project Site from South Chrisman Road Looking Southwest



Figure 4.1-8
View 6: Existing View of Project Site from South Chrisman Road Looking Northwest



View 7: Views from South Chrisman Road (Looking Southwest Toward the Project Site)

View 7 is from South Chrisman Road looking southwest toward the northern boundary of the project site, where the University would be located (Figure 4.1-9). As shown in View 7, the view from South Chrisman Road looking southwest toward the project site consists of the gravel shoulder of South Chrisman Road in the foreground, as well as a utility pole and orchards, which obscure potential midground views. Background views consist of distant views of the Diablo Range foothills and open sky.

View 8: Views from SR 132 (Looking North Toward Project Site)

View 8 is from the intersection of South Chrisman Road and SR 132, looking north toward the project site (Figure 4.1-10). As shown in View 8, foreground views consist of a grassy embankment and South Chrisman Road. Midground views consist of orchards, a 76 gas station, utility poles, and undeveloped grassland. The majority of background views consist of distant treetops and the on-site agricultural facilities, as well as distant urban development and the Sierra Nevada foothills.

View 9: Views from SR 132 (Looking Northwest Toward Project Site)

View 9 is just east of the intersection of South Chrisman Road/SR 132 looking northwest toward the project site (Figure 4.1-11). As shown in View 9, similar to View 8, foreground views consist of a grassy embankment and South Chrisman Road. Midground views consist of orchards, a 76 gas station, utility poles, and undeveloped grassland. The majority of background views consist of distant treetops and the on-site agricultural facilities, as well as the Diablo Range foothills and open sky.

View 10: Views from Westbound SR 132 (Looking West Toward Project Site)

View 10 is from westbound SR 132 looking west toward the project site (Figure 4.1-12). As shown in View 10, foreground views consist of a vegetated ditch, a barbed wire fence, and vineyards that extend into the midground. Background views consist of the Diablo Range foothills and open sky.

View 11: Views from the Bird Road/SR 132 On-Ramp (Looking West Toward Project Site)

View 11 is from the Bird Road/SR 132 on-ramp looking west toward the project site (Figure 4.1-13). As shown in View 11, foreground views consist of the paved SR 132 on-ramp, the vegetated shoulder, and a street lamp. Midground views consist of on-site agricultural land extending into the distance, as well as the Delta-Mendota Canal. Background views consist of the distant Diablo Range foothills, urban development, and open sky.

Light Pollution and Glare

Light pollution refers to all forms of unwanted light in the night sky, including glare, light trespass, sky glow, and excessive illumination at an intensity that is inappropriate. Views of the night sky can be an important part of the natural environment, particularly in communities surrounded by extensive open space. Excessive light and glare can also be visually disruptive to humans and nocturnal animal species.

Figure 4.1-9
View 7: Existing View of Project Site from South Chrisman Road Looking Southwest



Figure 4.1-10
View 8: Existing View of Project Site from South Chrisman Road/SR 132 Looking North



Figure 4.1-11
View 9: Existing View of Project Site from South Chrisman Road/SR 132 Looking Northwest



Figure 4.1-12
View 10: Existing View of Project Site from Westbound SR 132 Looking West



Figure 4.1-13
View 11: Existing View of Project Site from the Bird Road/SR 132 On-Ramp Looking West



Currently, the project site is primarily comprised of unlit agricultural land (e.g., orchards and vineyards) with the exception of the existing on-site agricultural facilities operated by Crown Nut Company and A.B. FAB, Inc., which constitute existing sources of light and glare. Additional sources of light and glare on-site include headlights from vehicles traveling on South Chrisman Road, which crosses through the center of the project site. Off-site sources of light and glare in the project vicinity include the rural single-family residences to the northeast, northwest, and west; commercial uses to the west and northwest, and headlights from vehicles traveling on I-580 and SR 132.

Off-Site Improvements Study Area Characteristics

As discussed in Chapter 3, Project Description, of this EIR, the Local Transportation Analysis (LTA) prepared for the proposed project by Fehr & Peers identifies a range of intersection and roadway improvements that would be triggered by full project buildout. The analysis of these prospective improvements will be conducted at a programmatic level, as is appropriate given that they are not components of the proposed project, nor have improvements yet been designed. The majority of the Off-Site Improvements Study Area consists of paved roadways and, thus, contains minimal development and light sources.

4.1.3 REGULATORY CONTEXT

Applicable federal laws or regulations pertaining to the aesthetic quality of the project area do not exist. The existing State and local laws and regulations applicable to the proposed project are listed below.

State Regulations

The following is an applicable State regulation related to aesthetic resources.

California Scenic Highway Program

The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. Such highways are identified in Section 263 et seq. of the California Streets and Highways Code.

Local Regulations

The following local regulations are applicable to the proposed project.

San Joaquin County General Plan

The following aesthetics-related goals and policies of the San Joaquin County General Plan are applicable to the proposed project.

Natural and Cultural Resources Element

Goal NCR-7 To protect and enhance the unique scenic features of San Joaquin County.

Policy NCR-7.1 **Scenic Roadways**. The County shall protect the visual character of designated scenic roadways.

Policy NCR-7.2 **Views from Public Lands and Roadways**. The County shall ensure that views of waterways, hilltops, and oak groves from public land and public roadways are protected and public access is provided to them whenever possible.

Policy NCR-7.3 **Designate Scenic Routes**. The County shall preserve scenic views from roadways by designating scenic routes based on the following criteria:

- Leads to a recreational area;
- Provides a representative sampling of the scenic diversity within the County;
- Exhibits unusual natural or humanmade features of interest;
- Provides opportunities to view activities outside the normal routine of most people;
- Provides a route for people to view the Delta waterways; and
- Links two scenic routes or connects with scenic routes of cities or other counties.

Policy NCR-7.4 **Visually Complementary Development**. The County shall require new development adjacent to scenic resources to be sited and designed to visually complement those resources, except in MR-Z designated areas.

Policy NCR-7.5 **Require Landscape Plans**. The County shall require landscape plans for new development along State- or County-designated scenic routes.

Policy NCR-7.6 **Preservation of Ridgelines and Hill Tops**. The County shall ensure that ridgelines and major hill tops remain undeveloped.

Policy NCR-7.7 **Reducing Glare and Light Pollution**. The County shall encourage project designs, lighting configurations, complementary land uses, and operational practices that reduce the potential for glare during daytime hours and reduce nighttime light pollution to protect adjacent land uses from light and glare and preserve views of the night sky. (MMRP)

Policy NCR-7.8 **Underground Utility Lines**. The County shall require all new electric and communication distribution facilities adjacent to scenic routes to be placed underground, whenever feasible. Where overhead utility lines are unavoidable, every effort should be made to reduce the visual impact through elements of design.

Land Use Element

Goal LU-3 Preserve and enhance the character and scale of San Joaquin County's communities and rural areas, including their architectural heritage and historic character.

Policy LU-3.1 **Contextual and Compatible Design**. The County shall ensure that new development respects San Joaquin County's heritage by requiring that new development respond to its context, be compatible with the traditions and character of each community, and develop in an orderly fashion which is compatible with the scale of surrounding structures.

Policy LU-3.3 **Transitions in Scale**. The County shall encourage a balance of the scale and massing of new development to the physical and visual character of adjoining uses to provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods.

Policy LU-3.10 **Visual Access**. The County shall encourage new development to maintain views of hillsides, creeks, and other distinctive natural areas by regulating building orientation, height, and bulk.

Goal LU-5 Promote the development of regional and locally-serving commercial uses in communities and other areas of the unincorporated County.

Policy LU-5.4 **Commercial Conflicts and Visual Impacts**. The County shall require new commercial development to address potential land use conflicts and visual impacts through site specific performance standards related to landscaping, screening, lighting, access, signage, setbacks, and architectural design.

Goal LU-8 Protect open space for its recreational, agricultural, safety, and environmental value and provide adequate parks and open space areas throughout the County.

Policy LU-8.2 **Open Space Character**. The County shall require new development in Resource Conservation designated areas to be planned and designed to maintain the scenic open space character of the surrounding area, including view corridors from highways. New development should use natural landforms and vegetation in the least visually disruptive manner possible, and use design, construction, and maintenance techniques that minimize the visibility of structures.

4.1.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to aesthetics. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, an impact related to aesthetics is considered significant if the proposed project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Method of Analysis

The section below gives full consideration to the development of the proposed project and acknowledges physical changes to the existing setting. Impacts to the existing environment of the project area are to be determined by the contrast between the visual setting before and after buildout of the proposed project. The standards of significance listed above are used to delineate the significance of any visual alterations of the site, including alterations that would impact views from public viewsheds in the project area. The standards are not based solely on a change in the visual character or quality of the site and its surroundings, but whether the changes would substantially degrade said visual character or quality.

HPA Architecture prepared 3D architectural renderings of the selected public viewpoints to aid in the visual character evaluation of the proposed project. The renderings were reconciled with the site elevations of each building site as determined by survey by Kier and Wright, the civil engineer of record, to produce technically accurate depictions of the project based on the present intended designs. HPA Architecture 3D modeled the project site with the completed development of the Specific Plan based on project-specific information. HPA Architecture then overlayed photos of the existing project site from each designated location and aligned each 3D model view to ensure that the view angle and perspective matched the photos of the project site. The composition of the photo simulations consists of the existing setting as the top layer, the completed development (3D model) as the middle layer, and the background as the final layer. Landscaping shown is at full maturity at final build out. As the project consists of a Specific Plan, which is programmatic in nature, the post-project simulations represent conceptual designs that should not be considered final.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to aesthetics is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.1-1 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. Based on the analysis below, due to the lack of feasible mitigation, the impact is *significant and unavoidable.*

As previously noted, I-580 forms a portion of the western boundary of the project site and is an officially designated State scenic highway located within San Joaquin County with views of the Diablo Range foothills to the west and open agricultural lands, and, on especially clear days, the Sierra Nevada foothills to the east. The following sections evaluate the potential for the Initial Phase, Specific Plan Buildout, and Off-Site Improvements to substantially damage scenic resources as viewed from I-580.

Initial Phase

As shown in Figure 3-3, Development Areas Plan, in Chapter 3, Project Description, of this EIR, the majority of the Initial Phase of the proposed project would include development of portions of the project site located north of the California Aqueduct, between South Chrisman Road and Bird Road. While the Initial Phase of the proposed project is comprised of agricultural land (e.g., orchards), which is considered a scenic resource in the County General Plan, the Initial Phase is located approximately 0.5-mile from the nearest point of I-580. Due to intervening vegetation (existing orchards) and topography (canals and roadway infrastructure), the Initial Phase of the proposed project would only be intermittently visible from I-580. Because the Initial Phase would only be intermittently visible from I-580, the expansive agricultural views would not be substantially impacted. As such, the Initial Phase would not substantially damage scenic resources within proximity of a State scenic highway.

Specific Plan Buildout

Buildout of the Specific Plan would include development of the remainder of the project site. In particular, the Pacific Gateway West, Pacific Gateway Central, and Gateway Center development areas are located in close proximity to I-580 and would include a considerable amount of new industrial development. The current condition of these proposed development areas is characterized by open agricultural lands (e.g., orchards and vineyards), which are considered a scenic resource by the County. Impacts related to views of the project site from I-580 are further discussed in Impact 4.1-2 below. The project at full buildout would significantly disrupt the visual quality of the open agricultural landscape located east of I-580. Based on the above, Specific Plan Buildout would substantially damage scenic resources within view of a State scenic highway.

Off-Site Improvements Study Area

Similar to the discussion related to the Initial Phase of the proposed project above, the majority of the Off-Site Improvements Study Area is not located in close proximity to I-580. Rather, the majority of the Off-Site Improvements Study Area are located northeast of the project site, which places the potential future improvements even further from a State scenic highway than the project site. In addition, the majority of improvements would not include any vertical structures. However, as shown in Figure 3-15, Chrisman Road Study Area, of this EIR, potential improvements are identified to address the project's queuing effect on South Chrisman Road/I-580 Westbound Off-Ramp. Improvements consist of widening of the existing I-580 overcrossing or construction of second parallel overcrossing likely needed for lane alignment with the widened SR 132/South Chrisman Road interchange. The recommended improvements (see Mitigation Measure 4.12-5[a] of Chapter 4.12) require approval from Caltrans, and thus, it is not certain whether the project would ultimately construct the improvements. In widening the vertical I-580 overcrossing at South Chrisman

Road, the extent that the Diablo foothills are partially visible from I-580 beyond the existing overcrossing at South Chrisman Road will be similarly extended. However, given the average speeds along I-580, the reduction in visibility of the Diablo foothills would not substantially disrupt the visual quality of the Diablo foothills views for motorists along I-580. As such, future development within the Off-Site Improvements Study Area would have a less-than-significant impact on scenic resources within a State scenic highway.

Conclusion

Based on the above information, because the Initial Phase of the proposed project would only be intermittently visible from I-580 due to intervening vegetation and topography, the scenic resources, i.e. the expansive agricultural views, to the east would not be substantially damaged, resulting in a less-than-significant impact. Regarding the Off-Site Improvements Study Area, the widening of the vertical I-580 overcrossing at South Chrisman Road would not substantially disrupt the visual quality of views of the Diablo foothills for motorists along I-580. However, Specific Plan Buildout could substantially damage scenic resources, disrupting the visual quality of the open agricultural landscape to the east of I-580; therefore, and a ***significant*** impact could occur.

Mitigation Measure(s)

Feasible mitigation does not exist to reduce the above impact to a less-than-significant level. Due to the substantial damage to scenic resources, i.e., the expansive agricultural views, within a State scenic highway, the impact associated with buildout of the proposed Specific Plan would remain *significant and unavoidable*.

4.1-2 Have a substantial adverse effect on a scenic vista or, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point). Based on the analysis below, due to the lack of feasible mitigation, the impact is *significant and unavoidable*.

Given that the immediate vicinity of the site is primarily rural in nature, the analysis within this chapter considers the project area to be non-urbanized. Thus, the relevant CEQA threshold, pursuant to Appendix G, is whether the proposed project would substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The proposed project includes implementation of a Specific Plan that would result in up to 24,675,000 square feet (sf) of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.5-acre University campus plus 9.8 acres for future expansion, a Veterans of Foreign Wars (VFW) post, and various open space, parks, a new fire station, stormwater management basins, and pedestrian and bicycle facilities within the 1,576.7-acre project site. Development of the Initial Phase of industrial buildings would consist of four Class “A” facilities for a total of approximately four million sf. The buildings would range in size from approximately

157,000 sf to 1.3 million sf, situated on 181.26 net acres located immediately east of South Chrisman Road, within the Pacific Gateway East development area. The Initial Phase of the Specific Plan would also include a 25,000-sf university facility within the University Center development area, which would serve as Phase 1 of the university campus. The VFW facility would be developed concurrently with the Industrial and university campus components of the Initial Phase. During the Initial Phase, necessary backbone infrastructure would be constructed to serve the proposed Initial Phase development. Generally, the necessary infrastructure would include improvements to South Chrisman Road, as well as the following utilities improvements: installation of a potable groundwater well and treatment facilities, construction of a pre-packaged wastewater treatment plant (WWTP), and construction of a large stormwater retention basin.

The proposed Specific Plan includes standards and regulations related to the appearance and design of the proposed project, including maximum allowable building heights, architectural design and materials, and landscaping. Pursuant to the proposed Specific Plan, the portions of the project site zoned as General Commercial (C-G), Industrial Park (I-P), and Public Facilities (P-F) would have a maximum allowable building height of 60 feet; the portions of the project site zoned as Industrial Limited (I-L) would have a maximum allowable building height of 100 feet west of South Chrisman Road and 120 feet east of South Chrisman Road. With respect to architectural design, the Specific Plan includes various design standards for the different types of on-site development. For example, commercial uses would be required to incorporate features that enhance the pedestrian experience, such as covered walkways and windows, and would be designed with a consistent quality of materials to create visual interest. Similarly, the proposed university would be designed to maximize pedestrian and bicycle access, and would be designed to reflect the rural character of the site and its agricultural history. Most light industrial buildings will orient truck dock doors away from I 580, SR 132 and Chrisman Road. Where it is not feasible to orient truck courts away from main circulation streets, such as A Street and B Street, the docks would be screened by either landscaping, berming, a wall or a combination of these screening elements. The buildings would be required to incorporate colors and materials compatible with the architectural theme of the Specific Plan. In addition, the proposed industrial buildings would be required to use a variety of colors and materials that align with, or complement, the general palette of the Specific Plan, and buildings with predominantly metal exteriors would not be permitted. It is noted that, pursuant to Mitigation Measure 4.10-2(c), as established in Chapter 4.10, Noise, of this EIR, sound walls would be installed along the specific roadway segments shown in Figure 4.10-11 of this EIR and are discussed below for views that would include those walls.

As discussed in the proposed Specific Plan, one goal of the proposed design guidelines is to create a comprehensive landscape theme that establishes consistency between the development areas. Sustainable landscape practices, such as planting native vegetation and using recycled water, would be used to maintain large trees and shrubs strategically planted to minimize visual dominance of structures. Landscape setbacks, including fast-growing trees spaced in groupings to create visual massing where needed, would be provided between parking, roads, and property line setbacks to provide visual relief from large expanses of hardscape.

Potential impacts to scenic vistas and the visual character and quality of public views as a result of the proposed project are organized by the aforementioned key public viewpoints and are discussed in detail below.

View 1: Views from the Eastbound Lane of I-580 Looking East

Currently, the view from the eastbound lane of I-580 looking east toward the project site consists of a grassy median and the westbound lane in the foreground. Midground views consist of a grassy berm along the California Aqueduct and the Aqueduct itself, as well as undeveloped grassy fields and a limited number of structures. Background views consist of distant treetops, urban development, the Sierra Nevada foothills, and open sky.

Impacts upon View 1 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

As shown in Figure 4.1-2, View 1 provides views from I-580 of the Pacific Gateway West development area, which would not be subject to development during the Initial Phase of the proposed project. The nearest portion of Initial Phase development would be approximately two miles from I-580 at View 1. As such, buildout of the Initial Phase of the proposed project would not result in any impacts to the scenic vistas of the Sierra Nevada foothills, nor substantially degrade the visual character and quality of public views available from View 1.

Specific Plan Buildout

The simulation of View 1 includes a conceptual rendering of the proposed industrial buildings in the Pacific Gateway West development area. Figure 4.1-14 shows the existing viewshed from View 1 as compared to the view with full project buildout.

As shown in Figure 4.1-14, the proposed industrial buildings would be visible from the eastbound lane of I-580 looking east, behind the existing grassy berm that runs parallel to the California Aqueduct. While the new industrial buildings would not be immediately adjacent to the I-580 right-of-way, but rather would be set back approximately 1,500 feet due to the intervening California Aqueduct, on-site open space, and a proposed internal roadway, the proposed industrial development would nevertheless remove existing open agricultural lands (e.g., orchards) and fully obscure existing views of the Sierra Nevada foothills and the horizon. Overall, buildout of the Specific Plan would substantially alter the existing agricultural landscape visible from View 1. As previously discussed, the San Joaquin County General Plan considers agricultural lands to be a contributing element to the scenic resources within the County. Therefore, buildout of the Specific Plan would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

The scenic vista of the Sierra Nevada foothills is available from View 1. Buildout of the proposed Specific Plan would obscure this scenic vista, resulting in a potentially significant impact.

Figure 4.1-14
View 1: Existing Versus Post-Project Conditions from the Eastbound Lane of I-580 Looking East





View 2: Views from the Westbound Lane of I-580 Looking North

Currently, foreground views from View 2 consist of a barbed wire fence and orchards. Midground views consist of the orchards extending into the distance and a limited number of structures. Background views consist of distant treetops, urban development, and open sky.

Impacts upon View 2 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

As shown in Figure 4.1-2, View 2 provides views of Pacific Gateway West and Central development areas, which would not be subject to development during the Initial Phase of the proposed project. View 2 is oriented away from the Initial Phase, which would be approximately 5,000 feet from I-580 at View 2. As such, buildout of the Initial Phase of the proposed project would not result in any impacts to scenic vistas nor substantially degrade the visual character and quality of public views available from View 2.

Specific Plan Buildout

The simulation of View 2 includes a conceptual rendering of the proposed industrial buildings in the Pacific Gateway West and Central development areas. Figure 4.1-15 shows the existing viewshed from View 2 as compared to the view with full buildout of the Specific Plan.

As shown in Figure 4.1-15, similar to View 1, the proposed industrial buildings would be visible beyond the existing orchards and California Aqueduct (not visible in the photo) in the foreground. In addition, although not included in Figure 4.1-15, pursuant to Mitigation Measure 4.10-2(c) of this EIR, a 12-foot-tall sound wall would be installed at the southern boundary of the project site, adjacent to South MacArthur Drive, which could be visible from View 2, but would be part of the building complex and would not add any additional visual impact. However, whereas Specific Plan Buildout would eliminate all horizon views in View 1, development would not obscure background views from View 2. While the new industrial buildings would not be immediately adjacent to the I-580 right-of-way, but rather set back approximately 1,600 feet due to the intervening orchards, California Aqueduct, and on-site open space and a proposed internal roadway, the proposed buildings would replace existing views of undeveloped agricultural portions of the project site. Overall, buildout of the Specific Plan would substantially alter the existing open agricultural landscape visible from View 2. Therefore, buildout of the Specific Plan would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Similar to the discussion for View 1 above, scenic vistas, such as the Diablo Range foothills, are not available from View 2; therefore, buildout of the proposed Specific Plan would not result in any adverse effects to scenic vistas visible from View 2.

Figure 4.1-15
View 2: Existing Versus Post-Project Conditions from the Westbound Lane of I-580 Looking North





View 3: Views from South Chrisman Road Looking Northeast

Currently, the on-site view from South Chrisman Road, just north of the California Aqueduct, looking northeast through the project site consists of the gravel shoulder, fenced-in utility infrastructure, and utility poles in the foreground. Midground views are dominated by orchards, and background views consist of open sky. The simulation from View 3 includes a conceptual rendering of the proposed development within the Pacific Gateway East. More specifically, the foreground includes a proposed on-site park, east of which is the fire station site, though the fire station is just out of view in the simulation. The park and fire station are not part of the Initial Phase. Beyond the on-site park is proposed B Street and the industrial buildings of the Initial Phase. Figure 4.1-16 shows the existing viewshed from View 3 as compared to the view with buildout of the Initial Phase and remaining buildout components. Impacts upon View 3 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

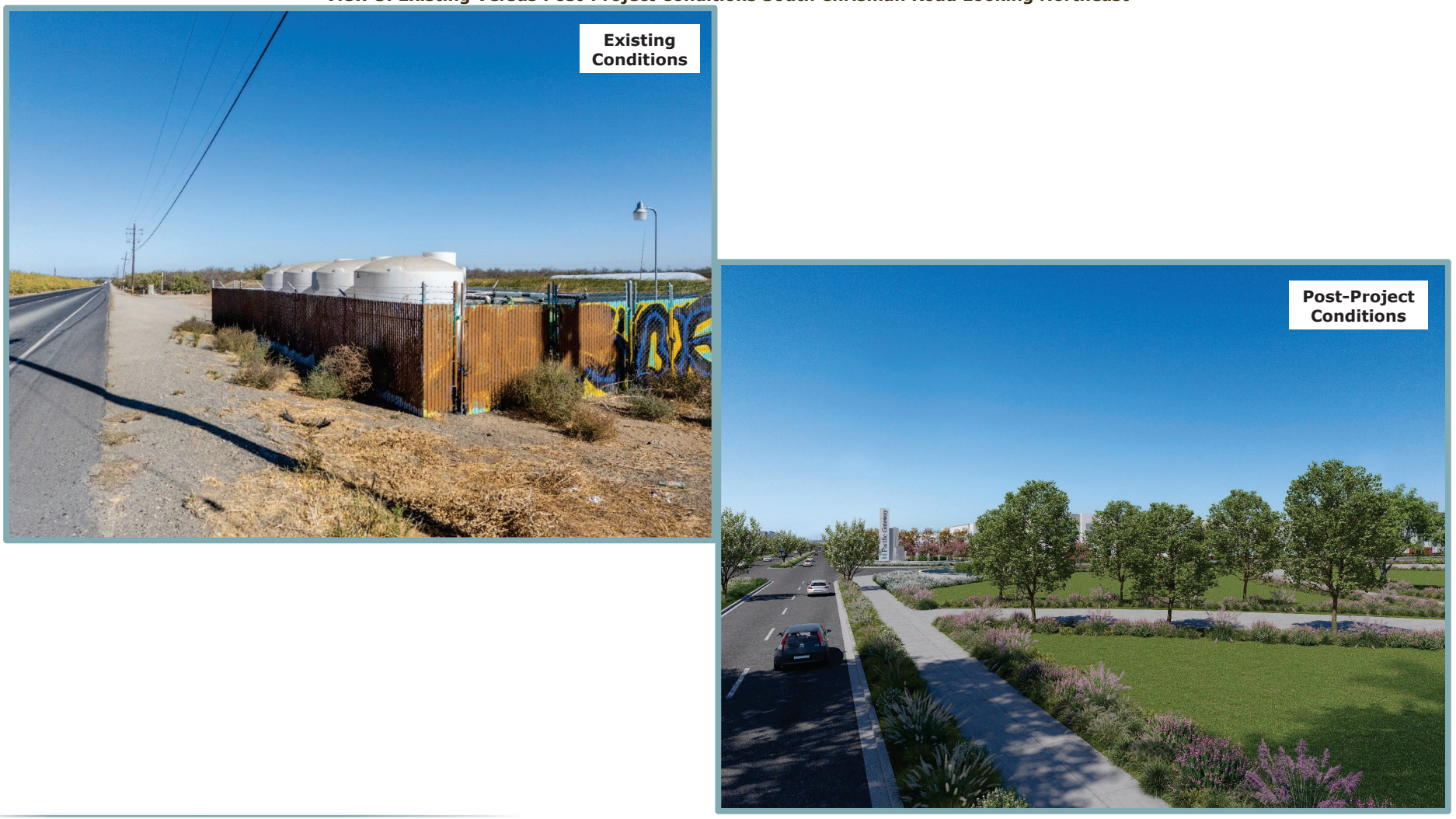
As shown in Figure 4.1-16, existing orchards would be replaced with the Initial Phase industrial buildings, which would be partially obscured by the on-site landscaping upon maturity. The existing infrastructure with associated dilapidated fencing would be removed as part of the Initial Phase. While the Initial Phase would substantially alter the existing conditions visible from View 3, it is reasonable to conclude that such alteration would not be considered a substantial degradation due to the existing utility infrastructure that predominates this viewpoint. Therefore, buildout of the Initial Phase would not be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Scenic vistas, such as the Sierra Nevada foothills, are not visible from View 3; as such, the Initial Phase would not have a substantial adverse effect on scenic vistas available from View 3.

Specific Plan Buildout

As shown in Figure 4.1-16, the entirety of View 3 would be altered by the development of the proposed project. In the foreground, South Chrisman Road would be widened from a two-lane road to a four-lane major arterial with a landscaped median as well as pedestrian paths and landscaping trees on either side of the roadway. The existing infrastructure with associated dilapidated fencing would be replaced with a park that would improve the visual character of the foreground. Beyond the park, the Initial Phase industrial buildings would be further obscured by the park landscaping upon maturity. The currently available background views visible from View 3 would be almost entirely obscured by the proposed development. Overall, while Specific Plan Buildout would substantially alter the existing conditions visible from View 3, it is reasonable to conclude that such alteration would not be considered a substantial degradation due to the existing utility infrastructure that predominates this viewpoint. Therefore, buildout of the proposed project would not be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Figure 4.1-16
View 3: Existing Versus Post-Project Conditions South Chrisman Road Looking Northeast



Scenic vistas, such as the Sierra Nevada foothills, are not visible from View 3; as such, buildout of the proposed project would not have a substantial adverse effect on scenic vistas available from View 3.

View 4: Views from South Chrisman Road Looking Southeast

Currently, the on-site view from South Chrisman Road looking southeast through the project site consists of a paved roadway and utility poles in the foreground with orchards dominating the midground. Background views consist of the foothills of the Diablo Range and open sky. The distant views of the Diablo Range foothills afforded by View 4 are considered a scenic vista.

Impacts upon View 4 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

The simulation from View 4 includes a conceptual rendering of the proposed development within the Pacific Gateway East development area, which would be developed during the Initial Phase of the proposed project. Figure 4.1-17 shows the existing viewshed from View 4 as compared to the view with buildout of the Initial Phase.

As shown in Figure 4.1-17, the entirety of View 4 would be altered by the development of the proposed project. In the foreground, South Chrisman Road would be widened from a two-lane road to a four-lane major arterial with a landscaped median as well pedestrian paths and landscaping trees on either side of the roadway. Midground views of orchards would be replaced with industrial buildings, which would be partially obscured by the intervening landscaping upon maturity. Nonetheless, the proposed buildings would be visible from South Chrisman Road. The currently available background views of the Diablo Range foothills visible from View 4 would be almost entirely obscured by the proposed development. Overall, the Initial Phase of the proposed project would substantially alter the existing agricultural landscape (e.g., orchards) visible from View 4. Therefore, buildout of the Initial Phase of the proposed project would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

With respect scenic vistas, the Initial Phase of the proposed project would result in the development of buildings and the planting of landscape trees which would partially obscure existing views of the Diablo Range foothills that are currently available from View 4. Views of the Diablo Range foothills represent scenic vistas according to the San Joaquin County General Plan. Thus, buildout of the Initial Phase of the proposed project would have a substantial adverse effect on scenic vistas available from View 4.

Figure 4.1-17
View 4: Existing Versus Post-Project Conditions from South Chrisman Road Looking Southeast





Specific Plan Buildout

Because the portion of the Pacific Gateway East development area visible from View 4 would be fully developed during the Initial Phase of the proposed project, full buildout of the Specific Plan would not result in any additional impacts related to having a substantial adverse affect on a scenic vista or substantially degrading of the existing visual character and quality of public views of the project site and its surroundings beyond what would occur as a result of the Initial Phase of the proposed project, as discussed above.

View 5: Views from South Chrisman Road Looking West

Currently, the on-site view from South Chrisman Road looking west through the project site consists of the gravel shoulder of South Chrisman Road in the foreground, as well as a power line pole and orchards, which obscure potential midground views. Background views consist of distant views of the Diablo Range foothills and open sky. Similar to View 4, the Diablo Range foothills are considered to be scenic vistas.

Impacts upon View 5 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

As shown in Figure 4.1-2, View 5 provides views of the Pacific Gateway Central development area, which would not be subject to development during the Initial Phase of the proposed project. As such, buildout of the Initial Phase of the proposed project would not result in any impacts to the scenic vista of the Diablo Range foothills or the visual character and quality of public views available from View 5.

Specific Plan Buildout

The simulation of View 5 includes a conceptual rendering of the proposed industrial buildings in the Pacific Gateway Central development area. Figure 4.1-18 shows the existing viewshed from View 5 as compared to the view with full buildout of the Specific Plan.

As shown in Figure 4.1-18, the entirety of View 5 would be altered by the buildout of the Specific Plan. In the foreground, South Chrisman Road would be widened from a two-lane road to a four-lane major arterial with a landscaped median as well pedestrian paths and landscaping trees on either side of the roadway. Views of orchards would be replaced with a parking lot, as well as the proposed industrial buildings, which would be partially obscured by the intervening landscaping upon maturity. In addition, pursuant to Mitigation Measure 4.10-2(c) of this EIR, an eight-foot-tall and a 10-foot-tall sound wall would be installed adjacent to the western side of South Chrisman Road. Nonetheless, the proposed buildings would be visible from South Chrisman Road. The currently available background views of the Diablo Range foothills visible from View 5 would be partially obscured by the proposed development. Overall, Specific Plan Buildout would substantially alter the existing agricultural landscape (e.g., orchards) visible from View 5. Therefore, Specific Plan Buildout would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

Figure 4.1-18
View 5: Existing Versus Post-Project Conditions from South Chrisman Road Looking West



With respect scenic vistas, Specific Plan Buildout would result in the development of buildings and the planting of landscape trees which would partially obscure existing views of the Diablo Range foothills that are currently available from View 5. However, unlike View 4, following Specific Plan Buildout, existing views of the Diablo Range foothills would only be partially obscured, and would still be visible. Thus, from View 5, buildout of the Specific Plan would not have a substantial adverse effect on scenic vistas.

View 6: Views from South Chrisman Road Looking Northwest

Currently, foreground views from View 6 consist of a paved roadway and grassy shoulder, as well as a gravel access road that runs along the Delta-Mendota Canal. Midground views consist of orchards that are lower in elevation than South Chrisman Road such that the tops of the trees are nearly level with the roadway surface. Background views consist of distant trees and urban development, as well as the Diablo Range foothills, some of which are developed with wind turbines, and open sky. Existing views of the Diablo Range foothills are considered scenic vistas.

Impacts upon View 6 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

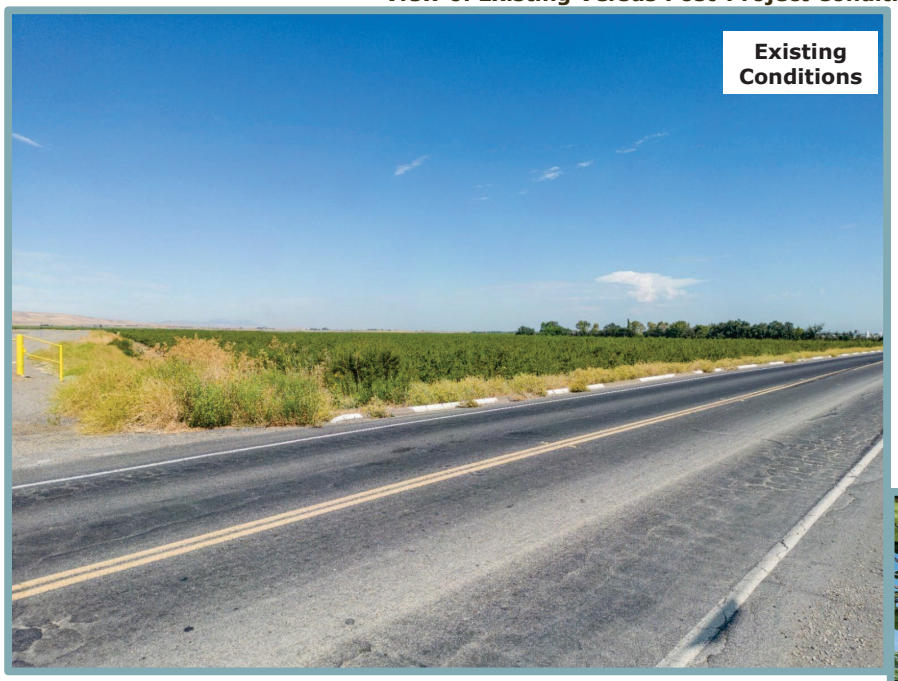
Initial Phase

The simulation from this view consists of a conceptual rendering of the University Center development area, which would be developed with a portion of the University during the Initial Phase of the proposed project. Figure 4.1-19 shows the existing viewshed from View 6 as compared to the view with buildout of the Initial Phase.

As shown in Figure 4.1-19, the entirety of View 6 would be altered by the development of the proposed project. In the foreground, South Chrisman Road would be widened from a two-lane road to a four-lane major arterial with a landscaped median and bicycle and pedestrian paths, as well as landscaping trees, on either side of the roadway. Midground views of orchards would be replaced with the initial phase of the proposed university campus, which would be generally obscured by the intervening landscaping upon maturity. The currently available background views visible from View 6 would be completely obscured by the proposed development. Overall, the Initial Phase of the proposed project would substantially alter the existing agricultural landscape (e.g., orchards) visible from View 6. Therefore, buildout of the Initial Phase of the proposed project would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

With respect to scenic vistas, the Initial Phase of the proposed project would result in the development of buildings and the planting of landscape trees which would obscure existing views of the Diablo Range foothills that are currently available from View 6. However, it is noteworthy that the foothills are not particularly prominent in the view. Nevertheless, it is conservatively concluded that buildout of the Initial Phase of the proposed project would have a substantial adverse effect on scenic vistas available from View 6.

Figure 4.1-19
View 6: Existing Versus Post-Project Conditions from South Chrisman Road Looking Northwest





Specific Plan Buildout

Because the area of the project site visible from View 6 would be fully developed during the Initial Phase of the proposed project, full buildout of the Specific Plan would not result in any additional impacts related to having a substantial adverse effect on a scenic vista or substantially degrading of the existing visual character and quality of public views of the project site and its surroundings beyond what would occur as a result of the Initial Phase of the proposed project, as discussed above.

View 7: Views from South Chrisman Road Looking Southwest

Currently, the view from South Chrisman Road looking southwest toward the project site consists of the gravel shoulder of South Chrisman Road in the foreground, as well as a utility pole and orchards which obscure potential midground views. Background views consist of distant views of the Diablo Range foothills and open sky. Existing views of the Diablo Range foothills are considered scenic vistas.

Impacts upon View 7 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

View 7 provides views of the northern portion of the University Center development area, which would be developed with the VFW post and commercial buildings within the University Center development area.

The simulation includes transparent building outlines, illustrating that the VFW and commercial buildings within the Initial Phase of the University Center would not be visible due to the intervening orchards. Figure 4.1-20 shows the existing viewshed from View 7 as compared to the view with buildout of the Initial Phase of the proposed project.

As shown in Figure 4.1-20, South Chrisman Road would be widened from a two-lane road to a four-lane major arterial with landscaping trees in the median. The existing orchards in the foreground would be retained on-site, and would obscure views of the proposed development. However, the proposed landscaping in the median would partially obscure existing views of the Diablo Range foothills. The proposed VFW post and university campus buildings would not be visible from View 7 because the existing on-site orchards would be retained. Nonetheless, existing views of the Diablo Range foothills, which are considered a scenic vista, would be affected by buildout of the Initial Phase of the proposed project and, thus, a significant impact could occur.

Specific Plan Buildout

Because the area of the project site visible from View 7 would be fully developed during the Initial Phase of the proposed project, full buildout of the Specific Plan would not result in any additional impacts related to having a substantial adverse effect on a scenic vista or substantially degrading of the existing visual character and quality of public views of the project site and its surroundings beyond what would occur as a result of the Initial Phase of the proposed project, as discussed above.

Figure 4.1-20
View 7: Existing Versus Post-Project Conditions from South Chrisman Road Looking Southwest



View 8: Views from SR 132 Looking North

Currently, foreground views from View 8 consist of a grassy embankment and South Chrisman Road. Midground views consist of orchards, a 76 gas station, utility poles, and undeveloped grassland. The majority of background views consist of distant treetops and the on-site agricultural facilities, as well as distant urban development and the Sierra Nevada foothills in the distance.

Impacts upon View 8 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

As shown in Figure 4.1-2, View 8 provides views of the southern portion of the Gateway Center development area, which would not be subject to development during the Initial Phase of the proposed project. The Initial Phase buildings, approximately 2,100 feet from the viewpoint, are partially visible but would not be a dominant feature and would not impede scenic vista views of the Sierra Nevada foothills. At such distance, buildout of the Initial Phase of the proposed project would not substantially degrade the visual character and quality of public views available from View 8.

Specific Plan Buildout

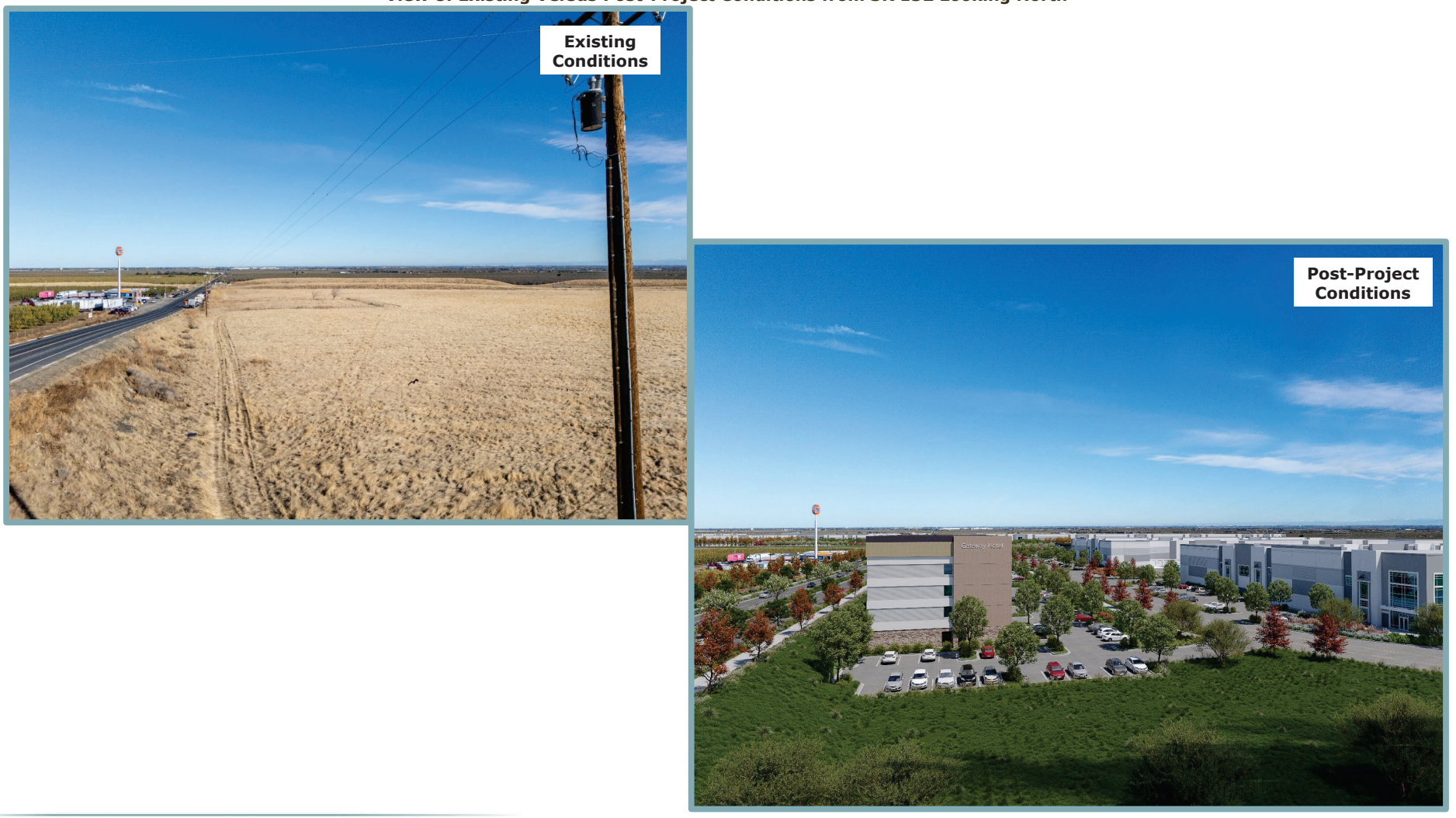
As stated above, the simulation of View 8 includes a conceptual rendering of the proposed industrial and commercial buildings in the Gateway Center development area. Figure 4.1-21 shows the existing viewshed from View 8 as compared to the view with full buildout of the Specific Plan.

As shown in Figure 4.1-21, South Chrisman Road would be widened from a two-lane road to a four-lane major arterial with landscaping trees in the median.

The undeveloped grassland within the Gateway Center development area would be replaced with the proposed hotel, as well as industrial buildings and associated landscaping and parking lots; the existing power lines running parallel to South Chrisman Drive would be removed and/or undergrounded. Overall, existing foreground and midground views would be completely replaced with the proposed development, permanently altering the existing open and agricultural landscape (e.g., orchards) visible from View 8. Therefore, buildout of the proposed Specific Plan would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

With respect to scenic vistas, views of the Sierra Nevada foothills from View 8 would not be obscured by the project. Therefore, buildout of the proposed Specific Plan would not have a substantial adverse effect on scenic vistas from View 8.

Figure 4.1-21
View 8: Existing Versus Post-Project Conditions from SR 132 Looking North



View 9: Views from SR 132 Looking Northwest

Similar to View 8, foreground views from View 9 consist of a grassy embankment and South Chrisman Road. Midground views consist of vineyards, a 76 gas station, utility poles, and undeveloped grassland. The majority of background views consist of distant treetops and the on-site agricultural facilities, as well as the Diablo Range foothills and open sky.

Impacts upon View 9 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

As shown in Figure 4.1-2, View 9 provides views of the southern portion of the Gateway Center development area, which would not be subject to development during the Initial Phase of the proposed project. West of South Chrisman Road, this view would continue to be characterized by the agricultural land south of the proposed project boundaries (e.g., Pacific Gateway Central development area). As such, buildout of the Initial Phase of the proposed project would not have a substantial adverse effect on scenic vistas or substantially degrade the visual character and quality of public views available from View 9.

Specific Plan Buildout

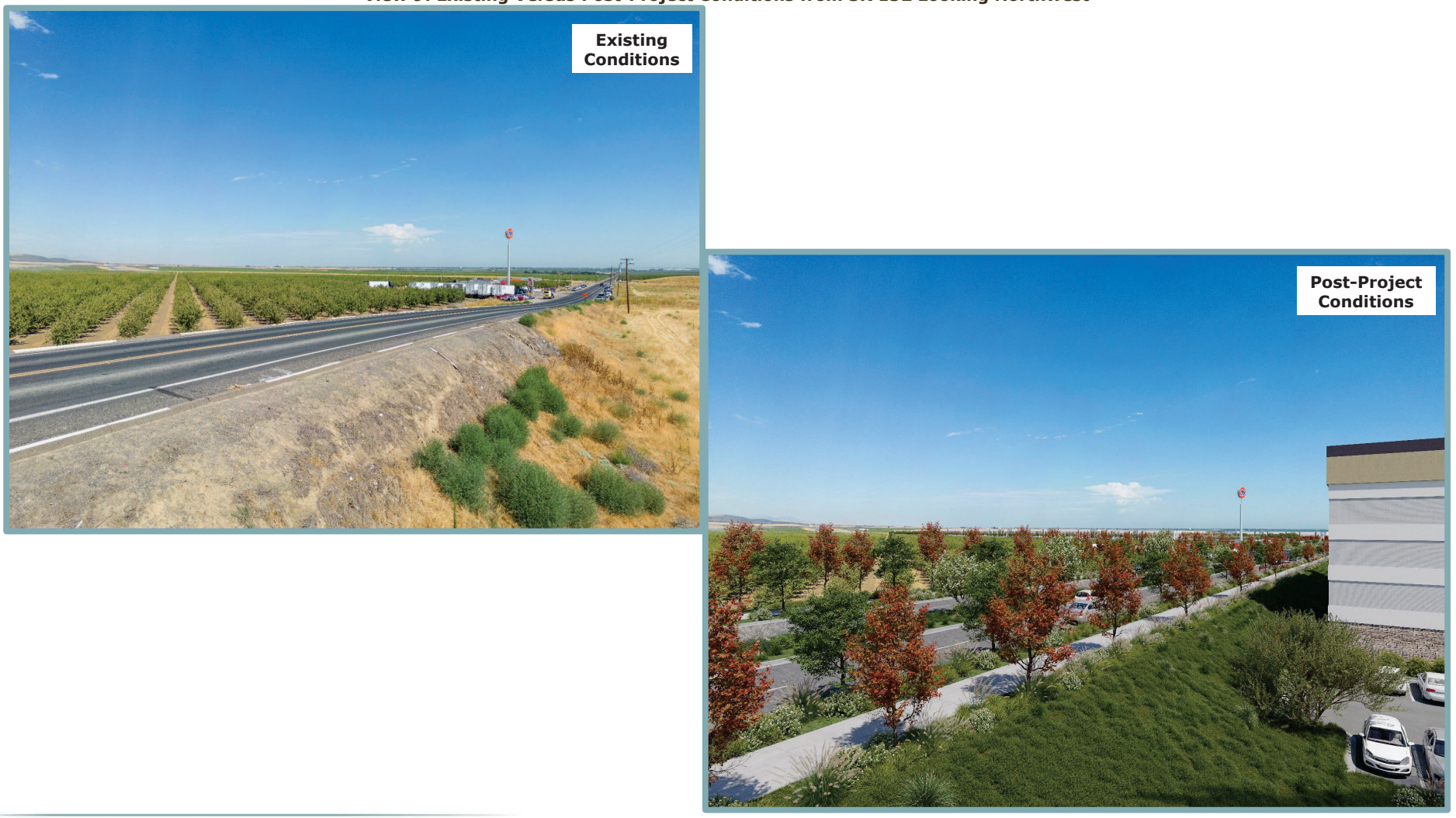
The simulation of View 9 includes a conceptual rendering of the proposed hotel building in the Gateway Center development area, and on the west side of South Chrisman Road, the distant industrial buildings within the Pacific Gateway Central development area. Figure 4.1-22 shows the existing viewshed from View 9 as compared to the view with full buildout of the Specific Plan.

As shown in Figure 4.1-22, South Chrisman Road would be widened from a two-lane road to a four-lane major arterial with landscaping trees in the median and on either side of the roadway. The undeveloped grassland within the Gateway Center development area would be replaced with the proposed hotel, as well as associated landscaping and parking lots; the existing power lines running parallel to South Chrisman Drive would be removed and/or undergrounded. In addition, existing background views of the on-site agricultural fields would be replaced with the proposed industrial buildings in the Pacific Gateway Central development area.

However, the existing agricultural land located immediately west of South Chrisman Road, within the midground view, would remain, as this area is located outside of the project boundaries, between I-580 and the California Aqueduct. Overall, existing foreground and midground views east of South Chrisman Road would be completely replaced with the proposed development, permanently altering the existing open and agricultural landscape visible from View 9. Therefore, buildout of the proposed Specific Plan would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

With respect to scenic vistas, Specific Plan Buildout would not obscure existing limited views of the Diablo Range foothills visible from View 9. Therefore, buildout of the proposed Specific Plan would not have a substantial adverse effect on scenic vistas from View 9.

Figure 4.1-22
View 9: Existing Versus Post-Project Conditions from SR 132 Looking Northwest



View 10: Views from Westbound SR 132 Looking West

Foreground views from View 10 consist of a vegetated ditch, a barbed wire fence, and vineyards that extend into the midground. Background views consist of the Diablo Range foothills and open sky. Existing views of the Diablo Range foothills are considered scenic vistas.

Impacts upon View 10 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

As shown in Figure 4.1-2, View 10 provides views of the southern portion of the Pacific Gateway East development area, which would not be subject to development during the Initial Phase of the proposed project. As such, buildout of the Initial Phase of the proposed project would not have a substantial adverse effect on scenic vistas or substantially degrade the visual character and quality of public views available from View 10.

Specific Plan Buildout

The simulation of View 10 includes a conceptual rendering of the proposed industrial buildings in the Pacific Gateway East development area. Figure 4.1-23 shows the existing viewshed from View 10 as compared to the view with full buildout of the Specific Plan.

As shown in Figure 4.1-23, the existing vegetated ditch in the foreground would be landscaped, and midground views of vineyards would be replaced with landscaping trees, a two-lane roadway, and the proposed industrial buildings.

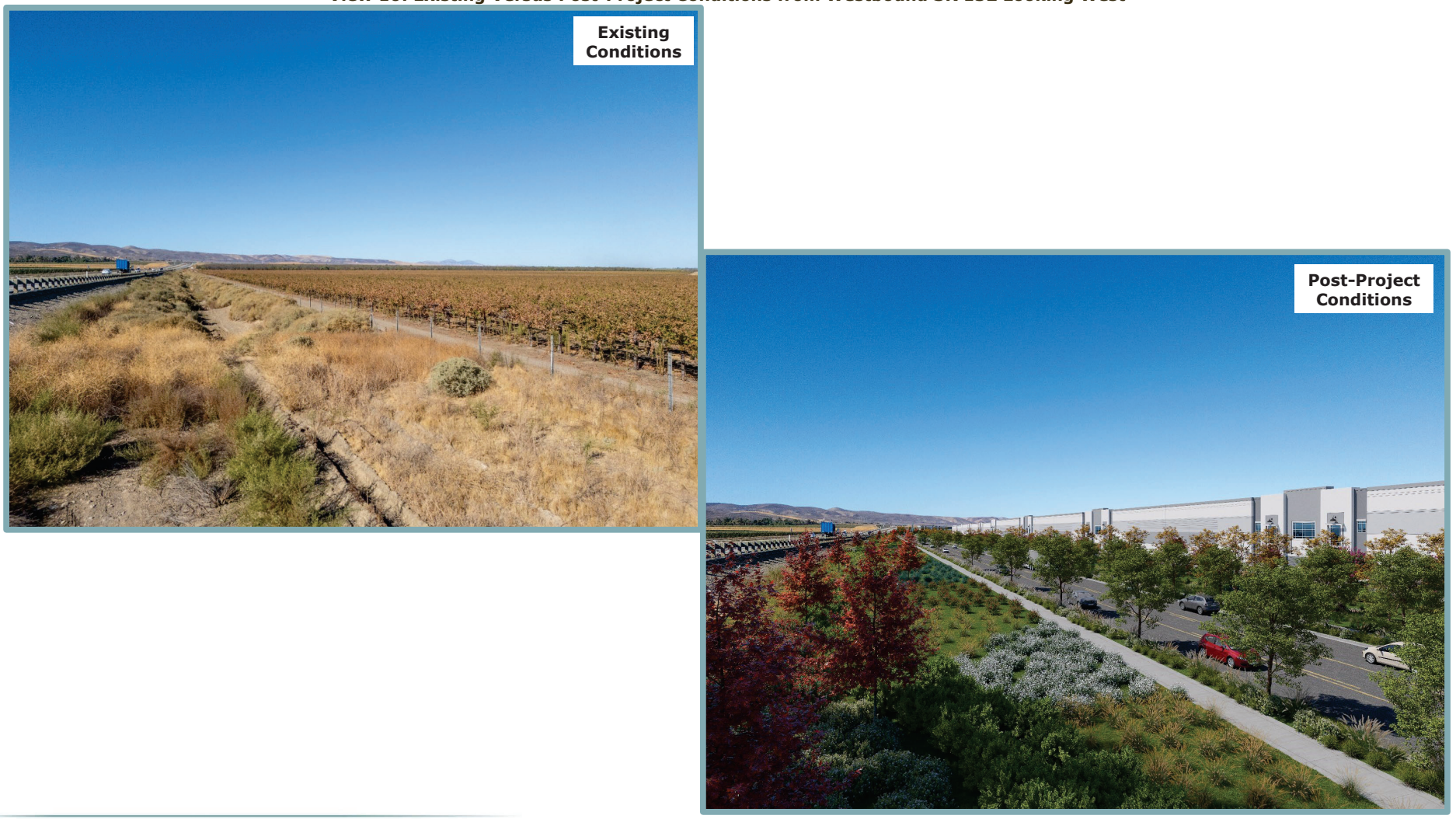
While the Diablo Range foothills would still be visible in the background, portions of the foothills that are currently visible to the north would be blocked by the proposed buildings. Overall, the existing on-site agricultural operations would be replaced by industrial development, permanently altering the existing agricultural landscape visible from View 10. Therefore, buildout of the proposed Specific Plan would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

With respect to scenic vistas, as discussed above, existing views of the Diablo Range foothills would be partially obscured by the proposed project from this view, though the foothills would still figure prominently in the western portion of the view. Nonetheless, existing views of the Diablo Range foothills, which are considered a scenic vista, would be affected by buildout of the Specific Plan and, thus, a significant impact could occur.

View 11: Views from the Bird Road/SR 132 On-Ramp Looking West

Foreground views from View 11 consist of the paved SR 132 on-ramp at Bird Road, the vegetated shoulder, and a street lamp. Midground views consist of on-site agricultural land (e.g., vineyards) extending into the distance, as well as the Delta-Mendota Canal. Background views consist of the distant Diablo Range foothills, urban development, and open sky. Existing views of the Diablo Range foothills are considered scenic vistas.

Figure 4.1-23
View 10: Existing Versus Post-Project Conditions from Westbound SR 132 Looking West



Impacts upon View 11 related to the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

As shown in Figure 4.1-2, View 11 provides views of the eastern portion of the Pacific Gateway East development area, which would not be subject to development during the Initial Phase of the proposed project. As such, buildout of the Initial Phase of the proposed project would not have a substantial adverse effect on scenic vistas or substantially degrade the visual character and quality of public views available from View 11.

Specific Plan Buildout

The simulation of View 11 includes a conceptual rendering of the proposed industrial buildings in the Pacific Gateway East development area, at the far eastern corner of the project site. Figure 4.1-24 shows the existing viewshed from View 11 as compared to the view with full buildout of the Specific Plan.

As shown in Figure 4.1-24, while the existing foreground views are not anticipated to significantly change following Specific Plan Buildout, the existing agricultural midground view would be completely replaced with a roadway, landscape trees, and the proposed industrial buildings. Existing background views would be fully blocked by the proposed industrial development. Overall, the existing on-site agricultural operations would be replaced by industrial development, permanently altering the existing open landscape visible from View 11. Therefore, buildout of the proposed Specific Plan would be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings.

With respect to scenic vistas, existing views of the Diablo Range foothills from this location would be fully obscured by the proposed project. Therefore, buildout of the proposed Specific Plan would have a substantial adverse effect on scenic vistas available from View 11.

Off-Site Improvements Study Area

Future development within the Off-Site Improvements Study Area would consist of improvements to existing roadways. Although specific improvements are not currently proposed, any future development would be unlikely to include components that would be substantial enough to adversely affect a scenic vista or result in the degradation of the existing visual character or quality of views beyond what has already occurred, with the exception of the potential improvements to the I-580 overcrossing at South Chrisman Road, which is addressed in Impact 4.1-1.

Conclusion

Based on the above, the proposed project would change existing public viewsheds of the site from predominantly agricultural landscape to industrial and commercial development. In addition, the proposed project would substantially interfere with existing scenic vistas of the Diablo Range and Sierra Nevada foothills.

Figure 4.1-24
View 11: Existing Versus Post-Project Conditions from the Bird Road/SR 132 On-Ramp Looking West





The Initial Phase of the proposed project would not substantially degrade the existing visual character of the site or its surroundings from the majority of the key public viewpoints; only views from View 4 and View 6 would be impacted by the Initial Phase. Nonetheless, with the exceptions of View 3 and View 7, full Specific Plan Buildout could have a significant impact on the existing visual character of the site from public viewpoints. Furthermore, existing views of scenic vistas would be substantially affected by development of the proposed project from the majority of the key public viewpoints.

The proposed Specific Plan includes development standards aimed at ensuring that the proposed buildings are architecturally appealing and include a consistent design. In addition, landscaping would be incorporated throughout the project site, which would serve to partially obscure the proposed structures from public roadways and would add aesthetic appeal to the development. Although future development within the Off-Site Improvements Study Area would not have a substantial adverse effect on a scenic vista and would not substantially degrade the existing visual character or quality of views of the site and its surroundings, the proposed project could result in impacts related to such. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Feasible mitigation does not exist to reduce the above impact to a less-than-significant level beyond the development standards included in the Specific Plan. Due to the substantial adverse effects on a scenic vista and the substantial degradation of the existing visual character and quality of public views of the project site, the impact associated with buildout of both the Initial Phase of the proposed project and the full Specific Plan would remain *significant and unavoidable*.

4.1-3 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Based on the analysis below, and with implementation of mitigation, the impact is *less than significant*.

The following analysis addresses potential impacts of the Initial Phase of the proposed project and full Specific Plan Buildout related to the creation of a new source of substantial light or glare which could adversely affect day or nighttime views in the area. In addition, a separate discussion of potential impacts associated with the Off-Site Improvements Study Area is included below.

Initial Phase, Specific Plan Buildout

As noted previously, the majority of the project site is characterized by an undeveloped, unlit landscape. Although the project site is developed with the A.B. FAB, Inc. facility and five single-family homes, which constitute existing on-site sources of light and glare, the facility and homes occupy only a small portion of the project site. Thus, development of the project site with a substantial amount of industrial uses, university campus, and limited business and commercial uses would introduce additional sources of light and/or glare to a site where minimal sources currently exist. While relatively few receptors are located in close proximity to the project site, several existing single-family residences within the rural community of Chrisman are located southwest of the Gateway Center development area.

Commercial and industrial uses, as well as the proposed university and VFW post, would introduce new sources of lighting, such as architectural accent lighting, motion-activated security lighting, parking lot lighting, landscape lighting, and interior lighting visible through windows. Lighting could also be interspersed along the proposed open space areas, parks, and pedestrian and bicycle facilities for safety purposes. The proposed university campus would also include multiple sports fields located in the center of the University Center development area that would likely be illuminated with lighting poles. The proposed project would be subject to compliance with all applicable General Plan policies, including Policy NCR-7.7, which states that the County shall encourage project designs, lighting configurations, and operational practices that reduce light pollution and preserve views of the night sky. Furthermore, on-site lighting would be required to comply with the design standards established in the Specific Plan by ensuring that lighting shall have a 40-foot maximum height for a freestanding light pole. In addition, all lighting fixtures shall be required to be fully shielded with cut-off features to prevent light spillage and glare from being emitted onto adjacent properties or above the lowest part of the fixture.

Off-Site Improvements Study Area

As discussed previously, any future development within the Off-Site Improvements Study Area would consist of improvements to existing roadways. Although specific improvements are not currently proposed, any future development would be unlikely to introduce sources of light or glare to an area that is not already lit. One potential exception would be the installation of street lights in a location that does not currently contain one; however, such street lighting would be designed in compliance with local shielding standards, and thus, would not be considered a substantial source of light or glare.

Conclusion

Based on the above, future development in the Off-Site Improvements Study Area would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, and a less than significant impact would occur. However, because the types of lighting and the specific locations have not yet been determined, the Initial Phase of the proposed project and Specific Plan Buildout could increase the amount of light and glare generated on-site, which could be visible from the nearby residential developments and roadways in the project vicinity, including contributions to nighttime sky glow that deteriorate the “dark sky” setting of the project site and surround environs. Therefore, the Initial Phase of the proposed project and Specific Plan Buildout could be considered to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, and a ***significant*** impact could occur.

Mitigation Measure(s)

By requiring a lighting plan demonstrating Dark-Sky compliance and low-glare building materials, implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout

4.1-3 *Prior to Improvement Plan approval for each building, the project applicant shall submit a lighting plan for the project to San Joaquin*

County Community Development Department for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association. The lighting plan shall include, but not necessarily be limited to, the following provisions:

- *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;*
- *Place and shield or screen area lighting needed for construction activities and/or security so as not to disturb residential areas;*
- *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash; and*
- *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), and appropriate signage to prevent light and glare from adversely affecting adjacent properties.*

Off-Site Improvements Study Area

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened by glare or shadows created at another location. Rather these effects are independent, and the determination as to whether they are adverse is specific to the project and location where they are created. Projects that block a view or affect the visual quality of a site also have localized aesthetic impacts. The impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.

Three types of aesthetic impacts may be additive in nature and thus cumulative, including degradation of scenic resources along a state scenic highway, night sky lighting, and overall changes in the visual environment as the result of increasing urbanization of large areas. As more development occurs along the corridor of a state scenic highway, the scenic resources visible to passing motorists may become further and further obscured. As development in one area increases and possibly expands over time and meets or connects with development in an adjoining exurban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed. Similarly, as development in one area changes from rural to urban, and this pattern continues to occur throughout the undeveloped areas of a jurisdiction, the changes in visual character may become additive and cumulatively considerable. The proposed project's incremental contribution to night sky lighting and changes in visual character are addressed below.

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region. Other proposed and pending projects in the region under the cumulative context would generally include buildout of the project site in conjunction with the cumulative development within the same viewshed, i.e., visible from Views 1 through 11, as discussed above. As shown in Figure 4.1-25, cumulative development within the same viewshed would consist of the Tracy Hills Specific Plan, anticipated to result in the conversion of approximately 2,725 acres of farmland;[4] the Cordes Ranch Specific Plan, anticipated to result in the conversion of approximately 1,700 acres of farmland;[5] and the Ellis Specific Plan, anticipated to result in the conversion of approximately 320 acres of farmland.[6] For more details regarding the cumulative setting, refer to Chapter 6, Statutorily Required Sections, of this EIR.

4.1-4 Long-term changes in scenic resources along a State scenic highway, scenic vistas, and visual character associated with development of the proposed project in combination with cumulative development. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *cumulatively considerable* and *significant and unavoidable*.

The geographic setting for analysis of long-term cumulative changes in scenic resources along a State scenic highway, scenic vistas and visual character associated with the proposed project is cumulative buildout of the project site in conjunction with all other development within the same viewshed. Cumulative development could impact scenic resources along I-580, impact scenic vistas, and/or change the existing visual character of the viewshed from predominantly vacant or minimally developed land to more intensively developed areas. Based on the nature of the cumulative analysis, the following discussion includes an analysis of potential cumulative impacts associated with development of the full Specific Plan Buildout and off-site improvement areas.

Specific Plan Buildout, Off-Site Improvements Study Area

As discussed above, I-580 is an officially designated State scenic highway from I-205 to I-5 with views of the Diablo Range foothills, open agricultural lands, and, on especially clear days, the Sierra Nevada foothills. Similar to the proposed project, the identified cumulative development would abut I-580 and may also significantly damage the highway's scenic resources. The cumulative impacts to scenic resources along a State scenic highway could be significant.

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4 City of Tracy. *Tracy Hills Specific Plan: Recirculated Draft Subsequent Environmental Impact Report* [pg. 4.2-1]. October 2015.
5 City of Tracy. *The Cordes Ranch Specific Plan Draft Environmental Impact Report* [pg. 4.2-7]. April 5, 2013.
6 City of Tracy. *Modified Ellis Project Draft Revised Environmental Impact Report* [pg. 4.2-1]. July 2012.

Figure 4.1-25
Cumulative Development Within the Viewshed of the Proposed Project

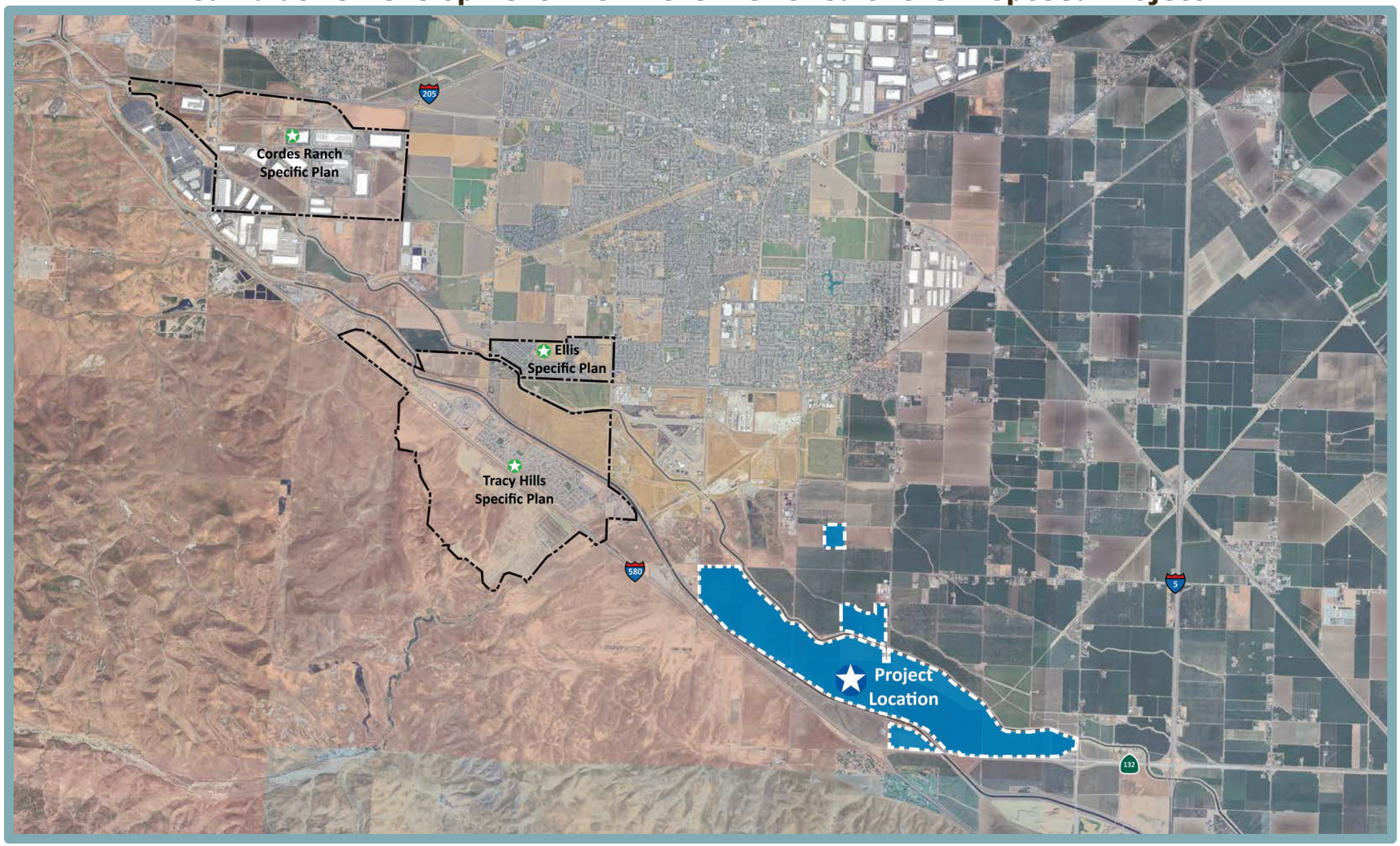


*Figure not OCR compatible.

Surrounding existing land uses include agricultural land to the north, west, and east; rural single-family residences to the north; a gas station, single-family residences, and a golf and country club to the south; undeveloped land to the west, across I-580; and commercial and rural residential uses, as well as a surface mining operation and flight school to the northwest. The existing agricultural uses in the project vicinity are not anticipated to be converted to urban uses. Similar to the proposed project, development of the identified cumulative development within the same viewshed as the proposed project, identified in Figure 4.1-25, could impede existing public views of the Diablo Range and Sierra Nevada foothills, which represent scenic vistas according to the San Joaquin County General Plan. As such, the aforementioned foreseeable developments could combine with the proposed project to have a significant adverse effect on views of the Diablo Range foothills.

Although none of the aforementioned developments are known to be within the viewsheds of the simulations presented above, due to the generally flat topography of the project area, some of the simulations include wide-ranging areas. While it is not possible to determine with certainty whether any of the foregoing cumulative projects would be within the same viewshed as the proposed project, in order to provide a conservative analysis, it is assumed that some of the aforementioned foreseeable developments could combine with the proposed project to result in changes to visual character and quality in the project vicinity.

According to the General Plan EIR, with compliance with applicable policies and implementation of Mitigation Measure 4.L-1, which required a program requiring the County to work with Caltrans to ensure that any road expansions of identified scenic routes would minimize disruption of the elements that make the route scenic, impacts related to having a substantial adverse effect on a scenic vista would be less than significant. The General Plan EIR also evaluated potential impacts that could occur to the existing visual character of the planning area through development facilitated by the buildout of the General Plan, noting that development of a significant amount of currently undeveloped land could result in a significant change to the visual character and quality of the County. However, similar to the proposed project and future development within the Off-Site Improvements Study Area, all future development would be subject to a range of goals and policies in the General Plan that seek to direct growth into already urbanized areas, support the visual quality and character of the County, and achieve a balance between allowing new development and preserving the County's valued open spaces and scenic resources.

While cumulative buildout in the geographic area could result in a substantial change in visual character of the project region, the General Plan EIR determined that compliance with the General Plan's goals, policies, and actions, combined with other State and local regulations, would reduce project-level aesthetic impacts to a less-than-significant level. However, the project would require a General Plan Amendment as it was not anticipated for development, and as discussed under Impact 4.1-2, the quality of scenic vistas and the existing visual character of the project site would be significantly altered with implementation of the proposed project. Therefore, although future development within the Off-Site Improvements Study Area was determined to result in a less-than-significant impact, the proposed project's incremental contribution to the significant cumulative impact could be ***cumulatively considerable*** and ***significant and unavoidable***.

Mitigation Measure(s)

Feasible mitigation does not exist to reduce the above impact to a less-than-significant level. Due to the degradation of scenic resources along a State scenic highway, substantial adverse effects on a scenic vista and the substantial degradation of the existing visual character and quality of public views of the project site, the impact associated with buildout of the Initial Phase of the proposed project and Specific Plan Buildout in combination with cumulative development would remain *cumulatively considerable* and *significant and unavoidable*.

4.1-5 Creation of new sources of light or glare associated with development of the proposed project in combination with cumulative development. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than significant*.

Based on the nature of the cumulative analysis, the following discussions include an analysis of potential cumulative impacts associated with development of the full Specific Plan Buildout and off-site improvement areas.

Specific Plan Buildout, Off-Site Improvements Study Area

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. Cumulative development throughout the southern portion of the General Plan planning area, particularly conversion of currently vacant or agricultural sites to urban uses, would increase the sources of light and glare. Such sources of light would be typical of existing industrial, commercial, and residential development in the greater project vicinity, such as the rural residences northwest of the project site. As shown in Figure 4.1-25, the aforementioned Tracy Hills Specific Plan, Cordes Ranch Specific Plan, and Ellis Specific Plan are proposed on what is currently agricultural land that is unlikely to contain existing sources of light. As such, similar to the proposed project, cumulative development would increase the sources of light and glare, which would have the potential to contribute to sky glow in the area and result in a significant cumulative impact.

However, cumulative development within the General Plan planning area, including the proposed project and future development within the Off-Site Improvements Study Area, would be subject to existing regulations and guidelines related to light and glare. For instance, General Plan Policy NCR-7.7 states that the County shall encourage project designs, lighting configurations, and operational practices that reduce light pollution and preserve views of the night sky. Furthermore, those projects located within the jurisdiction of the City of Tracy, such as the Cordes Ranch Specific Plan, would be required to comply with all applicable City requirements related to lighting. For example, Section 12.42.040(c) of the City of Tracy Code of Ordinances requires that the subdivider shall install an on-site lighting system on all vehicular access ways and along major walkways based on a lighting plan approved by the City; Section 12.40.040(d) defines similar requirements for residential uses, with the additional requirement that lighting shall be directed onto walkways and driveways within the

development and away from adjacent properties.[7] In addition, as described in Impact 4.1-3 above, the proposed project in particular would be required to submit a lighting plan to the San Joaquin County Community Development Department for review and approval prior to improvement plan approval (see Mitigation Measure 4.1-3). Mitigation Measure 4.1-3 requires the project's lighting to be Dark-Sky compliant as specified by the International Dark-Sky Association.

Based upon the above analysis, cumulative development within the southern portion of the General Plan planning area, including the proposed project and future development within the Off-Site Improvements Study Area, would result in a ***less-than-significant*** cumulative impact related to new sources of light or glare.

Mitigation Measure(s)

None required.

[7] City of Tracy. *City of Tracy Code of Ordinances.* Available at: https://library.municode.com/ca/tracy/codes/code_of_ordinances. Accessed January 2024.

4.2 Agricultural Resources

4.2 AGRICULTURAL RESOURCES

4.2.1 INTRODUCTION

The Agricultural Resources chapter of the EIR summarizes the status of the existing agricultural resources within the boundaries of the project site and potential off-site improvement areas, using the current State model and data, including, but not limited to, identification of any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project boundaries. The analysis addresses any conflicts with existing zoning for agricultural use. Documents referenced to prepare this chapter include the San Joaquin County General Plan[1] and the associated General Plan EIR,[2] the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey,[3] and the California Department of Conservation's (DOC's) Important Farmland Finder.[4]

4.2.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section describes current farmland and soil productivity classification systems, as well as the extent and quality of the agricultural resources present on the project site.

Farmland Classifications

The NRCS uses two systems to determine a soil's agricultural productivity: the Land Capability Classification System and the Storie Index Rating System. The "prime" soil classification of both systems indicates the presence of few to no soil limitations, which, if present, would require the application of management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production. The Farmland Mapping and Monitoring Program (FMMP), part of the DOC's Division of Land Resource Protection, uses the information from the NRCS to create maps illustrating the types of farmland in the area.

Farmland Mapping and Monitoring Program

The intent of the USDA Soil Conservation Service (USDA-SCS) was to produce agriculture maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA-SCS developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland Maps are derived from the USDA-SCS soil survey maps using the LIM criteria.

Since 1980, the State of California has assisted the USDA-SCS with completing mapping in the State. The FMMP was created within the DOC to carry on the mapping activity on a continuing basis, and with a greater level of detail. The DOC applied a greater level of detail by modifying

1 San Joaquin County. *San Joaquin County General Plan.* Adopted December 2016.
2 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report*. Certified October 2014.
3 U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey*. Available at: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed September 2023.
4 California Department of Conservation. *California Important Farmland Finder*. Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed October 2023.

the LIM criteria for use in California. The LIM criteria in California utilizes the SCS and Storie Index Rating systems, but also considers physical conditions such as dependable water supply for agricultural production, soil temperature range, depth of the groundwater table, flooding potential, rock fragment content and rooting depth.

The California DOC classifies lands into seven agriculture-related categories: Prime Farmland, Farmland of Statewide Importance (Statewide Farmland), Unique Farmland, Farmland of Local Importance (Local Farmland), Grazing Land, Urban and Built-up Land (Urban Land), and Other Land. The first three types listed above are collectively designated by the State as Agricultural Land for the purposes of CEQA (see Public Resources Code [PRC] Section 21060.1). Important Farmland maps for California are compiled using the modified LIM criteria and current land use information. The minimum mapping unit is 10 acres unless otherwise specified. Units of land smaller than 10 acres are incorporated into surrounding classifications.

Each of the seven farmland types are summarized below, based on California DOC's *A Guide to the Farmland Mapping and Monitoring Program*.[5]

Prime Farmland

Prime Farmland is land with the best combination of physical and chemical features able to sustain the long-term production of agricultural crops. The land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. The land must have been used for the production of irrigated crops at some time during the two update cycles (a cycle is equivalent to two years) prior to the mapping date.

Farmland of Statewide Importance

Farmland of Statewide Importance is land similar to Prime Farmland, but with minor shortcomings, such as greater slopes or with less ability to hold and store moisture. The land must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date.

Unique Farmland

Unique Farmland is land of lesser quality soils used for the production of the State's leading agricultural crops. The land is usually irrigated, but may include non-irrigated orchards or vineyards, as found in some climatic zones in California. The land must have been cultivated at some time during the two update cycles prior to the mapping date.

Farmland of Local Importance

Farmland of Local Importance is land of importance to the local agricultural economy, as determined by each county's Board of Supervisors and a local advisory committee.

Grazing Land

Grazing Land is land on which the existing vegetation, whether grown naturally or through management, is suited to the grazing of livestock. The minimum mapping unit for the Grazing Land category is 40 acres.

[5] California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program. *A Guide to the Farmland Mapping and Monitoring Program*. 2004.

Urban Land

Urban and Built-up Land is occupied with structures with a building density of at least one unit to one-half acre. Uses may include but are not limited to, residential, industrial, commercial, construction, institutional, public administration purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as part of this unit, if they are part of a surrounding urban area.

Other Land

Other Land is land that is not included in any other mapping categories. The following uses are generally included: rural development, brush timber, government land, strip mines, borrow pits, and a variety of other rural land uses.

Project Site Farmland Classifications

According to the FMMP, approximately 1,454 acres of the 1,576.7-acre project site are mapped as Prime Farmland and approximately 65 acres are mapped as Farmland of Local Importance; the on-site agricultural machinery manufacturing facility is mapped as Other Land Specified as Semi-agricultural and Rural Commercial Land (see Figure 4.2-1).

Land Capability Classification System

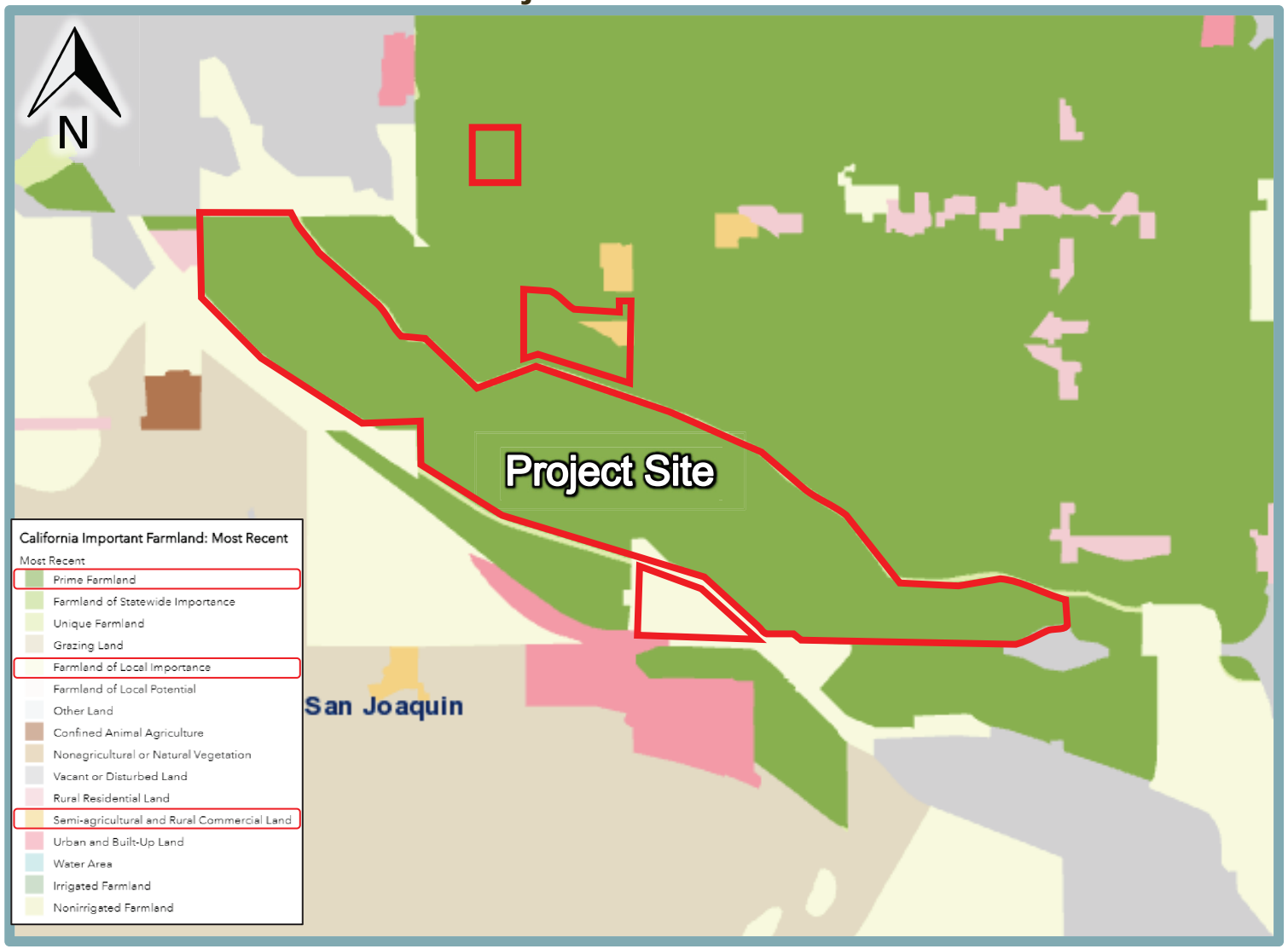
The Land Capability Classification System takes into consideration soil limitations, the risk of damage when soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable for agriculture. Generally, as the rating of the capability classification system increases, yields and profits are more difficult to obtain. The NRCS presents a Land Capability Classification for soils under irrigated conditions and non-irrigated conditions. A general description of soil classification, as defined by the NRCS, is provided in Table 4.2-1.

Table 4.2-1
Land Capability Classification

Class	Definition
I	Soils have slight limitations that restrict their use.
II	Soils have moderate limitations that restrict the choice of plants or that require moderate conservation practices.
III	Soils have severe limitations that restrict the choice of plants or that require special conservation practices, or both.
IV	Soils have very severe limitations that restrict the choice of plants or that require very careful management, or both.
V	Soils are not likely to erode but have other limitations; impractical to remove that limit their use largely to pasture or range, woodland, or wildlife habitat.
VI	Soils have severe limitations that make them generally unsuited to cultivation and limit their use largely to pasture or range, woodland, or wildlife habitat.
VII	Soils have very severe limitations that make them unsuited to cultivation and that restrict their use largely to pasture or range, woodland, or wildlife habitat.
VIII	Soils and landforms have limitations that preclude their use for commercial plants and restrict their use to recreation, wildlife habitat, or water supply or to aesthetic purposes.

Source: USDA, Natural Resources Conservation Service. Web Soil Survey, Soil Data Explorer, Irrigated Capability Class Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx, Accessed January 2025.

Figure 4.2-1
Project Site Farmlands



Source: California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, 2025.

*Figure not OCR compatible.

Storie Index Rating System

The Storie Index Rating system ranks soil characteristics according to suitability for agriculture from Grade 1 soils (81 to 100 rating), which have few or no limitations for agricultural production, to Grade 6 soils (less than or equal to 10 rating), which are not suitable for agriculture. Under the Storie Index Rating system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. Unlike the Land Capability Classification outlined above, the Storie Index Rating System does not distinguish between irrigated and non-irrigated soils. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided in Table 4.2-2, Storie Index Rating System.

Table 4.2-2
Storie Index Rating System

Grade	Index Rating	Definition
1 – Excellent	81 through 100	Few limitations that restrict their use for crops
2 – Good	61 through 80	Suitable for most crops, but have minor limitations that narrow the choice of crops and have a few special management needs
3 – Fair	41 through 60	Suited to a few crops, or special crops, and require special management
4 – Poor	21 through 40	If used for crops, severely limited and require special management
5 – Very Poor	11 through 20	Not suited for cultivated crops, but can be used for pasture/range
6 – Non-Agriculture	Less and 10	Soil and land types generally not suited to farming

Source: USDA NRCS, Web Soil Survey, 2025.

Project Site Land Characteristics

The irrigated and non-irrigated Land Capability Classification and Storie Index Grade for each soil type present in the project site is presented in Table 4.2-3.

Table 4.2-3
On-Site Land Capability Classification and Storie Index Rating

Soil Map Symbol and Name	Soil Capability Classification (Non-Irrigated)	Soil Capability Classification (Irrigated)	Storie Index Grade	Approximate Percentage of the Project Site Area
Capay clay, 0 to 1 percent slopes, MLRA 17 (Map Unit Symbol 118)	IV	II	Grade 4 – Poor	65.5
Capay clay, 1 to 6 percent slopes, MLRA 17 (Map Unit Symbol 119)	IV	II	Grade 3 – Fair	1.0
El Solyo clay loam, 0 to 2 percent slopes (Map Unit Symbol 156)	IV	II	Grade 1 – Excellent	17.6
Reiff loam, 0 to 2 percent slopes (Map Unit Symbol 223)	IV	II	Grade 1 – Excellent	2.0
Stomar clay loam, 0 to 2 percent slopes	IV	II	Grade 1 – Excellent	1.6

(Continues on next page)

Table 4.2-3
On-Site Land Capability Classification and Storie Index Rating

Soil Map Symbol and Name	Soil Capability Classification (Non-Irrigated)	Soil Capability Classification (Irrigated)	Storie Index Grade	Approximate Percentage of the Project Site Area
Vernalis clay loam, 0 to 2 percent slopes (Map Unit Symbol 268)	IV	I	Grade 1 – Excellent	1.9
Zacharias clay loam, 0 to 2 percent slopes (Map Unit Symbol 281)	IV	I	Grade 1 – Excellent	7.5
Zacharias gravelly clay loam, 0 to 2 percent slopes (Map Unit Symbol 282)	IV	II	Grade 2 – Good	2.6
Water (Map Unit Symbol W)	Not Rated	Not Rated	Not Rated	0.1

Source: USDA NRCS, Web Soil Survey, 2025.

The Storie Index Ratings of the on-site soils range from Grade 1 – Excellent to Grade 4 – Poor. Grade 1 soils have few limitations that restrict use and are suitable for most crops. Grade 2 soils are suitable for most crops, but have minor limitations that narrow the choice of crops and have a few special management needs, while Grade 4 soils are severely limited for crop use and require special management. The locations of each soil type are shown in Figure 4.2-2.

Existing Agricultural Zoning

The entirety of the project site is zoned AG-40-acres (AG-40), with the exception of Assessor's Parcel Number 253-260-050, which is zoned Rural Service Commercial (C-RS), by San Joaquin County. Pursuant to Chapter 9-203, Agricultural Zones, of the San Joaquin County Code of Ordinances, the purpose of agricultural zones is to designate adequate land for animal raising, crop production, and related agricultural services. More specifically, the AG zone is established to preserve agricultural lands for the continuation of commercial agricultural enterprises.

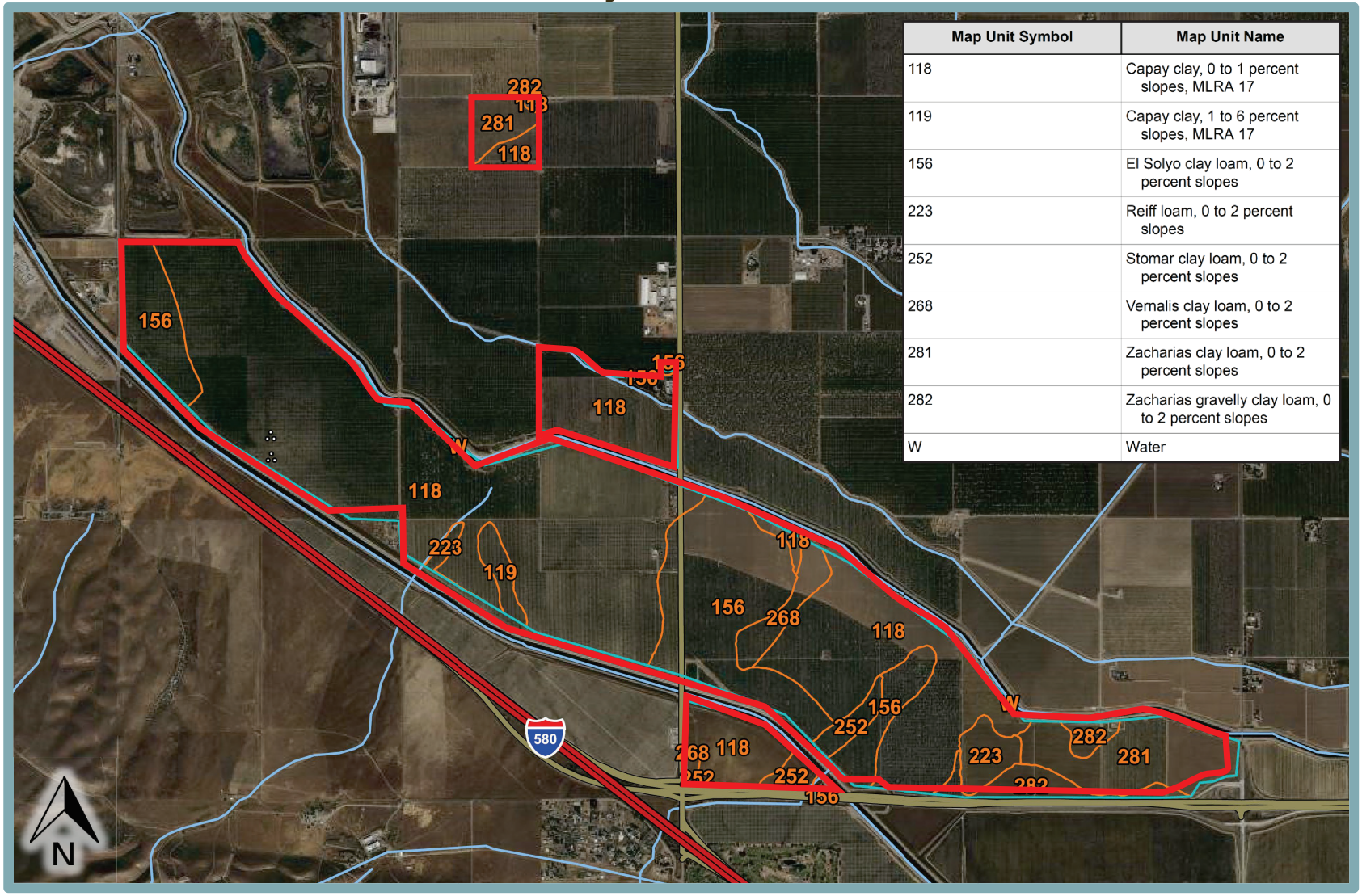
Existing Agricultural Operations

The project site is primarily comprised of active agricultural land, including almond and cherry orchards, which has generally been subject to agricultural use since at least 1937. The project site also includes the A.B. FAB, Inc. manufacturing facility which designs and builds dust control equipment for agricultural processing.

Williamson Act Contracts

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, has been the State's premier agricultural land protection program since the Act's enactment. The Act creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict land to agricultural and open space uses. The vehicle for the agreements is a rolling term 10-year contract (i.e., unless either party files a "notice of non-renewal," the contract is automatically renewed annually for an additional year). In return, restricted parcels are assessed for property tax purposes at a rate consistent with their annual use, rather than potential market value.

Figure 4.2-2
Project Site Soils



Map Unit Symbol	Map Unit Name
118	Capay clay, 0 to 1 percent slopes, MLRA 17
119	Capay clay, 1 to 6 percent slopes, MLRA 17
156	El Solyo clay loam, 0 to 2 percent slopes
223	Reiff loam, 0 to 2 percent slopes
252	Stomar clay loam, 0 to 2 percent slopes
268	Vernalis clay loam, 0 to 2 percent slopes
281	Zacharias clay loam, 0 to 2 percent slopes
282	Zacharias gravelly clay loam, 0 to 2 percent slopes
W	Water

Source: USDA NRCS, Web Soil Survey, 2025.

*Figure not OCR compatible.

As summarized in Table 3-3, Williamson Act Parcels, in Chapter 3, Project Description, of this EIR, eight parcels within the project site totaling approximately 789.85 acres are currently subject to Williamson Act contracts. Notices of Nonrenewal have been filed for the Williamson Act Parcels, and a Williamson Act Contract cancellation application was filed separately on November 8, 2024.

Off-Site Improvements Study Area Characteristics

As discussed in Chapter 3, Project Description, of this EIR, the Local Transportation Analysis (LTA) prepared for the proposed project by Fehr & Peers identifies a range of intersection, interchange, and roadway improvements that would be triggered by full buildout of the proposed project. The analysis of these prospective improvements will be conducted at a programmatic level, as is appropriate given that they are not components of the proposed project, nor have improvements yet been designed.

The majority of the Off-Site Improvements Study Area consists of paved roadways; thus, agricultural resources within the existing roadways were analyzed and addressed prior to construction. Although portions of the Off-Site Improvements Study Area boundaries extend outside of paved areas, protected farmland does not overlap with the proposed improvements.

4.2.3 REGULATORY CONTEXT

Federal laws or regulations pertaining to agricultural resources are not applicable for this analysis. The existing State and local laws and regulations pertaining to such resources are listed below, as applicable.

State Regulations

The following are applicable State regulations related to agricultural resources.

California Land Conservation Act – Williamson Act

The California Land Conservation Act, better known as the Williamson Act, has been the State's premier agricultural land protection program since the act's enactment in 1965. The California Legislature passed the Williamson Act in 1965 to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Act creates an arrangement whereby private landowners' contract with counties and cities to voluntarily restrict land to agricultural and open-space uses.

The vehicle for these agreements is a rolling term 10-year contract (i.e., unless either party files a "notice of nonrenewal," the contract is automatically renewed annually for an additional year). In return, restricted parcels are assessed for property tax purposes at a rate consistent with their annual use, rather than potential market value.

Local Regulations

The following are the local government environmental goals and policies relevant to the CEQA review process and applicable to the proposed project.

San Joaquin County General Plan

The San Joaquin County General Plan identifies the following goals and policies related to agricultural resources.

Land Use Element

Goal LU-1 Direct most urban development towards cities and urban and rural communities within the unincorporated county to promote economic development, while preserving agricultural lands and protecting open space resources.

Policy LU-1.5 **Clear Boundaries.** The County shall strive to preserve agricultural and open space areas that contribute to maintaining clear boundaries among cities and unincorporated communities.

Policy LU-1.7 **Farmland Preservation.** The County shall consider information from the State Farmland Mapping and Monitoring Program when designating future growth areas in order to preserve prime farmland and limit the premature conversion of agricultural lands.

Goal LU-2 Promote efficient development and land use practices in new development that provide for the protection of vital resources and enhancement of communities.

Policy LU-2.10 **Soils Information.** The County shall consider the soils information from the Farmland Mapping and Monitoring Program during review of proposed new development projects.

Policy LU-2.14 **General Plan Land Use Amendments.** When reviewing proposed General Plan amendments to change or modify land use designations or the land use diagram or a zoning reclassification, the County shall consider the following:

- consistency of the proposal with the Vision and Guiding Principles and the goals and policies of the General Plan;
- new physical, social, or economic factors that were not present when the time of General Plan was adopted;
- reasonable alternative sites in the vicinity that are already planned for the use and can accommodate the proposal;
- potential for an undesirable, growth-inducing precedent or premature conversion of agricultural land;
- the availability of infrastructure and services; and
- the effect on the fiscal health of the County.

Policy LU-2.15 **Agricultural Conversions.** When reviewing proposed General Plan amendments to change a land use diagram or zoning reclassification to change from an agricultural use to non-agricultural use, the County shall consider the following:

- potential for the project to create development pressure on surrounding agricultural lands;
- potential for the premature conversion of prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and confined animal agriculture;
- potential for impacts on surrounding farming operations and practices;
- provision of infrastructure and services to the new use and the potential impact of service demands or on the surrounding area; and
- protecting habitat restoration opportunities.

Goal LU-7 Provide for the long-term preservation of productive farmland and to accommodate agricultural services and related activities that support the continued viability of the County's agricultural industry.

Policy LU-7.1 **Protect Agricultural Land.** The County shall protect agricultural lands needed for the continuation of viable commercial agricultural production and other agricultural enterprises.

Policy LU-7.2 **Agricultural Support Uses.** The County shall require new agricultural support development and non-farm activities to be compatible with surrounding agricultural operations. New developments shall be required to demonstrate that they are locating in an agricultural area because of unique site area requirements, operational characteristics, resource orientation, or because it is providing a service to the surrounding agricultural area. The operational characteristics of the use may not have a detrimental impact on the operation or use of surrounding agricultural properties. Developments must be sited to avoid any disruption to the surrounding agricultural operations.

Policy LU-7.3 **Small Parcel Size Viability.** The County shall not allow further fragmentation of land designated for agricultural use, except for the purpose of separating existing dwellings on a lot, provided the Development Title regulations are met.

Policy LU-7.5 **Right to Farm.** The County shall strive to protect agricultural land against nuisance complaints from nonagricultural land uses though the implementation of the San Joaquin County Right to Farm ordinance and, if necessary, other appropriate regulatory and land use planning mechanisms.

Policy LU-7.7 **Agricultural Buffers.** The County shall ensure non-agricultural land uses at the edge of agricultural areas

incorporate adequate buffers (e.g., fences and setbacks) to limit conflicts with adjoining agricultural operations.

Policy LU-7.10 **Agricultural Mitigation Program.** The County shall continue to require agricultural mitigation for projects that convert agricultural lands to urban uses.

Policy LU-7.11 **Agricultural Land Preservation Mechanisms.** The County shall support regulatory, incentive-based, and financial mechanisms for the preservation of agricultural land.

Policy LU-7.12 **Agricultural Land Conversion Mitigation.** The County shall maintain and implement the Agricultural Mitigation Ordinance to permanently protect agricultural land within the County.

Policy LU-7.15 **Williamson Act Contracts.** The County shall continue to administer the Williamson Act program and shall maintain procedures for Williamson Act contracts consistent with the policies in the General Plan.

Policy LU-8.1 **Open Space Preservation.** The County shall limit, to the extent feasible, the conversion of open space and agricultural lands to urban uses, and place a high priority on preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, public safety, water resource protection, and overall community benefit.

San Joaquin County Code of Ordinances

The following provisions from the San Joaquin County Code of Ordinances relate to agricultural resources and are applicable to the proposed project.

Chapter 9-701: Agricultural Mitigation

The County's Agriculture Mitigation Ordinance is defined in Title 9, Chapter 9-701, of the County's Code of Ordinances. The purpose of the County's Agriculture Mitigation Ordinance is to permanently protect agricultural land in the County by mitigating the loss of agricultural land resulting from: 1) A General Plan, Master Plan, or Specific Plan Amendment that changes the designation of any land from an agricultural to a non-agricultural use; and 2) A Zoning Reclassification that changes the permitted uses from agriculture to a nonagricultural use, regardless of the General Plan designation. Pursuant to Section 9-701.101(b), the purpose of Chapter 9-701 is also, in part, to coordinate with the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP) in order to achieve an optimal farmland protection system. Mitigation is required in the form of an agricultural conservation easement that protects the same number of acres proposed to be changed to a non-agricultural use, or greater (i.e., 1:1 ratio). If easement acquisition is determined to be infeasible after a good faith effort, a payment in lieu may be allowed. Such in lieu fees would be used to acquire agricultural mitigation land.

Division 9: Right to Farm

The County's Right to Farm Ordinance is defined in Title 6, Division 9, of the County's Code of Ordinances. The Ordinance is designed to preserve, protect, and encourage the development and improvement of agricultural land, and to reduce the loss to the County of agricultural resources by limiting the circumstances under which agricultural operations or activities may be deemed to constitute a nuisance. The Right to Farm ordinance protects farmland by requiring disclosure to purchasers and users of property next to or near agricultural operations of the inherent potential problems associated with living near actively farmed land.

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

The SJMSCP is the County's strategy for balancing conservation with the needs of development while safeguarding agriculture; protecting land-owner rights; provide for the long-term management of plant, fish, and wildlife species, especially special-status species and those listed under the federal Endangered Species Act (FESA) or California Endangered Species Act (CESA); provide and maintain multiple-purpose open space areas; and accommodate a growing population. The SJMSCP contains numerous goals, policies, and strategies to protect and/or preserve biological and agricultural resources.

One of the core purposes of the SJMSCP is to facilitate the mitigation for the conversion of agricultural land to non-agricultural use. Pursuant to Section 4.1.2 of the SJMSCP, it has been determined that the conversion of Open Space lands classified as Natural Lands or Agricultural Habitat Lands may result in Incidental Take, meaning to result in an adverse impact to a protected species that is incidental to a project activity, which would necessitate compensation pursuant to SJMSCP; Agricultural Habitat Land converted from Open Space use is required to be compensated at a 1:1 ratio. Section 2.2.1.2 defines Agricultural Habitat Lands as including perennial and annual row crops and some ruderal vegetation types. In contrast, pursuant to Section 4.1.2 of the SJMSCP, Multi-Purpose Open Space lands, which is defined in Section 2.2.1.3 as primarily consisting of orchards and vineyards, are of limited importance to SJMSCP covered species, would not be considered to result in Incidental Take, and would not trigger requirements to add new preserve acres to the Preserve System. Rather, pursuant to CEQA, the cumulative impact of eliminating Multi-Purpose Open Space lands is significant and adverse to common plant and wildlife species, and, therefore, the SJMSCP requires conversion of Multi-Purpose Open Space lands to share in the costs of enhancement, maintenance, and administration of the SJMSCP Preserve System.

The SJMSCP developed its classification system based on the land forms present at the time of adoption. At that time, the project site corresponded to the Agricultural Habitat Lands. Under the SJMSCP, the project site is treated as Agricultural Habitat Lands for purposes of SJMSCP compliance.

4.2.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to agricultural resources. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact related to agricultural resources would occur if the proposed project would result in any of the following:

- 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;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]) (see Chapter 5, Effects Not Found to be Significant);
- Result in the loss of forest land or conversion of forest land to non-forest use (see Chapter 5, Effects Not Found to be Significant);
- 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
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use (see Chapter 5, Effects Not Found to be Significant).

Issues related to whether the proposed project would result in any of the following impacts are discussed in Chapter 5, Effects Not Found To Be Significant, of this EIR:

- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g));
- Result in the loss of forest land or conversion of forest land to non-forest use; and
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.

Method of Analysis

Evaluation of potential impacts of the proposed project on agricultural resources is based on the following: the San Joaquin County General Plan, the associated EIR, the NRCS Web Soil Survey, and the FMMP online mapping system. Soil data from the FMMP was used to characterize the amount of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance within the project site boundaries. The proposed area of disturbance associated with the proposed project was overlaid with the known on-site agricultural resources to determine the overall impact to agricultural land that would occur during development of the proposed project. Similarly, an analysis of the prospective improvements within the Off-Site Improvements Study Area is conducted at a programmatic level; pursuant to CEQA Guidelines Section 15126.4(a)(D), the prospective improvements are evaluated in less detail than the proposed project. The standards of significance listed above are used to delineate the significance of any potential impacts.

Project-Specific Impacts and Mitigation Measures

The following discussions of impacts related to agricultural resources are based on implementation of the proposed project in comparison to the baseline conditions and the standards of significance presented above.

4.2-1 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, or conflict with existing zoning for agricultural use, or a Williamson Act contract. Based on the analysis below, even with the implementation of mitigation, the impact is *significant and unavoidable*.

The footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar agricultural land and, thus, are addressed together. The following discussion also addresses the Off-Site Improvements Study Area.

Initial Phase, Specific Plan Buildout

PRC Section 21060.1 defines "Agricultural land" as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. As noted previously, according to the FMMP, approximately 1,454 acres of the project site are mapped as Prime Farmland, with approximately 65 acres of the site mapped as Farmland of Local Importance; the on-site agricultural machinery manufacturing facility is mapped as Other Land Specified as Semi-agricultural and Rural Commercial Land. The loss and/or conversion of the on-site Prime Farmland would be considered a significant impact under CEQA Guidelines. The Initial Phase of the proposed project would result in the development of approximately 181.26 acres of Prime Farmland within the project site with industrial uses, as well as a 25,000-square foot (sf) university building plus 9.8 acres for future expansion, and Veterans of Foreign Wars (VFW) facility; the remainder of the 1,576.7-acre project site would be subject to future development pursuant to the proposed Specific Plan. Subsequent development would be based on market demand. Full buildout of the proposed Specific Plan would involve development of various commercial, industrial, and public facility uses; as such, the proposed project would directly result in the conversion of Prime Farmland to non-agricultural use.

The majority of the project site is currently zoned for agricultural uses by San Joaquin County and is comprised of the A.B. FAB, Inc. facility and cherry and almond orchards. As such, the proposed commercial, industrial, and public service uses would conflict with the project site's existing zoning designation. As discussed in Chapter 3, Project Description, of this EIR, the proposed project would require County approval of General Plan Amendments and a Zone Reclassification application to change the project site's existing agricultural General Plan land use and zoning designations to accommodate the proposed commercial, industrial, and public service uses. The proposed project would therefore be required to comply with the County's Agricultural Mitigation Ordinance, as defined in Title 9, Chapter 9-701, of the County's Code of Ordinances. As previously stated, the purpose of the Agricultural Mitigation Ordinance is to permanently protect agricultural land in the County by mitigating the loss of agricultural land resulting from a Zone Reclassification that changes the permitted uses from agricultural to non-agricultural use. Given that the majority of the project site is zoned AG-40 and the proposed project includes a request to change the site's General Plan land use and zoning designations in accordance with the proposed Specific Plan, the site would be subject to mitigation in accordance with the Agricultural

Mitigation Ordinance. Compliance with such would require the project applicant to mitigate for the loss of agricultural land either with an agricultural conservation easement that protects the same number of acres proposed to be changed to a non-agricultural use, or greater (i.e., 1:1 ratio), or through the payment of in-lieu fees.

As discussed in the Regulatory Context section of this Chapter, the SJMSCP is intended to comprehensively minimize and mitigate impacts to plant, fish, and wildlife habitat and compensation for some impacts to recreational, agricultural, scenic enjoyment, and other beneficial open space uses resulting from development. The project site is considered primarily Agricultural Habitat land and the SJMSCP anticipates conversion of 65,943 acres of Agricultural Habitat lands between 2001 and 2051. The SJMSCP Preserve System required to compensate for impacts to covered species is 100,841 acres, and includes compensation for other agricultural lands that are important in supporting covered species. For example, according to the SJMSCP (page 2-72), the Preserve System would include 57,635 acres of Agricultural Habitat lands. As noted in Chapter 4.4, Biological Resources, of this EIR, the proposed project would be subject to payment of applicable SJMSCP fees, pursuant to Mitigation Measure 4.4-9(a), which would help fund enhancement, maintenance, and administration of the Preserves. Thus, the project's compliance with the SJMSCP would further address the project-related agricultural conversion impact by facilitating the preservation of agricultural lands.

With respect to Williamson Act contracts, eight parcels within the project site totaling approximately 789.85 acres are currently subject to Williamson Act contracts. Notices of Nonrenewal have been filed for the Williamson Act Parcels, and a Williamson Act contract cancellation application was filed separately on November 8, 2024. Approval of the Williamson Act contract cancellation application is considered an administrative function. Nonetheless, the reasonably foreseeable consequence of contract cancellation is the conversion of agricultural land for another non-agricultural use. This reasonably foreseeable consequence has been addressed in the preceding discussion and has been determined to be significant.

Off-Site Improvements Study Area

The proposed project includes potential future intersection and roadway improvements that would be triggered by full buildout of the proposed project in the Off-Site Improvements Study Area, which is generally located north of the project site. While several of the locations proposed for improvement are located in proximity to Farmland as well as adjacent to parcels that are zoned for agricultural use and/or are under a Williamson Act, all development within the Off-Site Improvements Study Area would consist of improvements to existing roadways. As such, future development within the Off-Site Improvements Study Area would not result in the conversion of Important Farmland to non-agricultural uses and would not conflict with an existing zoning for agricultural use or a Williamson Act contract.

Conclusion

Because the proposed project would result in the conversion of Prime Farmland to non-agricultural use and would conflict with Williamson Act contracts, a significant impact could occur; furthermore, pursuant to the County's Code of Ordinances, because the entire project site is designated for agricultural uses, the proposed

General Plan Map Amendment, Rezone, and Specific Plan would result in a significant impact. Therefore, the proposed project would result in the conversion of Important Farmland to non-agricultural uses, and a ***significant*** impact could occur.

Mitigation Measure(s)

While the following mitigation measure would preserve an equivalent acreage of Farmland elsewhere, the proposed project would result in the conversion of agricultural land to urban uses, and would not create new agricultural land; as such, the proposed project would lead to an overall loss of Farmland. Therefore, although implementation of the following mitigation measure would reduce the above significant impact, the impact would remain *significant and unavoidable*.

Initial Phase, Specific Plan Buildout

4.2-1 Consistent with the County's Agricultural Mitigation Ordinance, prior to issuance of grading permits for each phase, the project applicant shall either pay for a farmland conservation easement to protect the same number of acres proposed to be changed to a non-agricultural use, as well as an administrative fee to cover the costs of administering, monitoring, and enforcing the farmland conservation easement, subject to review by the County Agricultural Technical Advisory Committee, or pay an in-lieu fee in an amount determined by the County Board of Supervisors.

Off-Site Improvements Study Area

None required.

4.2-2 Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Based on the analysis below, the impact is *less than significant*.

The footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar agricultural operations and surrounding uses and, thus, are addressed together. The following discussion also addresses the Off-Site Improvements Study Area.

Initial Phase, Specific Plan Buildout

Consistent with General Plan Policy LU-7.5, the proposed project would be required to comply with the County's Right to Farm Ordinance as defined in Title 6, Division 9, of the County's Code of Ordinances, which would ensure that such agricultural uses would be protected from conflicts with non-agricultural land uses within the project vicinity. The project site is almost entirely surrounded by parcels containing active agricultural uses, which are assumed to continue into perpetuity. While operations of surrounding agricultural uses could include the use of pesticides, some of which may be harmful to sensitive receptors, due to the industrial and commercial nature of the majority of the proposed project, such on-site uses would not be considered incompatible with such operations. Thus, the proposed project would be consistent with General Plan Policy LU-7.5. In addition, consistent with General Plan Policy LU-7.7, the majority of the project site is buffered from surrounding agricultural operations

by the Delta Mendota Canal and the California Aqueduct. While the proposed university campus would not be a compatible use with the surrounding existing agricultural operations, the campus would be adequately buffered from the adjacent agricultural uses by a canal to the north and the Delta Mendota Canal to the south. Furthermore, as shown in Figure 3-10, Initial Phase University Site Plan, of this EIR, the proposed university campus would be bordered on all sides by a 36.5-foot-wide roadway. Therefore, through compliance with the foregoing General Plan policies, development of the proposed project would not preclude the use of the surrounding parcels for agricultural purposes and, thus, would not induce conversion of adjacent agricultural lands to non-agricultural uses. Compliance with the foregoing policies and ordinance would further ensure that the proposed project would not involve changes in the existing environment which could result in the conversion of off-site Farmland to non-agricultural use.

As discussed in further detail in Chapter 4.9, Land Use and Planning, of this EIR, the project is requesting General Plan Text Amendments to support the project. Specifically, the requested General Plan text amendments pertain to the Community Development Element of the General Plan, with proposed revisions to (existing) Policy LU-2.15 and the proposed addition of a new policy, Policy ED-3.8. However, both of the foregoing policies are limited to developments "in south San Joaquin County in the areas proximate to Interstate 580, Interstate 5, and State Route 132 that are served by an existing Surface Transportation Assistance Act (STAA) Route." Because the focus of the policies is limited to the project area, adoption of the proposed addition to Policy LU-2.15 and the new Policy ED-3.8 would not directly or indirectly facilitate the conversion of agricultural land in other areas of the County to non-agricultural use.

Off-Site Improvements Study Area

Similar to the discussion above, while some of the proposed improvements within the Off-Site Improvements Study Area would occur adjacent to parcels that are used for agricultural purposes, all future improvements would be restricted to the existing roadways. Therefore, future improvements within the Off-Site Improvements Study Area would not involve changes in the existing environment which could result in the conversion of off-site Farmland to non-agricultural use.

Conclusion

Based on the above, the proposed project would not involve changes in the existing environment which could result in the conversion of off-site Farmland to non-agricultural use, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. For

further details related to the cumulative setting of the proposed project, see Chapter 6, Statutorily Required Sections, of this EIR.

4.2-3 Impacts related to the cumulative loss of agricultural land. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *cumulatively considerable* and *significant and unavoidable*.

Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous, the potential for cumulative impacts related to the loss of agricultural land from developing either project component would be similar. The following discussion also addresses the Off-Site Improvements Study Area.

Initial Phase, Specific Plan Buildout

The San Joaquin County General Plan EIR concluded that the County's General Plan would bring about changes to the existing land uses in the unincorporated areas of the County and anticipated that the conversion of existing farmland in the region to urban use would result in the loss of agricultural production. While the San Joaquin County General Plan EIR stated that the loss of Farmland and agricultural production was considered a significant adverse impact, the EIR did not provide mitigation measures sufficient to reduce the adverse impact to a less-than-significant level; thus, the General Plan EIR concluded that the impact would be significant and unavoidable.

Looking at cumulative agricultural impacts in unincorporated San Joaquin County and the City of Tracy, on a regional level, as set forth in Table 6-1, Cumulative Development Potential, in Chapter 6, Statutorily Required Sections, of this EIR, a cumulative total of approximately 28,667,805 sf of industrial uses, approximately 364,591 sf of retail uses, and approximately 9,011 residential units are reasonably foreseeable; a large portion of the foregoing development is proposed on what is currently agricultural land. For example, as shown in Figure 4.1-25 in Chapter 4.1, Aesthetics, of this EIR, the Tracy Hills Specific Plan is anticipated to result in the conversion of approximately 25 acres of Prime Farmland;[6] the Cordes Ranch Specific Plan is anticipated to result in the conversion of approximately 100 acres of Prime Farmland;[7] and the Ellis Specific Plan is anticipated to result in the conversion of the entire project site, which consists of 320 acres of Prime Farmland.[8]

Similar to the proposed project, other reasonably foreseeable projects involving the conversion of agricultural land would be required to comply with either the County's Agricultural Mitigation Ordinance or the City of Tracy's Agricultural Mitigation Fee Ordinance (Chapter 12.28). Furthermore, it is noted that the proposed Policy ED-3.8 is limited to "non-agricultural industrial development applications in south San Joaquin County in the areas proximate to Interstate 580, Interstate 5, and State Route 132 that are served by an existing STAA Route." Because the focus of the policy is limited to the project area, adoption of Policy ED-3.8 would not directly or indirectly facilitate the conversion of agricultural land in other areas of the County to non-agricultural use.

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6 City of Tracy. *Tracy Hills Specific Plan: Recirculated Draft Subsequent Environmental Impact Report* [pg. 4.2-1]. October 2015.
7 City of Tracy. *The Cordes Ranch Specific Plan Draft Environmental Impact Report* [pg. 4.2-7]. April 5, 2013.
8 City of Tracy. *Modified Ellis Project Draft Revised Environmental Impact Report* [pg. 4.2-1]. July 2012.

However, even with the implementation of mitigation, the proposed project, in combination with other reasonably foreseeable development, would convert Prime Farmland to non-agricultural uses, and a significant and unavoidable impact would occur. Thus, development of the Initial Phase and Specific Plan Buildout, as well as the other projects described above, would contribute to the aforementioned impact.

Off-Site Improvements Study Area

As discussed above, while several of the locations proposed for improvement within the Off-Site Improvements Study Area are located in proximity to parcels that are used for agricultural purposes, all development within the Off-Site Improvements Study Area would consist of improvements to existing roadways. As such, future development within the Off-Site Improvements Study Area would not result in the conversion of Important Farmland to non-agricultural uses.

Conclusion

Based of the above, even with implementation of mitigation, the project's incremental contribution to the cumulative impact is ***cumulatively considerable*** and ***significant and unavoidable***.

Mitigation Measure(s)

Implementation of the following mitigation measure would help reduce the project's incremental contribution towards the cumulative impact related to conversion of important farmland. However, the impact would remain *significant and unavoidable* due to the permanent loss of agricultural land attributable to the project.

Initial Phase, Specific Plan Buildout

4.2-3 Implement Mitigation Measure 4.2-1.

Off-Site Improvements Study Area

None required.

4.3 Air Quality, Greenhouse Gas Emissions, and Energy

4.3 AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY

4.3.1 INTRODUCTION

The Air Quality, Greenhouse Gas Emissions, and Energy chapter of the EIR describes the potential impacts of the proposed project on local and regional air quality emissions, potential impacts related to greenhouse gas (GHG) emissions and climate change, and potential impacts related to energy. The chapter includes a discussion of the existing air quality, GHG, and energy setting, the existing regulatory setting, as well as potential local and regional air quality, GHG, and energy impacts resulting from construction and operation of the project. In addition, the chapter includes mitigation measures warranted to reduce or eliminate any identified significant impacts.

The chapter is primarily based on information and guidance within the San Joaquin County Air Pollution Control District's (SJVAPCD's) Guidance for Assessing and Mitigating Air Quality Impacts (Air Quality Guidelines),[1] the San Joaquin County General Plan,[2] and the associated General Plan EIR,[3] as well as an Air Quality Technical Report (see Appendix D),[4] a Greenhouse Gas Emissions Technical Report (see Appendix E),[5] and an Energy Technical Report (see Appendix F),[6] prepared for the proposed project by Ramboll Americas Engineering Solutions, Inc. (Ramboll).

4.3.2 EXISTING ENVIRONMENTAL SETTING

The following information provides an overview of the existing environmental setting in relation to air quality within the proposed project area. Air basin characteristics, ambient air quality standards (AAQS), attainment status and regional air quality plans, local air quality monitoring, odors, and sensitive receptors are discussed. In addition to the information pertaining to air quality, information related to climate change, GHGs, and energy is also provided.

Air Basin Characteristics

San Joaquin County is located within the northern portion of the San Joaquin Valley Air Basin (SJVAB), which consists of eight counties and represents approximately 16 percent of the State's geographic area. The topography and meteorology within the SJVAB, including low precipitation levels, cloudless days, high temperatures, and light winds during the summer and inversion layers in the atmosphere during the winter, provide ideal conditions for trapping air pollution for long periods of time and producing harmful levels of air pollutants, including ozone (O_3) and particulate matter. In addition, the region houses the State's major arteries for goods and people movement, Interstate 5 (I-5) to the west and State Route 99 (SR 99) through the Central Valley, thereby attracting a large volume of vehicular traffic.

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1 San Joaquin County Air Pollution Control District. *Guidance for Assessing and Mitigating Air Quailty Impacts.* March 19, 2015.
2 San Joaquin County. *San Joaquin County General Plan.* Adopted December 2016.
3 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report*. Certified October 2014.
4 Ramboll Americas Engineering Solutions, Inc. *Air Quality Technical Report*. April 2025.
5 Ramboll Americas Engineering Solutions, Inc. *Greenhouse Gas Emissions Technical Report*. April 2025.
6 Ramboll Americas Engineering Solutions, Inc. *Energy Technical Report*. April 2025.

The geography of mountainous areas to the east, west, and south, in combination with long summers and relatively short winters, contributes to local climate episodes that prevent the dispersion of pollutants. Wind speed and direction play an important role in dispersion and transport of air pollutants. Wind at the surface and aloft can disperse pollution by mixing and by transporting the pollution to other locations. Especially in summer, winds in the SJVAB most frequently blow from the northwesterly direction. As a result of the prevailing wind direction, pollutants from the Bay Area and the Sacramento Valley are transported into the SJVAB.[7] The SJVAB's topographic features restrict air movement and channel the air mass towards the southeastern end of the Valley.

Solar radiation and temperature are particularly important in the chemistry of ozone formation. Generally, the higher the temperature, the more ozone formed, because reaction rates increase with temperature. The SJVAB averages over 260 sunny days per year. Ozone levels are low during winter periods when there is much less sunlight to drive the photochemical reaction. In addition, precipitation, clouds, and fog can block the solar radiation required for ozone formation. Wet fogs can cleanse the air during winter as moisture collects on particles and deposits them on the ground. The winds and unstable air conditions experienced during the passage of winter storms result in periods of low pollutant concentrations and excellent visibility. Between winter storms, high pressure and light winds allow cold moist air to pool on the SJVAB floor, thus creating strong low-level temperature inversions and very stable air conditions. However, atmospheric moisture can also increase pollution levels. In fogs with less water content, the moisture acts to form secondary ammonium nitrate particulate matter, which is part of the SJVAB's particulate matter (PM) problem. Accordingly, wintertime conditions favorable to fog formation are also conditions favorable to high concentrations of respirable or suspended particulate matter (i.e., particles less than 10 microns in diameter or PM_{10}) and fine particles (i.e., particles less than 2.5 microns in diameter or $PM_{2.5}$).

Ambient Air Quality Standards

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established AAQS for common pollutants. The federal standards are divided into primary standards, which are designed to protect the public health, and secondary standards, which are designed to protect the public welfare. The AAQS for each contaminant represent safe levels that avoid specific adverse health effects. Pollutants for which air quality standards have been established are called "criteria" pollutants. Table 4.3-1 identifies the major pollutants, characteristics, health effects and typical sources. The national and California AAQS (NAAQS and CAAQS, respectively) are summarized in Table 4.3-2. The NAAQS and CAAQS were developed independently with differing purposes and methods. As a result, the federal and State standards differ in some cases. In general, the State of California standards are more stringent than the federal standards, particularly for ozone and PM.

A description of each criteria pollutant and its potential health effects is provided in the following section.

Ozone

Ozone is a reactive gas consisting of three oxygen atoms. In the troposphere, ozone is a product of the photochemical process involving the sun's energy, and is a secondary pollutant formed as a result of a complex chemical reaction between reactive organic gas (ROG) and oxides of nitrogen (NO_X) emissions in the presence of sunlight.

[7] San Joaquin Valley Air Pollution Control District. *Frequently Asked Questions*. Available at: https://ww2.valleyair.org/about/frequently-asked-questions/. Accessed February 2025.

Table 4.3-1
Summary of Criteria Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive gas produced by the photochemical process involving a chemical reaction between the sun's energy and other pollutant emissions. Often called photochemical smog.	• Eye irritation • Wheezing, chest pain, dry throat, headache, or nausea • Aggravated respiratory disease such as emphysema, bronchitis, and asthma	Combustion sources such as factories, automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	An odorless, colorless, highly toxic gas that is formed by the incomplete combustion of fuels.	• Impairment of oxygen transport in the bloodstream • Impaired vision, reduced alertness, chest pain, and headaches • Can be fatal in the case of very high concentrations	Automobile exhaust, combustion of fuels, and combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	A reddish-brown gas that discolors the air and is formed during combustion of fossil fuels under high temperature and pressure.	• Lung irrigation and damage • Increased risk of acute and chronic respiratory disease	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
Sulfur Dioxide	A colorless, irritating gas with a rotten egg odor formed by combustion of sulfur-containing fossil fuels. The primary gas that makes up sulfur oxide (SO_X) emissions.	• Aggravation of chronic obstruction lung disease • Increased risk of acute and chronic respiratory disease	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter (PM_{10} and $PM_{2.5}$)	A complex mixture of extremely small particles and liquid droplets that can easily pass through the throat and nose and enter the lungs.	• Aggravation of chronic respiratory disease • Heart and lung disease • Coughing • Bronchitis • Chronic respiratory disease in children • Irregular heartbeat • Nonfatal heart attacks	Combustion sources such as automobiles, power generation, industrial processes, and wood burning. Also from unpaved roads, farming activities, and fugitive windblown dust.
Lead	A metal found naturally in the environment as well as in manufactured products.	• Loss of appetite, weakness, apathy, and miscarriage • Lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract	Industrial sources and combustion of leaded aviation gasoline.

Sources:

- ***California Air Resources Board. California Ambient Air Quality Standards (CAAQS). Available at: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed February 2025.***
- ***Sacramento Metropolitan, El Dorado, Feather River, Placer, and Yolo-Solano Air Districts, Spare the Air website. Air Quality Information for the Sacramento Region. Available at: sparetheair.com. Accessed February 2025.***
- ***California Air Resources Board. Glossary of Air Pollution Terms. Available at: https://ww2.arb.ca.gov/glossary. Accessed February 2025.***

Table 4.3-2
Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS	NAAQS	
			Primary	Secondary
Ozone	1 Hour	0.09 ppm	-	Same as primary
	8 Hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	8 Hour	9 ppm	9 ppm	-
	1 Hour	20 ppm	35 ppm	
Nitrogen Dioxide	Annual Mean	0.030 ppm	53 ppb	Same as primary
	1 Hour	0.18 ppm	100 ppb	-
Sulfur Dioxide	24 Hour	0.04 ppm	-	-
	3 Hour	-	-	0.5 ppm
	1 Hour	0.25 ppm	75 ppb	-
Respirable Particulate Matter (PM_{10})	Annual Mean	20 ug/m^3	-	Same as primary
	24 Hour	50 ug/m^3	150 ug/m^3	
Fine Particulate Matter ($PM_{2.5}$)	Annual Mean	12 ug/m^3	9 ug/m^3	15 ug/m^3
	24 Hour	-	35 ug/m^3	Same as primary
Lead	30 Day Average	1.5 ug/m^3	-	-
	Calendar Quarter	-	1.5 ug/m^3	Same as primary
Sulfates	24 Hour	25 ug/m^3	-	-
Hydrogen Sulfide	1 Hour	0.03 ppm	-	-
Vinyl Chloride	24 Hour	0.010 ppm	-	-
Visibility Reducing Particles[1]	8 Hour	see note below	-	-

ppm = parts per million
ppb = parts per billion
µg/m^3 = micrograms per cubic meter

Note: Statewide Visibility Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Source: CARB. Ambient Air Quality Standards. July 16, 2024. Available at: https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed February 2025.

As such, and unlike other pollutants, ozone is not released directly into the atmosphere from any sources. In the stratosphere, ozone exists naturally and shields Earth from harmful incoming ultraviolet radiation. The primary source of ozone precursors is mobile sources, including cars, trucks, buses, construction equipment, and agricultural equipment. Ground-level ozone reaches the highest level during the afternoon and early evening hours. High levels occur most often during the summer months. Ground-level ozone is a strong irritant that could cause constriction of the airways, forcing the respiratory system to work harder in order to provide oxygen. Ozone at the Earth's surface causes numerous adverse health effects and is a major component of smog. High concentrations of ground level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments.

Reactive Organic Gas

ROG is a reactive chemical gas composed of hydrocarbon compounds typically found in paints and solvents that contributes to the formation of smog and ozone by involvement in atmospheric chemical reactions. A separate health standard does not exist for ROG. However, some compounds that make up ROG are toxic, such as the carcinogen benzene.

Oxides of Nitrogen

NO_X are a family of gaseous nitrogen compounds and are precursors to the formation of ozone and particulate matter. The major component of NO_X, nitrogen dioxide (NO_2), is a reddish-brown gas that discolors the air and is toxic at high concentrations. NO_X results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion are the major sources of NO_X. NO_X reacts with ROG to form smog, which could result in adverse impacts to human health, damage the environment, and cause poor visibility. Additionally, NO_X emissions are a major component of acid rain. Health effects related to NO_X include lung irritation and lung damage and can cause increased risk of acute and chronic respiratory disease.

Nitrogen Dioxide

A particular oxide of nitrogen that is of concern to human health is NO_2. NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas.

A large body of health science literature indicates that exposure to NO_2 can induce adverse health effects. The strongest health evidence, and the health basis for the AAQS for NO_2, results from controlled human exposure studies that show that NO_2 exposure can intensify responses to allergens in allergic asthmatics. In addition, several epidemiological studies have demonstrated associations between NO_2 exposure and premature death, cardiopulmonary effects, decreased lung function growth in children, respiratory symptoms, emergency room visits for asthma, and intensified allergic responses. Infants and children are particularly at risk because they have disproportionately higher exposure to NO_2 than adults due to their greater breathing rate for their body weight and their typically greater outdoor exposure duration. Several studies have shown that long-term NO_2 exposure during childhood, the period of rapid lung growth, can lead to smaller lungs at maturity in children with higher compared to lower levels of exposure. In addition, children with asthma have a greater degree of airway responsiveness compared with adult asthmatics. In adults, the greatest risk is to people who have chronic respiratory diseases, such as asthma and chronic obstructive pulmonary disease.

Carbon Monoxide

CO is a colorless, odorless, poisonous gas produced by incomplete burning of carbon-based fuels such as gasoline, oil, and wood. When CO enters the body, the CO combines with chemicals in the body, which prevents blood from carrying oxygen to cells, tissues, and organs. Symptoms of exposure to CO can include problems with vision, reduced alertness, and general reduction in mental and physical functions. Exposure to CO can result in chest pain, headaches, reduced mental alertness, and death at high concentrations.

Sulfur Dioxide

Sulfur dioxide (SO_2) is a colorless, irritating gas with a rotten egg odor formed primarily by the combustion of sulfur-containing fossil fuels from mobile sources, such as locomotives, ships, and

off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Similar to airborne NO_X, suspended sulfur oxide particles contribute to poor visibility. Sulfur oxide particles are also a component of PM_{10} (discussed below). SO_2 is the primary gas constituting SO_X emissions.

Sulfates

Sulfates are the fully oxidized ionic form of sulfur and are colorless gases. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. The sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The sulfates standard established by CARB is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, because they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide

Hydrogen sulfide (H_2S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. Hydrogen sulfide is extremely hazardous in high concentrations, especially in enclosed spaces (800 parts per million [ppm] can cause death).

Particulate Matter

Particulate matter, also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of several components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health impacts. The USEPA is concerned about particles that are 10 micrometers in diameter or smaller (PM_{10}) because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, the particles could affect the heart and lungs and cause serious health effects. USEPA groups particle pollution into three categories based on their size and where they are deposited:

- "Inhalable coarse particles ($PM_{2.5-10}$)," which are found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. $PM_{2.5-10}$ is deposited in the thoracic[8] region of the lungs.
- "Fine particles ($PM_{2.5}$)," which are found in smoke and haze, are 2.5 micrometers in diameter and smaller. $PM_{2.5}$ particles could be directly emitted from sources such as forest fires, or could form when gases emitted from power plants, industries, and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.
- “Ultrafine particles (UFP),” are very, very small particles (less than 0.1 micrometers in diameter) largely resulting from the combustion of fossil fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of $PM_{2.5}$, their high surface area, deep lung penetration, and transfer into the bloodstream could result in disproportionate health

[8] The thoracic region of the lungs includes the trachea and main bronchi.

impacts relative to their mass. UFP is not currently regulated separately but is analyzed as part of $PM_{2.5}$.

PM_{10}, $PM_{2.5}$, and UFP include primary pollutants, which are emitted directly to the atmosphere and secondary pollutants, which are formed in the atmosphere by chemical reactions among precursors. Generally, $PM_{2.5}$ and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM_{10} sources include the same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust. Long-term PM pollution, especially fine particles, could result in significant health problems including, but not limited to, the following: increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; decreased lung function; aggravated asthma; development of chronic respiratory disease in children; development of chronic bronchitis or obstructive lung disease; irregular heartbeat; heart attacks; and increased blood pressure.

Lead

Lead is a relatively soft and chemically resistant metal that is a natural constituent of air, water, and the biosphere. Lead forms compounds with both organic and inorganic substances. As an air pollutant, lead is present in small particles. Sources of lead emissions in California include a variety of industrial activities. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically. However, because lead was emitted in large amounts from vehicles when leaded gasoline was used, lead is present in many soils (especially urban soils) as a result of airborne dispersion and could become re-suspended into the air.

Because lead is only slowly excreted by the human body, exposures to small amounts of lead from a variety of sources could accumulate to harmful levels. Effects from inhalation of lead above the level of the ambient air quality standard may include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms could include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children. Lead also causes cancer.

Vinyl Chloride

Vinyl chloride (C_2H_3Cl, also known as VCM) is a colorless gas that does not occur naturally, but is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloro-ethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Visibility Reducing Particles

Visibility Reducing Particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are also a category of environmental concern. TACs are present in many types of emissions with varying degrees of toxicity. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Common stationary sources of TACs include gasoline stations, dry cleaners, and diesel backup generators, which are subject to SJVAPCD stationary source permit requirements. The other, often more significant, common source type is on-road motor vehicles, such as cars and trucks, on freeways and roads, and off-road sources such as construction equipment, ships, and trains.

Fossil fueled combustion engines, including those used in cars, trucks, and some pieces of construction equipment, release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene, toluene, xylenes, and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust, DPM, is composed of carbon particles and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of such chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including ROG and NO_X. Due to the published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects, the CARB has identified DPM from diesel-fueled engines as a TAC. Although a variety of TACs are emitted by fossil fueled combustion engines, the cancer risk due to DPM exposure represents a more significant risk than the other TACs discussed above.[9]

More than 90 percent of DPM is less than one micrometer in diameter, and, thus, DPM is a subset of $PM_{2.5}$. As a California statewide average, DPM comprises about eight percent of $PM_{2.5}$ in outdoor air, although DPM levels vary regionally due to the non-uniform distribution of sources throughout the State. Most major sources of diesel emissions, such as ships, trains, and trucks, operate in and around ports, rail yards, and heavily-traveled roadways. Such areas are often located near highly populated areas. Thus, elevated DPM levels are mainly an urban problem, with large numbers of people exposed to higher DPM concentrations, resulting in greater health consequences compared to rural areas.

Due to the high levels of diesel activity, high volume freeways, stationary diesel engines, rail yards and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Construction-related activities also have the potential to generate concentrations of DPM from on-road haul trucks and off-road equipment exhaust emissions.

The size of diesel particulates that are of the greatest health concern are fine particles (i.e., $PM_{2.5}$) and UFPs. The small diameter of UFPs imparts the particulates with unique attributes, such as high surface areas and the ability to penetrate deeply into lungs. Once UFPs have been deposited in lungs, the small diameter allows the UFPs to be transferred to the bloodstream. The high surface area of the UFPs also allows for a greater adsorption of other chemicals, which are transported along with the UFPs into the bloodstream of the inhaler, where the chemicals can eventually reach critical organs.[10] The penetration capability of UFPs may contribute to adverse

[9] California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.
[10] Health Effects Institute. *Understanding the Health Effects of Ambient Ultrafine Particles*. January 2013.

health effects related to heart, lung, and other organ health.[11] UFPs are a subset of DPM and activities that create large amounts of DPM, such as the operations involving heavy diesel-powered engines, also release UFPs. Considering that UFPs are a subset of DPM, and DPM represents a subset of $PM_{2.5}$, estimations of either concentrations or emissions of $PM_{2.5}$ or DPM include UFPs.

Health risks from TACs are a function of both the concentration of emissions and the duration of exposure, which typically are associated with long-term exposure and the associated risk of contracting cancer. Health effects of exposure to TACs other than cancer can include birth defects, neurological damage, and death. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to criteria air pollutants that have established AAQS. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an AAQS or emission-based threshold.

Naturally Occurring Asbestos

Another concern related to air quality is naturally occurring asbestos (NOA). Asbestos is a term used for several types of naturally-occurring fibrous minerals found in many parts of California. The most common type of asbestos is chrysotile, but other types are also found in California. When rock containing asbestos is broken or crushed, asbestos fibers may be released and become airborne. Exposure to asbestos fibers may result in health issues such as lung cancer, mesothelioma (a rare cancer of the thin membranes lining the lungs, chest and abdominal cavity), and asbestosis (a non-cancerous lung disease which causes scarring of the lungs). Because asbestos is a known carcinogen, NOA is considered a TAC. Sources of asbestos emissions include: unpaved roads or driveways surfaced with ultramafic rock; construction activities in ultramafic rock deposits; or rock quarrying activities where ultramafic rock is present.

NOA is typically associated with fault zones, and areas containing serpentinite or contacts between serpentinite and other types of rocks. According to mapping prepared by the California Geological Survey, the project site is not in an area likely to contain serpentinite or other ultramafic rocks.[12] Consequently, NOA is not expected to be present at the project site.

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA) require all areas of California to be classified as attainment, nonattainment, or unclassified as to their status with regard to the NAAQS and/or CAAQS. Areas not meeting the NAAQS presented in Table 4.3-2 above are designated by the USEPA as nonattainment. Further classifications of nonattainment areas are based on the severity of the nonattainment problem, with marginal, moderate, serious, severe, and extreme nonattainment classifications for ozone. Nonattainment classifications for PM range from marginal to serious. Because of the differences between the national and State standards, the designation of nonattainment areas is different under the federal and State legislation. The FCAA requires areas violating the NAAQS to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The SIP contains the strategies and control measures for states to use to attain the NAAQS. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, rules, and regulations of air basins as reported by the agencies with jurisdiction over them. The USEPA reviews SIPs to determine if they conform

[11] South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.
[12] California Department of Conservation, Division of Mines and Geology. *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos*. August 2000.

to the mandates of the FCAA amendments and would achieve air quality goals when implemented. The CCAA requires local air pollution control districts with air quality that is in violation of CAAQS to prepare air quality attainment plans that demonstrate district-wide emission reductions of five percent per year averaged over consecutive three-year periods, unless an approved alternative measure of progress is developed.

Table 4.3-3 presents the current attainment status of the jurisdictional area of the SJVAPCD. As shown in the table, at the federal level, the area is designated as extreme nonattainment for the 8-hour ozone standard, nonattainment for $PM_{2.5}$, and attainment or unclassified for all other federal standards. At the State level, the area is designated as severe nonattainment for the one-hour ozone standard, and nonattainment for the 8-hour ozone, PM_{10}, and $PM_{2.5}$ standards. The area is designated attainment or unclassified for all other State standards.

Table 4.3-3
San Joaquin Valley Attainment Status Designations

Pollutant	Federal Standards[a]	State Standards[b]
Ozone - One hour	Revoked[f]	Nonattainment/Severe
Ozone - Eight hour	Nonattainment/Extreme[e]	Nonattainment
PM_{10}	Attainment[c]	Nonattainment
$PM_{2.5}$	Nonattainment[d]	Nonattainment
Carbon Monoxide	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide	Attainment/Unclassified	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
Lead (Particulate)	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

Notes:
[a] See 40 CFR Part 81
[b] See California Code of Regulations (CCR) Title 17 Sections 60200-60210
[c] On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM_{10} National Ambient Air Quality Standard (NAAQS) and approved the PM_{10} Maintenance Plan.
[d] The Valley is designated nonattainment for the 1997 $PM_{2.5}$ NAAQS. EPA designated the Valley as nonattainment for the 2006 $PM_{2.5}$ NAAQS on November 13, 2009 (effective December 14, 2009).
[e] Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).
[f] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). The District Governing Board adopted the 2023 Maintenance Plan and Redesignation Request and submitted to EPA in June of 2023. Although the standard is revoked, anti-backsliding provisions can be terminated upon final approval of the Maintenance Plan from EPA.

Source: San Joaquin Valley Air Pollution Control District. Ambient Air Quality Standards & Attainment Status. Available at: https://www.valleyair.org/aqinfo/attainment.htm. Accessed February 2025.

Local Air Quality Monitoring

Air quality is monitored by CARB at various locations to determine which air quality standards are being violated, and to direct emission reduction efforts, such as developing attainment plans and rules, incentive programs, etc. The nearest local air quality monitoring station to the project site is the Tracy-Airport station, located at 5749 South Tracy Boulevard, approximately 1.5 miles north

of the project site. Based on the data available from the applicable monitoring station, Table 4.3-4 presents the number of days that the NAAQS and CAAQS were exceeded for the three-year period from 2021 to 2023.

Table 4.3-4
Air Quality Monitoring Data Summary (2021-2023)

Pollutant	Standard	Days Standard Was Exceeded		
		2021	2022	2023
1-Hour Ozone	State	0	0	0
	Federal	0	0	0
8-Hour Ozone	State	3	1	0
	Federal	3	1	0
24-Hour PM_{10}	State	23	10	11
	Federal	1	0	0
24-Hour $PM_{2.5}$*	Federal	11	3	3

* $PM_{2.5}$ data is not available for the Tracy-Airport station. Thus, values from the Manteca-530 Fishback Road station, which is the next nearest station to the project site (approximately 13 miles northeast of the project site), were used.

Source: California Air Resources Board, Aerometric Data Analysis and Management (iADAM) System, http://www.arb.ca.gov/adam/topfour/topfour1.php. Accessed February 2025.

Odors

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Adverse effects of odors on residential areas and other sensitive receptors warrant the closest scrutiny; but consideration is also be given to other land use types where people congregate, such as recreational facilities, worksites, and commercial areas. The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between a receptor and an odor source, and local meteorological conditions.

One of the most important factors influencing the potential for an odor impact to occur is the distance between the odor source and receptors, also referred to as a buffer zone or setback. The greater the distance between an odor source and receptor, the less concentrated the odor emission would be when reaching the receptor.

Meteorological conditions also affect the dispersion of odor emissions, which determines the exposure concentration of odiferous compounds at receptors. The predominant wind direction in an area influences which receptors are exposed to the odiferous compounds generated by a nearby source. Receptors located upwind from a large odor source may not be affected due to the produced odiferous compounds being dispersed away from the receptors. Wind speed also influences the degree to which odor emissions are dispersed away from any area.

Odiferous compounds could be generated from a variety of source types including both construction and operational activities. Examples of common land use types that typically generate significant odor impacts include, but are not limited to, wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants. The project site is not located near any of the aforementioned odor-generating uses.

Valley Fever

Valley Fever (*coccidioidomycosis)* is primarily a disease of the lungs caused by inhalation of spores of the *Coccidioides immitis* fungus. The *Coccidioides* fungus resides in the soil in southwestern United States, northern Mexico, and parts of Central and South America. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil. The spores are found in the top few inches of soil, become airborne when the soil is disturbed by wind, vehicles, excavation, or other ground-moving activities, and are subsequently inhaled into the lungs. After the fungal spores have settled in the lungs, the fungal spores change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

Valley Fever symptoms generally occur within two to three weeks of exposure. Approximately 60 percent of Valley Fever cases are mild and display flu-like symptoms or no symptoms. The remainder developed flu-like symptoms (fatigue, cough, chest pain, fever, rash, headache, and joint aches) that can last for a month and tiredness that can sometimes last for longer than a few weeks. In some cases, painful red bumps may develop. A small percentage of infected persons (less than one percent) can develop disseminated disease that spreads outside the lungs to the brain, bone, and skin. Without proper treatment, Valley Fever can lead to severe pneumonia, meningitis, and even death.

In 2023, a total of 9,054 Valley Fever cases were reported in California.[13] Consistent with previous years, the highest incidence of Valley fever in 2023 was reported in counties in the Central Valley and Central Coast regions of California, including Kern, Kings, San Luis Obispo, Fresno, and Tulare counties. Of the 9,054 reported cases, 350 were reported for San Joaquin County. [14]

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. Several residential uses are located adjacent to the project site, with approximately ten additional residential uses located within approximately 1,000 feet of the project site boundaries.

Greenhouse Gas Emissions

GHGs are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the Earth's atmosphere. Some GHGs occur naturally and are emitted into the atmosphere through both natural processes and human activities. Other GHGs are created and emitted solely through human activities. The principal GHGs that enter the atmosphere due to human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated carbons. Other common GHGs include water vapor, ozone, and aerosols. The increase in atmospheric concentrations of GHG due to human activities has resulted in more heat being held within the atmosphere, which is the accepted explanation for global climate change.

[13] Ramboll Americas Engineering Solutions, Inc. *Air Quality Technical Report* [pg. 43]. April 2025.
[14] *Ibid.*

The primary GHG emitted by human activities is CO_2, with the next largest components being CH_4 and N_2O. A wide variety of human activities result in the emission of CO_2. Some of the largest sources of CO_2 include the burning of fossil fuels for transportation and electricity, industrial processes including fertilizer production, agricultural processing, and cement production. The primary sources of CH_4 emissions include domestic livestock sources, decomposition of wastes in landfills, releases from natural gas systems, coal mine seepage, and manure management. The main human activities producing N_2O are agricultural soil management, fuel combustion in motor vehicles, nitric acid production, manure management, and stationary fuel combustion.

In 2022, the United States emitted approximately 6.34 billion metric tons of CO_2 equivalents ($MTCO_2e$) per year or approximately 19 $MTCO_2e$ per person annually, calculated by dividing the emissions total by the U.S. Census Bureau 2022 population estimate. [15] Emissions of GHG by economic sector indicate that transportation-related activities account for the majority of U.S. emissions, followed by electricity generation and industrial activities.[16] The agricultural, commercial, and residential sectors account for the remainder of GHG emission sources.[17]

Transportation-related GHG emissions are entirely generated from direct fossil fuel combustion. Approximately 57.4 percent of transportation-related GHG emissions result from passenger car and light duty truck use. The remaining emissions result from other transportation activities, including the combustion of diesel fuel in medium- and heavy-duty vehicles, and jet fuel in aircrafts. According to the Inventory of U.S. Greenhouse Gas Emissions and Sinks, from 1990 to 2022 as a whole, transportation emissions from fossil fuel combustion rose, "due, in large part, to increased demand for travel … as a result of a confluence of factors including population growth, economic growth, urban sprawl, and periods of low fuel prices".[18]

In 2022, California emitted approximately 371.1 million $MTCO_2e$, or approximately six percent of the U.S. emissions.[19] California's percentage contribution is due primarily to the sheer size of California, as compared to other states. For example, in 2022 (the most recent year of state rankings for energy-related CO_2 emissions per capita), California had the third lowest per capita energy-related CO_2 emission rates in the country (including Washington D.C.), due to the success of the State's energy efficiency and renewable energy programs and commitments that have lowered the State's GHG emissions rate of emissions growth. California's per capita GHG emissions in 2022 were 8.4 metric tons per person, while the U.S. per capita GHG emissions in that same year were 19 metric tons per person. Another factor that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states.

The California Energy Commission (CEC) found that transportation is the source of approximately 38 percent of the State's GHG emissions, followed by industrial sources at 19 percent, and electricity generation (both in-state and out-of-state) at 16 percent.[20] Residential and commercial activities comprised approximately 10 percent of the inventory. Agriculture and forestry make up approximately eight percent of the State's GHG emissions. The remainder of the State's GHG emissions are accounted for by high- global warming potential (GWP) gases or recycling and waste.

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15 Ramboll Americas Engineering Solutions, Inc. *Greenhouse Gas Emissions Technical Report* [pg. 4]. April 2025.
16 U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions. Accessed April 2025.
17 *Ibid.*
18 Ramboll Americas Engineering Solutions, Inc. *Greenhouse Gas Emissions Technical Report* [pg. 4]. April 2025.
19 *Ibid.*
20 *Ibid.*

Emissions of GHG are partially offset by uptake of carbon and sequestration in trees, agricultural soils, landfilled yard trimmings and food scraps, and absorption of CO_2 by the Earth's oceans. Additional emission reduction measures for GHG could include, but are not limited to, compliance with local, State, or federal plans or strategies for GHG reductions, on-site and off-site mitigation, and project design features. Attainment concentration standards for GHGs have not been established by the federal or State government.

Global Warming Potential

GWP is one type of simplified index (based upon radiative properties) that can be used to estimate the potential future impacts of emissions of various gases. According to the USEPA, the GWP of a gas, or aerosol, to trap heat in the atmosphere is the "cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas." The reference gas for comparison is CO_2. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO_2, as well as the decay rate of each gas relative to that of CO_2. Each gas's GWP is determined by comparing the radiative forcing associated with emissions of that gas versus the radiative forcing associated with emissions of the same mass of CO_2, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 25 times greater than that of CO_2, as shown in Table 4.3-5.

As shown in the table, at the extreme end of the scale, sulfur hexafluoride is estimated to have a comparative GWP 22,800 times that of CO_2. The atmospheric lifetimes of such GHGs are estimated by the USEPA to vary from 50 to 200 years for CO_2, to 50,000 years for CF_4. Longer atmospheric lifetimes allow GHG to buildup in the atmosphere; therefore, longer lifetimes correlate with the GWP of a gas. The common indicator for GHG is expressed in terms of $MTCO_2e$, which is calculated based on the GWP for each pollutant.

Table 4.3-5
GWPs and Atmospheric Lifetimes of Select GHGs

Gas	Atmospheric Lifetime (years)	GWP (100 year time horizon)
Carbon Dioxide (CO_2)	See footnote[1]	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-23	230	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

1. For a given amount of CO_2 emitted, some fraction of the atmospheric increase in concentration is quickly absorbed by the oceans and terrestrial vegetation, some fraction of the atmospheric increase will only slowly decrease over a number of years, and a small portion of the increase will remain for many centuries or more.

Source: U.S. Environmental Protection Agency. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 [Table 1-2]. April 14, 2021

Effects of Global Climate Change

Globally, climate change has the potential to affect numerous environmental resources through uncertain impacts related to future air temperatures and precipitation patterns. The Intergovernmental Panel on Climate Change's (IPCC) Climate Change 2021: The Physical Science Basis report indicated that warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia.[21] Signs that global climate change has occurred include:

- Warming of the atmosphere and ocean;
- Diminished amounts of snow and ice;
- Rising sea levels; and
- Ocean acidification.

Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. A scientific consensus confirms that climate change is already affecting California. The Office of Environmental Health Hazard Assessment (OEHHA) identified various indicators of climate change in California, which are scientifically based measurements that track trends in various aspects of climate change. Many indicators reveal discernable evidence that climate change is occurring in California and is having significant, measurable impacts in the State. Changes in the State's climate have been observed, including:

- An increase in annual average air temperature with record warmth from 2012 to 2016;
- More frequent extreme heat events;
- More extreme drought;
- A decline in winter chill; and
- An increase in variability of statewide precipitation.

The California Climate Change Center (CCCC) has released four assessment reports on climate change in California, the most recent in 2018. California's Fourth Climate Change Assessment projects an increase by 5.6 to 8.8 degrees Fahrenheit from 2070 to 2100 depending on GHG emission reductions (at a moderate rate or continuing at current rates).[22] Warming temperatures and changing precipitation patterns have altered California's physical systems—the ocean, lakes, rivers and snowpack—upon which the State depends. Winter snowpack and spring snowmelt runoff from the Sierra Nevada and southern Cascade Mountains provide approximately one-third of the State's annual water supply. Impacts of climate on physical systems have been observed, such as high variability of snow-water content (i.e., amount of water stored in snowpack), decrease in snowmelt runoff, glacier change (loss in area), rise in sea levels, increase in average lake water temperature and coastal ocean temperature, and a decrease in dissolved oxygen in coastal waters. Impacts of climate change on biological systems, including humans, wildlife, and vegetation, have also been observed, including climate change impacts on terrestrial, marine, and freshwater ecosystems. However, it should be noted that the effects of climate change are not fully understood. For example, due to a series of atmospheric rivers that occurred throughout the 2022-2023 winter season, California saw the most snow the State has seen since the record

[21] Intergovernmental Panel on Climate Change. *Climate Change 2021: The Physical Science Basis Summary for Policymakers*. Available at: https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/. Accessed February 2025.

[22] Ramboll Americas Engineering Solutions, Inc. *Greenhouse Gas Emissions Technical Report* [pg. 6]. April 2025.

was set in the 1982-1983 winter season. In addition, California has experienced near-average or above-average snowpack for the last three years (2023-2025).[23]

In San Joaquin County, specifically, the number of extreme heat days (defined as days where temperatures exceed 101.6 F) could reach an average of 45 days per year, as compared to the four days per year that occur now.[24] While California could not see the average annual precipitation changing significantly in the next 50 to 75 years, precipitation could likely be delivered in more intense storms and within a shorter wet season. For example, the 30-year average length of dry spell in the County is 121 days. By the end of this century, the average dry spell could be up to 134 days.[25]

Energy Use in California

California is one of the highest energy demanding states within the nation. In 2022, the State consumed 287,826 gigawatt hours (GWh) of electricity.[26] Activities such as heating and cooling structures, lighting, the movement of goods, agricultural production, and other facets of daily life consume a variety of energy sources. However, despite California's high rate of energy use, the State has one of the lowest per capita energy consumption levels in the U.S.

In 2022, the most recent year in which such data is available, California was the fourth-largest electricity producer in the nation. In addition, California ranks eighth in the nation in production of crude oil and 15th in production of natural gas.[27] Energy within the State is provided primarily to consumers through a mix of sources including natural gas, hydroelectric, non-hydroelectric renewable sources, nuclear, coal, and petroleum. California is the nation's top producer of electricity from solar, geothermal, and biomass energy. Renewable resources, including hydroelectric power and small-scale (less than 1-megawatt [MW]), customer-sited solar photovoltaic (PV) systems, accounted for 49 percent of California's in-state electricity generation; natural gas-fired power plants fueled another 42 percent of the State's energy generation; and nuclear power supplied almost all the rest.

Figure 4.3-1 presents the sources that are used to produce energy in the State. As presented therein, energy is mostly generated from natural gas combustion, followed by non-hydroelectric renewables (such as wind and solar) and hydroelectric.

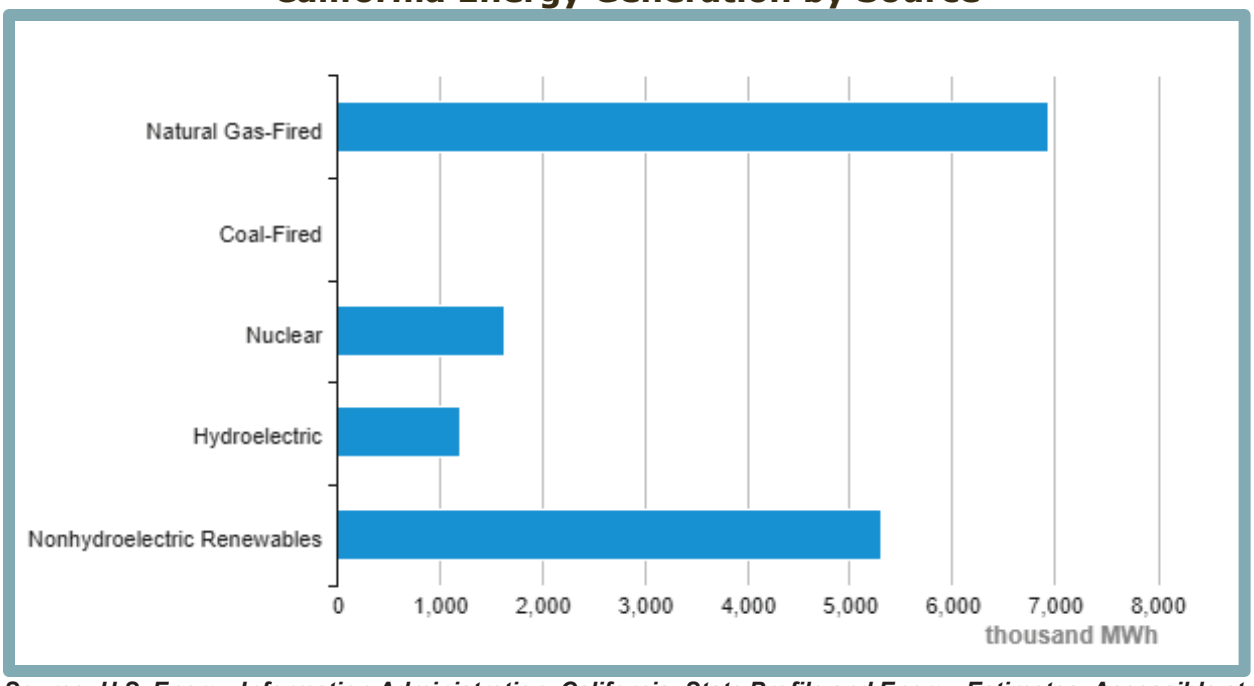
Figure 4.3-2 presents energy consumption within California for the most recent year for which data is available (2022). As shown in the figure, transportation-related activity consumes the largest single share of energy within the State. The second largest consumer is the industrial sector.

Of the total electricity supplied to the State in 2022, San Joaquin County consumed approximately 5,771 GWh, which constitutes approximately two percent of the total energy consumed within the State that year.[28]

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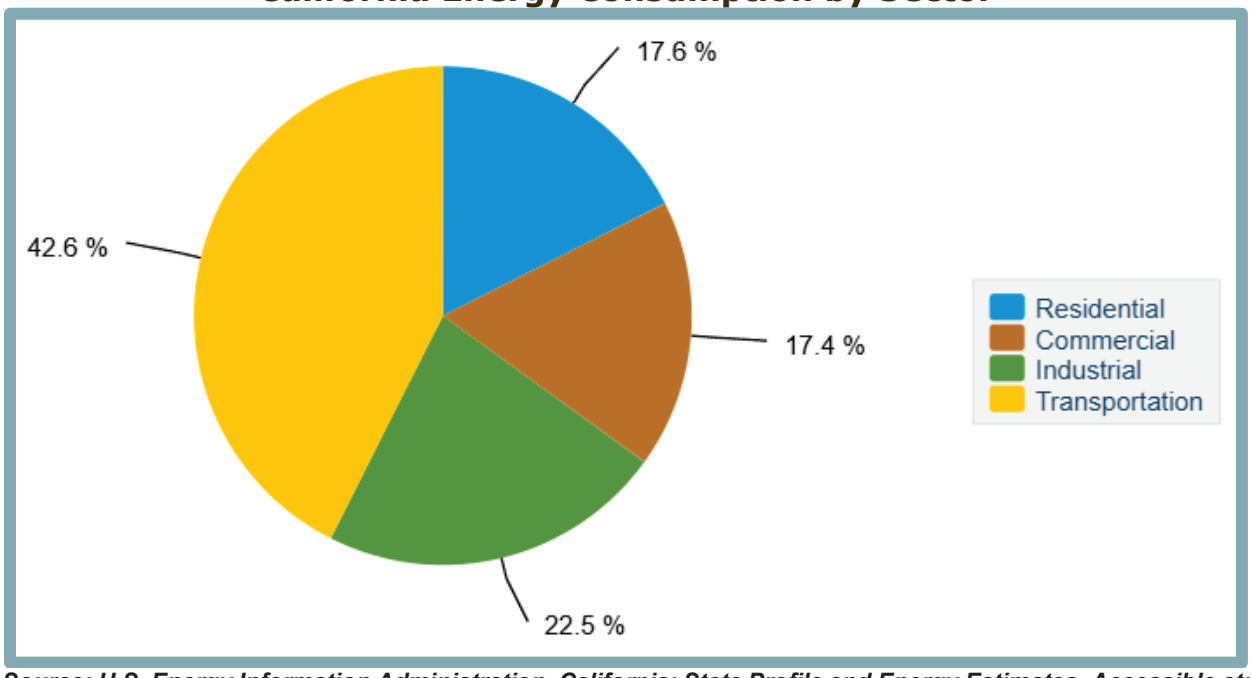
23 California Data Exchange Center-California Department of Water Resources. *Snow Water Equivalents (Inches).* Available at: https://cdec.water.ca.gov/snowapp/sweq.action. Accessed April 2025.
24 Cal-Adapt. *Local Climate Change Snapshot for San Joaquin County, California*. Available at: https://cal-adapt.org/tools/local-climate-change-snapshot/. Accessed February 2025.
25 *Ibid.*
26 Ramboll Americas Engineering Solutions, Inc. *Energy Technical Report* [pg. 4]. April 2025.
27 Ramboll Americas Engineering Solutions, Inc. *Energy Technical Report* [pg. 3]. April 2025.
28 Ramboll Americas Engineering Solutions, Inc. *Energy Technical Report* [pg. 4]. April 2025.

Figure 4.3-1
California Energy Generation by Source



Source: U.S. Energy Information Administration. California: State Profile and Energy Estimates. Accessible at: https://www.eia.gov/state/index.php?sid=CA. Accessed February 2025.

Figure 4.3-2
California Energy Consumption by Sector



Source: U.S. Energy Information Administration. California: State Profile and Energy Estimates. Accessible at: https://www.eia.gov/state/index.php?sid=CA. Accessed February 2025.

*Figures not OCR compatible.

Local Energy Use

For San Joaquin County, Pacific Gas and Electric Company (PG&E) is the primary supplier of electricity to businesses and residents of the area. PG&E's 70,000-square-mile service area covers both Northern and Central California. By the end of 2023, approximately 47 percent of the energy delivered to PG&E's customers came from eligible renewable energy-related projects. [29]

The existing 1,576.7-acre site is currently developed with active agricultural uses, which include commercial scale almond and cherry orchards, as well as an agricultural processing and manufacturing facility operated by A.B. FAB, Inc. Typical energy use associated with such existing uses includes electricity diesel, and/or gasoline for agricultural equipment, as well as electricity for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, appliances, and more. In addition to on-site energy use, the existing uses on-site result in transportation energy use associated with vehicle trips generated by employees.

Public Safety Power Shutoffs

In an effort to prevent fires, PG&E initiated public safety power shutoffs (PSPS) in 2019, which may continue in subsequent years until fire risks associated with power lines are decreased. PSPS events involve PG&E turning off electrical service during times when the weather is predicted to have a heightened fire risk from gusty winds and dry conditions. Dependent on the fire risks, the power outage events may occur in specific areas or for all PG&E customers across the County. Based on the project site's location, the site is not located within an area that is likely to experience a PSPS event.[30] Specifically, PSPS events have not occurred in the project site or vicinity within 2023 or 2024.

4.3.3 REGULATORY CONTEXT

Air quality, GHG emissions, and energy consumption are monitored and regulated through the efforts of various international, federal, State, and local government agencies. Agencies work jointly and individually to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating and improving the air quality within the project area and monitoring or reducing GHG emissions and energy consumption are discussed below.

Federal Regulations Related to Air Quality

The following discussion provides a summary of the federal regulations relevant to air quality, organized by pollutant type.

Criteria Pollutants

The FCAA, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The USEPA is responsible for implementing most aspects of the FCAA, including setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric ozone protection measures, and enforcement provisions. Under the FCAA, NAAQS are established for the following criteria pollutants: ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

[29] Ramboll Americas Engineering Solutions, Inc. *Energy Technical Report* [pg. 3]. April 2025.
[30] Pacific Gas & Electric Co. *Interactive PSPS Planning Map.* Available at: https://vizmap.ss.pge.com/. Accessed February 2025.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for ozone, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for ozone, NO_2, SO_2, PM_{10}, $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The FCAA requires the USEPA to reassess the NAAQS at least every five years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants/Toxic Air Contaminants

The 1977 FCAA amendments required the USEPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 FCAA Amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

Federal Regulations Related to GHG Emissions

The following are the federal regulations relevant to GHG emissions.

Federal Vehicle Standards

In 2010, President Obama issued a memorandum directing the Department of Transportation, Department of Energy, USEPA, and National Highway Traffic Safety Administration (NHTSA) to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards were projected to achieve emission rates as low as 163 grams of CO_2 per mile by model year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if the foregoing emissions level was achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intended to set standards for model years 2022 through 2025 in future rulemaking.

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program would have applied to vehicles with model years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards were expected to lower CO_2 emissions by approximately 1.1 billion MT, and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

In August 2018, the USEPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new, less-stringent standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards that were previously in place, the 2018 proposal would increase U.S. fuel consumption by approximately 0.5 million barrels per day, and would impact the global climate by 3/1000th of one degree Celsius by 2100. California and other states stated their intent to challenge federal actions that would

delay or eliminate GHG reduction measures, and committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the USEPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission-vehicle mandates in California. On March 31, 2020, the USEPA and NHTSA issued the Part Two Rule, which sets CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, an Executive Order (EO) was issued on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of the Part One Rule by April 2021 and review of the Part Two Rule by July 2021. In response to the Part One Rule, in December 2021, the U.S. Department of Transportation withdrew its portions of the "SAFE I" rule. As a result, states are now allowed to issue their own GHG emissions standards and zero-emissions vehicle mandates.[31] In addition, the Part Two Rule was adopted to revise the existing national GHG emission standards for passenger cars and light trucks through model year 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and will result in avoiding more than three billion tons of GHG emissions through 2050.[32]

Federal Regulations Related to Energy

The following are the federal regulations relevant to energy.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act was originally enacted in 1975 with the intention of ensuring that all vehicles sold in the U.S. meet established fuel economy standards. Following congressional establishment of the original set of fuel economy standards the U.S. Department of Transportation was tasked with establishing additional on-road vehicle standards and making revisions to standards as necessary. Compliance with established standards is based on manufacturer fleet average fuel economy, which originally applied to both passenger cars and light trucks but did not apply to heavy-duty vehicles exceeding 8,500 pounds in gross vehicle weight. The fuel economy program implemented under the Energy Policy and Conservation Act is known as the Corporate Average Fuel Economy (CAFE) Standards. Updates to the CAFE standards since original implementation have increased fuel economy requirements and begun regulation of medium- and heavy-duty vehicles.

Energy Policy Act of 2005

The Energy Policy Act of 2005 addressed energy production in the U.S. from various sources. In particular, the Energy Policy Act of 2005 included tax credits, loans, and grants for the implementation of energy systems that would reduce GHG emissions related to energy production.

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31 National Highway Traffic Safety Administration. *In Removing Major Roadblock to State Action on Emissions Standards, U.S. Department of Transportation Advances Biden-Harris Administration's Climate and Jobs Goals.* Available at: https://www.nhtsa.gov/press-releases/cafe-preemption-final-rule. Accessed February 2025.

32 U.S. Environmental Protection Agency. *Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026*. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed February 2025.

State Regulations Related to Air Quality

The following discussion summarizes applicable State regulations related to air quality, organized by pollutant type. Only the most prominent and applicable California air quality-related legislation is included below; however, an exhaustive list and extensive details of California air quality legislation can be found at the CARB website (http://www.arb.ca.gov/html/lawsregs.htm).

Criteria Air Pollutants

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

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and do not violate the standards more than once each year. The CAAQS for ozone, CO, SO_2 (one-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 4.3-2.

Hazardous Air Pollutants/Toxic Air Contaminants

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner), and involved definition of a list of TACs. The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. The State list of TACs includes the federally-designated hazardous air pollutants. In 1987, the Legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hot spots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over five years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment (HRA), and, if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

CARB Air Quality and Land Use Handbook

CARB's Air Quality and Land Use Handbook: A Community Health Perspective (CARB Handbook) addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities.[33] The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (I-405 and I-710), the San Francisco Bay, and

[33] California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.

San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day".[34]

Importantly, the Introduction chapter of the CARB Handbook clarifies that the guidelines are strictly advisory, recognizing that: "[l]and use decisions are a local government responsibility. The Air Resources Board Handbook is advisory and these recommendations do not establish regulatory standards of any kind." CARB recognizes that there may be land use objectives as well as meteorological and other site-specific conditions that need to be considered by a governmental jurisdiction relative to the general recommended setbacks, specifically stating, "[t]hese recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues".[35]

Diesel Particulate Matter

In 2000, CARB approved a comprehensive diesel risk reduction plan to reduce diesel emissions, including DPM, from new and existing diesel-fueled vehicles and engines. The regulation was anticipated to result in an 80 percent decrease in statewide diesel health risk by 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. The aforementioned regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures (ATCMs) exist that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

Heavy-Duty Diesel Truck and Bus Regulation

CARB adopted the final Heavy-Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce DPM and NO_X emissions from heavy-duty diesel vehicles. The rule requires nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an ATCM to limit idling of diesel-fueled commercial vehicles on December 12, 2013. The rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than five minutes at any location (13 CCR 2485).

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. Section 41700 also applies to sources of objectionable odors.

[34] California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
[35] *Ibid.*

Heavy-Duty Vehicle Idling Emission Reduction Program

On October 20, 2005, CARB approved a regulatory measure to reduce emissions of toxics and criteria pollutants by limiting idling of new and in-use sleeper berth equipped diesel trucks.[36] The regulation established new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. For example, the regulation requires 2008 and newer model year heavy-duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling, or optionally meet a stringent NO_X emission standard. The regulation also requires operators of both in-state and out-of-state registered sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California. Emission producing alternative technologies such as diesel-fueled auxiliary power systems and fuel-fired heaters are also required to meet emission performance requirements that ensure emissions do not exceed the emissions of a truck engine operating at idle.

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, CARB adopted a regulation to reduce DPM and NO_X emissions from in-use (existing), off-road, heavy-duty diesel vehicles in California.[37] Such vehicles are used in construction, mining, and industrial operations. The regulation is designed to reduce harmful emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements, imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The idling limits require operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to less than five minutes. The idling requirements are specified in Title 13 of the CCR. All fleets are currently prohibited from adding Tier 0, Tier 1, or Tier 2 vehicles to the fleet. In addition, starting January 1, 2024 fleets with a total horsepower over 2,501, excluding non-profit training centers, may not add any Tier 3 or Tier 4 Interim vehicles.[38]

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act

The California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act[39] is meant to help lead agencies pursue CEQA compliance and promote environmentally-just development for warehouse project proposals. The document provides information on feasible recommended best practices and mitigation measures to reduce air quality and GHG emissions impacts during both construction and operations.

State Regulations Related to GHG Emissions

The statewide GHG emissions regulatory framework is summarized below. The following text describes EOs, legislation, regulations, and other plans and policies that would directly or

[36] California Air Resources Board. *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*. Available at: https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling. Accessed February 2025.

[37] California Air Resources Board. *In-Use Off-Road Diesel Vehicle Regulation*. Available at: https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/about. Accessed February 2025.

[38] California Air Resources Board. *Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation.* August 23, 2023.

[39] California Department of Justice. *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act.* September 2022.

indirectly reduce GHG emissions and/or address climate change issues. The following discussion does not include an exhaustive list of applicable regulations; rather, only the most prominent and applicable California legislation related to GHG emissions and climate change is included below.

State Climate Change Targets

California has taken a number of actions to address climate change, including EOs, legislation, and CARB plans and requirements, which are summarized below.

Executive Order S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the State agencies for implementing the EO and for reporting on progress toward the targets. The EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

EO S-3-05 also directed the California Environmental Protection Agency (CalEPA) to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issues yearly GHG reduction report cards to track the progress of emission reduction strategies. Each report card documents the effectiveness of measures to reduce GHG in California, presents GHG emissions from State agencies' operations, and shows reductions that have occurred in the two years prior to publication.

Assembly Bill 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive, multi-year program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the State's long-range climate objectives. AB 32 also required that the CARB prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020. The CARB's Scoping Plan is described in further detail below.

Executive Order B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for an update to the CARB's Climate Change Scoping Plan: A Framework for Change (Scoping Plan) to express the 2030 target in terms of million metric tons (MMT) CO_2e. The CARB's Scoping Plan is discussed in further detail below. The EO also called for State agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

Senate Bill 32 and Assembly Bill 197

Senate Bill (SB) 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the State's climate policies. AB 197 also added two members of the Legislature to the Board as non-voting members; requires CARB to make available and update (at least annually via the CARB's website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code Section 38561[a]), and to update the Scoping Plan at least once every five years. In 2008, CARB approved the first Scoping Plan. The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives. The key elements of the Scoping Plan include the following:

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33 percent;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
5. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS) (17 CCR, Section 95480 et seq.); and
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15 percent from 2008 levels by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the State's GHG emission reduction priorities for the next five years and laid the groundwork to start the transition

to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuation of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent GWPs identified by the IPCC, from 427 MMT CO_2e to 431 MMT CO_2e.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40 percent below 1990 levels by 2030 to keep California on a trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as set forth in EO S-3-05. In summer 2016, the Legislature affirmed the importance of addressing climate change through passage of SB 32 (Pavley, Chapter 249, Statutes of 2016).

In December 2017, the Scoping Plan was once again updated. The 2017 Scoping Plan built upon the successful framework established in the initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies that would serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the State's climate change priorities to 2030 and beyond. For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15 percent reduction goal with a recommendation to aim for a communitywide goal of no more than six $MTCO_2e$ per capita by 2030, and no more than two $MTCO_2e$ per capita by 2050, which are consistent with the State's long-term goals. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through Climate Action Plans [CAPs]) and provided more information regarding tools to support those efforts. The 2017 Scoping Plan also recognized the CEQA streamlining provisions for project-level review where a legally adequate CAP exists.

When discussing project-level GHG emissions reduction actions and thresholds in the context of CEQA, the 2017 Scoping Plan stated that "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development" for project-level CEQA analysis, but also recognized that such a standard may not be appropriate or feasible for every development project. The 2017 Scoping Plan further provided that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

The most recent update to the Scoping Plan, the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan Update), was adopted by the CARB in December 2022.[40] The 2022 Scoping Plan Update builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. The 2022 Scoping Plan Update, the most comprehensive and far-reaching Scoping Plan developed to date, identifies a technologically feasible and cost-effective path to achieve carbon neutrality by 2045 while also assessing the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan. The 2030 target is an interim but important steppingstone along the critical path to the

[40] California Air Resources Board. *2022 Scoping Plan for Achieving Carbon Neutrality*. November 16, 2022.

broader goal of deep decarbonization by 2045. The relatively longer path assessed in the Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts to reduce GHGs and air pollution, while identifying new clean technologies and energy. Given the focus on carbon neutrality, the Scoping Plan also includes discussion for the first time of the Natural and Working Lands (NWL) sectors as both sources of emissions and carbon sinks.

The 2022 Scoping Plan Update lays out a path to achieve targets for carbon neutrality and reduce GHG emissions by 85 percent below 1990 levels by 2045, as directed by AB 1279. The actions and outcomes in the plan will achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

CARB's Regulations for the Mandatory Reporting of GHG Emissions

CARB's Regulation for the Mandatory Reporting of GHG Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that the USEPA promulgated in its Final Rule on Mandatory Reporting of GHGs (40 Code of Federal Regulations [CFR] Part 98). In general, entities subject to the Mandatory Reporting Regulation that emit more than 10,000 $MTCO_2e$ per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 $MTCO_2e$ per year threshold are required to have their GHG emission report verified by a CARB-accredited third party.

Senate Bill 1383

SB 1383 establishes specific targets for the reduction of short-lived climate pollutants (SLCPs) (40 percent below 2013 levels by 2030 for CH_4 and hydrofluorocarbons (HFCs), and 50 percent below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases.

Executive Order B-55-18/Assembly Bill 1279

EO B-55-18 (September 2018) establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal. On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18.

Mobile Sources

The following regulations relate to the control of GHG emissions from mobile sources. Mobile sources include both on-road vehicles and off-road equipment.

Assembly Bill 1493

AB 1493 (Pavley) (July 2002) was enacted in response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State

board to be vehicles that are primarily used for non-commercial personal transportation in the State. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards would result in a reduction of approximately 22 percent of GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards would result in a reduction of approximately 30 percent.

Senate Bill 375

SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every eight years. SB 375 requires the State's 18 regional metropolitan planning organizations to prepare a sustainable communities strategy as part of their Regional Transportation Plans that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise a sustainable communities strategy to achieve the GHG reduction target, the metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not (1) regulate the use of land, (2) supersede the land use authority of cities and counties, or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with the sustainable community strategy. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the State-mandated housing element process.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. By 2025, implementation of the rule is anticipated to reduce emissions of smog-forming pollution from cars by 75 percent compared to the average new car sold in 2015. To reduce GHG emissions, CARB, in conjunction with the USEPA and NHTSA, adopted GHG standards for model year 2017 to 2025 vehicles; the standards were estimated to reduce GHG emissions by 34 percent by 2025. The zero-emissions vehicle program acts as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles (EVs) in the 2018 to 2025 model years.

In late April to early May, the U.S. House of Representatives passed three Congressional Review Act (CRA) resolutions to rescind the USEPA's waiver for the Advanced Clean Cars II Program. The Senate passed all three resolutions on May 22, 2025, and President Donald Trump signed the CRA resolutions on June 12, 2025. Subsequently, a lawsuit has been filed by the State Attorney General on June 12, 2025, against the federal government's use of the CRA to upend

California's clean vehicles program.[41] As such, the future enforceability of the Advanced Clean Cars II Program is currently unknown.

Executive Order B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, CEC, California Public Utilities Commission (CPUC), and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

Assembly Bill 1236

AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric-vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and a feasible method to satisfactorily mitigate or avoid the specific, adverse impact does not exist. The bill provided for appeal of that decision to the planning commission, as specified. AB 1236 required electric-vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric-vehicle charging stations. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt the ordinance by September 30, 2017.

Water

The following regulations relate to the conservation of water, which reduces GHG emissions related to electricity demands from the treatment and transportation of water.

Executive Order B-29-15

In response to a drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives subsequently became permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the State. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance (MWELO) that, among other changes, significantly increases the requirements for landscape water use efficiency, and broadens the applicability of the ordinance to include new development projects with smaller landscape areas.

[41] State of California Department of Justice. *California Will Not Waver in Defending Itself from Federal Overreach: Attorney General Bonta Sues Trump Administration for Attack on California's Clean Vehicles Program.* Available at: https://oag.ca.gov/news/press-releases/california-will-not-waver-defending-itself-federal-overreach-attorney-general. Accessed June 12, 2025.

Solid Waste

The following regulations relate to the generation of solid waste and means to reduce GHG emissions from solid waste produced within the State.

Assembly Bill 939 and Assembly Bill 341

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code [PRC] Sections 40000 et seq.), was passed because of the observed increase in waste stream and the decrease in landfill capacity.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that the policy goal of the State is that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the State's policy goal.

Other State Actions

The following State regulations are broadly related to GHG emissions.

Senate Bill 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research (OPR) to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's OPR issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities. The advisory further recommended that the lead agency determine the significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural Resource Agency (CNRA) adopted the CEQA Guidelines amendments in December 2009, and the amended CEQA Guidelines became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis, or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply the lead agency's own thresholds of significance or those developed by other agencies or experts. CNRA acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions.

With respect to GHG emissions, the CEQA Guidelines state that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions (14 CCR 15064.4[a]). The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance-based standards" (14 CCR 15064.4[a]).



Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

Executive Order S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs State agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, Safeguarding California: Reducing Climate Risk, followed in July 2014. To assess the State's vulnerability, the report summarizes key climate change impacts to the State for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the Safeguarding California: Implementation Action Plans followed in March 2016. In January 2018, the CNRA released the Safeguarding California Plan: 2018 Update, which communicates current and needed actions that the State government should take to build climate change resiliency.

State Regulations Related to Energy

The primary State regulatory agencies governing energy consumption are the CEC and the CPUC.

The CEC, created by the Legislature in 1974, has seven major responsibilities: forecasting future energy needs; promoting energy efficiency and conservation by setting the State's appliance and building energy efficiency standards; supporting energy research that advances energy science and technology through research, development, and demonstration projects; developing renewable energy resources; advancing alternative and renewable transportation fuels and technologies; certifying thermal power plants 50 MW and larger; and planning for and directing State response to energy emergencies.[42]

The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC is responsible for ensuring that customers have safe, reliable utility service and infrastructure at reasonable rates, regulating utility services, stimulating innovation, and promoting competitive markets.[43]

The State has adopted various regulations aimed at reducing energy consumption, increasing energy efficiency, and mandating sourcing requirements for electricity production. The following regulations are applicable to the proposed project.

Building Energy

The following regulations relate to energy efficiency and energy use reductions in the built environment.

[42] California Energy Commission. *About the California Energy Commission*. Available at: http://www.energy.ca.gov/about. Accessed February 2025.

[43] California Public Utilities Commission. *About the California Public Utilities Commission*. Available at: https://www.cpuc.ca.gov/about-cpuc/cpuc-overview/about-us. Accessed February 2025.

Title 24, Part 6

Title 24 of the CCR, which is known as the California Building Standards Code (CBSC), was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed periodically, and revised if necessary, by the Building Standards Commission and CEC ([PRC Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). The regulations are scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, the standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2022 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2023. Compliance with the 2022 Title 24 Building Energy Efficiency Standards will reduce energy use and associated GHG emissions compared to structures built in compliance with the previous 2019 Title 24 standards. The 2022 Title 24 standards focus on four key areas in newly constructed homes and businesses:[44]

- Encouraging electric heat pump technology for space and water heating, which consumes less energy and produces fewer emissions than gas-powered units.
- Establishing electric-ready requirements for single-family homes to position owners to use cleaner electric heating, cooking and EV charging options whenever they choose to adopt those technologies.
- Expanding solar PV system and battery storage standards to make clean energy available onsite and complement the State's progress toward a 100 percent clean electricity grid.
- Strengthening ventilation standards to improve indoor air quality.

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as the CALGreen Code, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and State-owned buildings and schools and hospitals. The original CALGreen standards have been updated several times. The CALGreen 2022 standards, which are the current standards, improved upon the 2019 CALGreen standards, and went into effect on January 1, 2023. The mandatory standards require the following:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;

[44] California Energy Commission. *Energy Commission Adopts Updated Building Standards to Improve Efficiency, Reduce Emissions From Homes and Businesses.* August 11, 2021.

- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' (DWR's) MWELO;
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of EV charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. According to Section A4.602 of Appendix A4 of the CALGreen Code, CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

Title 20

Title 20 of the CCR requires manufacturers of appliances to meet State and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and State standards for federally regulated appliances, State standards for federally regulated appliances, and State standards for non-federally regulated appliances.

Climate Change Scoping Plan

Expanding and strengthening existing energy efficiency programs as well as building and appliance standards is the key element of the Scoping Plan, as introduced above, related to building energy.

Transportation/Fuel Energy

The following regulations relate to fuel efficiency and energy use reductions in the transportation and motorized vehicle sector.

Assembly Bill 1493

In 2002 California adopted AB 1493, also known as the Pavley I standards, which required new passenger vehicles with model years 2009 to 2016 to meet more stringent fuel efficiency standards. Additional laws have extended these rules to cover vehicles from future model years.

Executive Order S-1-07

EO S-1-07, otherwise known as the LCFS, was adopted in 2009 and requires transportation fuels such as gasoline and diesel sold within the state to be less carbon intensive. These policies reduce emissions from on-road transportation and off-road equipment use in San Joaquin County.

Executive Order B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed CARB, CEC, CPUC, and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

Assembly Bill 1346

AB 1346 (October 2021) prohibits non-electric small off-road engines. Small off-road engines, which are used primarily in lawn and garden equipment, emit high levels of air pollutants and, in 2020, California daily criteria pollutant emissions from small off-road engines were higher than emissions from light-duty passenger cars. Thus, by January 1, 2024, regulations shall prohibit engine exhaust and evaporative emissions from new small off-road engines.

Senate Bill 500

SB 500 (September 2021) requires that, beginning January 1, 2030, to the extent allowed by federal law, any autonomous vehicle that is model year 2031 or later, has a gross vehicle weight rating of less than 8,501 pounds, and is equipped with Level 3, 4, or 5 automation (as defined by the International Society of Automotive Engineers) to be a zero-emission vehicle to be operated on California public roads.

Climate Change Scoping Plan

The key elements of the Scoping Plan, as introduced above, related to transportation energy include the following:

1. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets; and
2. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the LCFS (17 CCR, Section 95480 et seq.).

Renewable Energy and Energy Procurement

The following regulation relates to the source of electricity provided to consumers within the State, as well as standards related to the generation of electricity within the State.

Renewable Portfolio Standard (RPS), Senate Bill 350, and Senate Bill 100

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Since the inception of the RPS program, the program has been extended and enhanced multiple times. In 2015, SB 350 extended the State's RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. The requirements of SB 350 were expanded and intensified in 2018 through the adoption of SB 100, which mandated that all electricity generated within the State by publicly owned utilities be generated through carbon-free sources by 2045. In addition, SB 100 increased the previous renewable energy requirement for the year 2030 by 10 percent; thus, requiring that 60 percent of electricity generated by publicly owned utilities originate from renewable sources by the year 2030.

Local Regulations

The most prominent local regulations related to air quality, GHG emissions, and energy are established by the SJVAPCD and the San Joaquin County General Plan, and are discussed in further detail below.

San Joaquin Valley Air Pollution Control District

The SJVAPCD was formed to administer local, State, and federal air quality management programs for San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, and Tulare counties, and the Valley portion of Kern County. The SJVAPCD monitors, evaluates, and implements control measures for enforcing air quality and GHG standards and regulations and reducing emissions from motor vehicles. The SJVAPCD is tasked with implementing certain programs and regulations required by the FCAA and the CCAA.

To assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific air quality and GHG emissions, the SJVAPCD has prepared a number of guidelines, including the Environmental Review Guidelines Procedures for Implementing the California Environmental Quality Act,[45] and the Guidance for Assessing and Mitigating Air Quality Impacts.[46] As set forth in the SJVAPCD guidelines, the SJVAPCD has adopted thresholds of significance for criteria pollutant emissions.

In August 2008, the SJVAPCD adopted the *Climate Change Action Plan* (CCAP). The CCAP directed the District Air Pollution Control Officer to develop guidance to assist lead agencies, project proponents, permit applicants, and interested parties in assessing and reducing the impacts of project-specific GHG emissions on global climate change. Accordingly, on December 17, 2009, the SJVAPCD adopted the Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA (GHG Guidelines)[47] and the District Policy Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving

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45 San Joaquin Valley Air Pollution Control District. *Environmental Review Guidelines Procedures for Implementing the California Environmental Quality Act*. August 2000.

46 San Joaquin County Air Pollution Control District. *Guidance for Assessing and Mitigating Air Quailty Impacts.* March 19, 2015.

47 San Joaquin Valley Air Pollution Control District. *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA*. December 17, 2009.

as the Lead Agency.[48] The SJVAPCD GHG Guidelines use a tiered approach to assess cumulative impacts on global climate change:

- Evaluate whether or not the project qualifies for any applicable exemption under CEQA.
- Determine whether or not the project is consistent with a GHG reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located.
- Determine whether the project would implement performance based standards, otherwise known as Best Performance Standards (BPS), to assess significance of project-specific GHG emissions on global climate change during the environmental review process, as required by CEQA.
- Use of BPS is a method of streamlining the CEQA process of determining significance and is not a required emission reduction measure. Projects implementing BPS would be determined to have a less-than-cumulatively-significant impact.
- Otherwise, demonstrate that a project's emissions would be reduced or mitigated consistent with AB 32 would be required in order to determine that a project would have a less-than-cumulatively-significant impact.

Since the release of SJVAPCD's GHG Guidelines, later regulations (SB 32, AB 1279, etc.) have extended and further reduced the statewide GHG reduction goals beyond AB 32. It should be noted that the guidance does not limit a lead agency's authority in establishing its own process and guidance for determining significance of project-related impacts on global climate change.

Attainment Plans

Due to the nonattainment designations, the SJVAPCD has developed plans to attain the State and federal standards for ozone and particulate matter. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution will be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area will meet air quality goals. Each of the attainment plans currently in effect are discussed in further detail below.

8-Hour Ozone Plan

In June 2016, SJVAPCD adopted the 2016 Plan for the 2008 8-hour Ozone Standard. Through the comprehensive stationary and mobile source control strategies that previously have been adopted and that are now proposed in the 2016 Plan, NO_X emissions in the SJVAB are expected to be reduced by over 60 percent between 2012 and 2031. As a result, the ambient ozone concentrations are projected to decrease dramatically in all areas of the Valley, such that future 8-hour ozone concentrations are expected to demonstrate attainment.

$PM_{2.5}$ Plan

In November 2018, SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards (2018 $PM_{2.5}$ Plan). The 2018 $PM_{2.5}$ Plan addresses the USEPA federal 1997 annual $PM_{2.5}$ standard and 24-hour $PM_{2.5}$ standard; the 2006 24-hour $PM_{2.5}$ standard; and the 2012 annual $PM_{2.5}$ standard. In the report, SJVAPCD included mobile source measures and a comprehensive suite of fiscally responsible local measures for stationary and area sources, including measures to further reduce emissions from industrial sources, residential wood-burning, and commercial charbroiling.

[48] San Joaquin Valley Air Pollution Control District. *District Policy Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. December 17, 2009.

Rules and Regulations

All projects under the jurisdiction of the SJVAPCD are required to comply with all applicable SJVAPCD rules and regulations. The SJVAPCD's regulations and rules include, but are not limited to, the following:

Regulation II (Permits)

Regulation II (Permits) deals with permitting emission sources and includes rules such as permit requirements (Rule 2010), New and Modified Stationary Source Review (Rule 2201), and implementation of Emission Reduction Credit Banking (Rule 2301). District Regulation II ensures that stationary source emissions will be reduced or mitigated to below the District's significance thresholds.

Regulation IV (Prohibitions)

District Regulation IV (Prohibitions) is comprised of prohibitory rules that are written to achieve emission reductions from specific source categories or from all sources. The rules are applicable to existing sources (retrofit requirements) as well as new sources. Examples of prohibitory rules would be Rule 4102 (Nuisance), Rule 4601 (Architectural Coatings), Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations), and Rule 4663 (Organic Solvent Cleaning, Storage, and Disposal).

Regulation VIII (Fugitive PM_{10} Prohibition)

The purpose of Regulation VIII is to reduce ambient concentrations of PM_{10} by requiring actions to prevent, reduce, or mitigate anthropogenic fugitive dust emissions. Regulation VIII requires property owners, contractors, developers, equipment operators, farmers and public agencies to control fugitive dust emissions from specified outdoor fugitive dust sources, including the following: construction sites; excavation and earthmoving; bulk material handling, storage and transport; vacant land; paved and unpaved roads; and unpaved vehicle traffic areas. Regulation VIII specifies the following measures to control fugitive dust:

- Apply water to unpaved surfaces and areas;
- Use non-toxic chemical or organic dust suppressants on unpaved roads and traffic areas;
- Limit or reduce vehicle speed on unpaved roads and traffic areas;
- Maintain areas in a stabilized condition by restricting vehicle access;
- Install wind barriers;
- During high winds, cease outdoor activities that disturb the soil;
- Keep bulk materials sufficiently wet when handling;
- Store and handle materials in a three-sided structure;
- When storing bulk materials, apply water to the surface or cover the storage pile with a tarp;
- Don't overload haul trucks. Overloaded trucks are likely to spill bulk materials;
- Cover haul trucks with a tarp or other suitable cover. Or, wet the top of the load enough to limit visible dust emissions;
- Clean the interior of cargo compartments on emptied haul trucks prior to leaving a site;
- Prevent trackout by installing a trackout control device;
- Clean up trackout at least once a day. If along a busy road or highway, clean up trackout immediately; and
- Monitor dust-generating activities and implement appropriate measures for maximum dust control.

For projects in which construction-related activities would disturb equal to or greater than one acre of surface area, the SJVAPCD recommends that demonstration of receipt of a District-approved Dust Control Plan or Construction Notification form, prior to issuance of the first grading permit, be made a condition of project approval.

It should be noted that although compliance with Regulation VIII substantially reduces project-specific fugitive dust emissions, the regulation alone may not be sufficient to reduce project-specific emissions to less-than-significant levels.

Rule 3135: Dust Control Plan Fee

Rule 3135 requires the applicant to submit a fee in addition to a Dust Control Plan. The purpose of the fee is to recover the SJVAPCD's cost for reviewing the Dust Control Plans and conducting compliance inspections.

Rule 4101: Visible Emissions

Rule 4101 applies to any source operation that emits or may emit air contaminants. The purpose of Rule 4101 is to prohibit the emissions of visible air contaminants to the atmosphere.

Rule 4102: Nuisance

Rule 4102 applies to any source operation that emits or may emit air contaminants or other materials. In the event that a project or construction of a project creates a public nuisance, the project could be in violation and be subject to SJVAPCD enforcement action.

Rule 4601: Architectural Coating

Rule 4601 limits VOC content in architectural coatings. Rule 4601 also contains requirements for architectural coatings storage, clean up, and labeling.

Rule 4622: Gasoline Transfer into Motor Vehicle Fuel Tanks

Rule 4622 applies to any gasoline storage and dispensing operation or mobile fueler from which gasoline is transferred into motor vehicle fuel tanks. The purpose of Rule 4622 is to limit emissions to gasoline vapors.

Rule 4641: Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations

Rule 4641 applies to the manufacturing and use of cutback asphalt, slow cure asphalt, and emulsified asphalt for paving and maintenance operations. Asphalt paving operations associated with the proposed project will be subject to Rule 4641.

Rule 9410: Employer Based Trip Reduction

SJVAPCD Rule 9410 requires major employers (with 100 or more employees) in the region to develop and implement transportation demand management (TDM) strategies. Adopted in 2009, the Employer Trip Reduction Implementation Plan (eTRIP) encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. These strategies can include employee shuttles, staggered work hours, telecommuting options, transit subsidies, carpool/vanpool programs, and many other strategies.

Rule 9510 (Indirect Source Review)

Rule 9510 (Indirect Source Review [ISR]) is intended to reduce a project's impact on air quality through project design elements or mitigation by payments of applicable off-site mitigation fees. The ISR rule, which went into effect March 1, 2006, requires developers of larger residential, commercial, and industrial projects to reduce smog-forming and particulate emissions generated by their projects. The ISR rule seeks to reduce the growth in NO_X and PM_{10} emissions associated with construction and operation of new development projects in the San Joaquin Valley. The ISR rule requires developers to reduce construction exhaust NO_X and PM_{10} emissions by 20 percent and 45 percent, respectively, and reduce operational emissions of NO_X and PM_{10} emissions by 33.3 percent and 50 percent, respectively, as compared to the unmitigated baseline. Developers can achieve the required reductions through any combination of SJVAPCD-approved on-site emission reduction measures. When a developer cannot achieve the required reductions through on-site measures, off-site mitigation fees are imposed to mitigate the difference between the required emission reductions and the mitigations achieved on-site. Monies collected from the fee are used by the SJVAPCD to fund emission reduction projects in the San Joaquin Valley on behalf of the project.

Individual development projects would be subject to ISR requirements if upon full buildout the project would include or exceed the size limits specified by the SJVAPCD, even if emissions generated by the project do not exceed the SJVAPCD's thresholds of significance. For a commercial/industrial development, the size limit is 2,000 square feet (sf) for a development project and 10,000 sf for a large development project. For projects subject to Rule 9510, the SJVAPCD recommends that demonstration of compliance with the rule, including payment of all applicable fees before issuance of the first building permit, be made a condition of project approval.

It should be noted that although compliance with Rule 9510 substantially reduces project specific impacts on air quality, the rule alone may not be sufficient to reduce project-specific emissions to less-than-significant levels.

Voluntary Emissions Reduction Agreement

A Voluntary Emissions Reduction Agreement (VERA) is a clean air measure by which the project proponent provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects. To implement a VERA, the project proponent and the SJVAPCD enter into a contractual agreement in which the project proponent agrees to mitigate project-specific emissions by providing funds for the SJVAPCD's incentives programs. Types of emission reduction projects that have been funded by project proponents and implemented by SJVAPCD in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old Heavy Heavy-Duty (HHD) trucks with new, cleaner, more efficient HHD trucks, and replacement of old farm tractors at sites throughout the SJVAPCD region. A VERA can be implemented to address air quality impacts under CEQA, from both construction and operational phases of a project.

San Joaquin County General Plan

The San Joaquin County General Plan identifies the following goals and policies related to air quality, GHG emissions, and energy.

Land Use Element

Policy LU-1.1 **Compact Growth and Development.** The County shall discourage urban sprawl and promote compact development patterns, mixed-use development, and higher-development intensities that conserve agricultural land resources, protect habitat, support transit, reduce vehicle trips, improve air quality, make efficient use of existing infrastructure, encourage healthful, active living, conserve energy and water, and diversify San Joaquin County's housing stock

Policy LU-1.6 **New Employment-Generating Uses.** The County shall direct new employment-generating uses to locate within Urban and Rural Communities and City Fringe Areas, at freeway interchanges, and in other areas designated for commercial or industrial development. The County may allow employment-generating uses in other unincorporated areas when development proposals demonstrate that the project will not conflict with adjacent uses and will provide: jobs to County residents; adequate infrastructure and services (i.e., water, sewer, drainage, and transportation); and positive tax benefits to the County.

Policy LU-1.8 **Support for Alternative Transportation Modes.** The County shall encourage land use patterns that promote walking and bicycling and the use of public transit as alternatives to the personal automobile.

Policy LU-2.2 **Sustainable Building Practices.** The County shall promote and, where appropriate, require sustainable building practices that incorporate a “whole system” approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.

Policy LU-3.11 **Solar Access.** The County shall encourage new residential subdivisions and new commercial, office, industrial, and public buildings to be oriented and landscaped to enhance natural lighting and solar access in order to maximize energy efficiency.

Policy LU-5.22 **Mixed-Use Development.** The County shall require new mixed-use developments to be developed under a single plan that details the full buildout of the development and any associated phasing for construction and includes specific design guidelines and standards that address the overall site design, scale of development, relationship to adjacent uses, circulation and parking, architecture, infrastructure, and landscaping.

Policy LU-6.8 **Sustainable Technologies.** The County shall encourage all employment and industrial projects to incorporate sustainable technologies including energy and water efficient practices.

Economic Development Element

Policy ED-2.4 **Green Economy.** The County shall encourage the development and expansion of industries and businesses that rely on environmentally-sustainable products and services, such as renewable energy, green building, clean transportation, water conservation, waste management and recycling, and sustainable land management.

Transportation and Mobility Element

Policy TM-6.7 **Bicyclist Amenities.** The County shall encourage new large employers to provide bicycle racks.

Policy TM-7.2 **Critical Facilities Access.** The County shall require new development to provide adequate access to facilities critical to goods movement, including railroad yards, intermodal facilities, the Port of Stockton, the Stockton Metropolitan Airport, and Interstate highways.

Infrastructure and Services Element

Policy IS-4.18 **Graywater and Rainwater Systems.** The County shall encourage homeowners, businesses, and developers to install graywater systems and rainwater harvest systems, consistent with local and State guidelines, regulations, and standards, in order to reduce consumption of potable water.

Policy IS-4.19 **Water Efficient Landscaping.** The County shall encourage water efficient landscaping and use of native, drought-tolerant plants consistent with the Model Landscape Ordinance.

Public Health and Safety Element

Goal PHS-5 To protect public health, agricultural crops, scenic resources, and the built and natural environments from air pollution.

Policy PHS-5.4 **Innovative Mitigation Measures.** The County shall encourage innovative mitigation measures and project redesign to reduce air quality impacts by coordinating with the SJVAPCD, project applicants, and other interested parties.

Policy PHS-5.7 **TAC Exposure Reduction Measures for New Development.** The County shall require new development projects to implement all applicable best management practices that will reduce exposure of sensitive receptors (e.g., hospitals, schools, daycare facilities, elderly housing and convalescent facilities) to toxic air contaminants.

Policy PHS-5.11 **Paving Materials.** The County shall require all access roads, driveways, and parking areas serving new commercial and industrial development to be constructed with materials that minimize particulate emissions and are appropriate to the scale and intensity of use.

Policy PHS-5.13 **Industrial Best Management Practices.** The County shall require industrial facilities to incorporate economically feasible Best Management Practices and control technology to reduce PM_{10} and $PM_{2.5}$ emissions consistent with State and Federal regulations.

Policy PHS-5.14 **Energy Consumption Reduction.** The County shall encourage new development to incorporate green building practices and reduce air quality impacts from energy consumption.

Policy PHS-5.15 **Construction Emissions**. The County shall require that new development projects incorporate feasible measures to reduce emissions from construction, grading, excavation, and demolition activities to avoid, minimize, and/or offset their impacts consistent with San Joaquin Valley Air Pollution Control District requirements. (MMRP)

Policy PHS-5.16 **Operational Emissions**. The County shall require that new development projects incorporate feasible measures that reduce operational emissions through project and site design and use of best management practices to avoid, minimize, and/or offset their impacts consistent with San Joaquin Valley Air Pollution Control District requirements. (MMRP)

Policy PHS-5.18 **Health Risk Evaluation**. Prior to project approval, the County shall evaluate health risks when proposed developments would result in new sensitive receptors near existing sources of substantial toxic air contaminants (TACs) or the development of sources of substantial toxic air contaminants near existing sensitive receptors. Evaluation would be based on consideration of the California Air Resource's Board Air Quality and Land Use Handbook: A Community Health Perspective distance recommendations between sources and receptors. If the project would not meet the distance recommendations between sources and receptors, the County shall require the applicant to ensure TAC impacts would be below the carcinogenic threshold (i.e., probability of contracting cancer for the Maximally Exposed Individual would be less than 10 in one million) and below the non-carcinogenic threshold (i.e., result in a Hazard Index less than 1 for the Maximally Exposed Individual). In addition, several measures to reduce potential risk from commercial or industrial land uses that would be considered include:

- Proposed commercial or industrial land uses that have the potential to emit toxic air contaminants (such as loading docks for diesel delivery trucks) would be located as far away as possible from existing and proposed sensitive receptors.
- Signs would be posted at all loading docks and truck loading areas which indicate that diesel-powered delivery trucks must be shut off when not in use for longer than 5 minutes on the premises in order to reduce idling emissions.
- Proposed commercial and industrial land uses that have the potential to host diesel trucks would incorporate idle reduction strategies that reduce the main propulsion engine idling time through alternative technologies such as, IdleAire, electrification of truck parking, and alternative energy sources for transport refrigeration units to allow diesel engines to be completely turned off. (MMRP)

Goal PHS-6 To reduce greenhouse gas emissions as part of the Statewide effort to combat climate change.

Policy PHS-6.3 **GHG Reduction Strategies.** The County shall promote greenhouse gas emission reductions by encouraging efficient farming methods (e.g., no-till farming, crop rotation, cover cropping); supporting the installation of renewable energy technologies; and protecting grasslands, open space, oak woodlands, riparian forest and farmlands from conversion to urban uses.

Policy PHS-6.6 **Business-related GHG Reduction Strategies.** The County shall encourage all businesses to help reduce GHG emissions by: replacing high mileage fleet vehicles with more efficient and/or alternative fuel vehicles; increasing the energy efficiency of facilities; transitioning toward the use of renewable energy instead of non-renewable energy sources; adopting purchasing practices that promote emissions reductions and reusable materials; and increasing recycling.

Policy PHS-6.7 **New Development.** The County shall require new development to incorporate all feasible mitigation measures to reduce construction and operational GHG emissions.

Policy PHS-6.9 **Public Awareness.** The County shall support public awareness about climate change and encourage County residents and businesses to become involved in activities and lifestyle changes that will aid in reduction of greenhouse gas emissions through alternative energy use, energy and water conservation, waste reduction and recycling, and other sustainable practices.

Natural and Cultural Resources Element

Policy NCR-3.5 **Low Impact Development.** The County shall require new development to minimize or eliminate stormwater quality and hydro-modification impacts through site design, source controls, runoff reduction measures, best management practices (BMPs), and Low Impact Development (LID).

Goal NCR-5 To increase energy independence through the use of renewable energy sources and improved energy conservation and efficiency.

Policy NCR-5.1 **Nonrenewable Energy and Energy Efficiency.** The County shall support the efforts of residents, businesses, and energy providers to reduce the consumption of nonrenewable energy and shall promote energy providers' programs to increase energy efficiency and implement demand response programs.

Policy NCR-5.2 **Alternative Energy.** The County shall encourage residents, businesses, and energy providers to develop and use alternative, renewable energy sources, including but not limited to, biomass, solar, wind, and geothermal.

Policy NCR-5.9 **Shaded Parking Lots.** The County shall require parking lots to be shaded in the summertime but allow winter solar access to adjacent buildings and sidewalks.

Policy NCR-5.11 **Green Building Practices.** The County shall encourage green building practices in new construction.

Policy NCR-5.12 **Energy Efficient Industry.** The County shall support energy efficiency of industrial processes.

Policy NCR-5.13 **Solar Heating in Industrial Operations.** The County shall encourage Industrial operations that require large amounts of hot water to incorporate active solar systems in the design of buildings.

Policy NCR-5.14 **Natural Daylighting in Commercial Operations.** The County shall encourage commercial and employment operations to incorporate natural daylighting by the use of windows and skylights to reduce energy demand for lighting.

San Joaquin Council of Governments 2022 Regional Transportation Plan and Sustainable Communities Strategy

The San Joaquin Council of Governments (SJCOG) is comprised of the County of San Joaquin and the cities of Stockton, Lodi, Manteca, Tracy, Ripon, Escalon and Lathrop. SJCOG serves as the regional transportation planning agency and a technical and informational resource for these jurisdictions. In August 2022, the SJCOG Board voted to adopt the 2022 Regional Transportation Plan/Sustainable Communities Plan (RTP/SCS), which serves as the region's long-range

transportation plan and provides guidance for decisions about transportation spending priorities through 2046. The RTP/SCS is intended to help the County achieve the goals of SB 375 and convey the region's statement of priorities for future transportation systems.

4.3.4 IMPACTS AND MITIGATION MEASURES

The standards of significance and methodology used to analyze and determine the potential impacts related to air quality, GHG emissions, and energy are described below. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact related to air quality, GHG emissions, or energy would occur if the proposed project would result in any of the following:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard;
- Expose sensitive receptors to substantial pollutant concentrations;
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs;
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
- Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Pursuant to CEQA Guidelines Section 15064.4(b)(2), the lead agency is charged with determining a threshold of significance that is applicable to the project. For the analysis within this EIR, the County has elected to use the SJVAPCD's thresholds of significance, as applicable, as well as consistency with various plans, policies and regulations adopted for the purpose of reducing the emissions of GHGs. The analysis in this EIR uses the thresholds for criteria pollutants, localized CO, TAC emissions, and GHG emissions, as discussed below.

Criteria Pollutant Emissions

The SJVAPCD thresholds of significance for criteria pollutant emissions are presented in Table 4.3-6 and are expressed in units of tons per year (tons/yr). If the proposed project's emissions exceed the SJVAPCD's pollutant thresholds presented in Table 4.3-6, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan or result in a cumulatively considerable net increase of a criteria pollutant for which the project region is under nonattainment.

Table 4.3-6
SJVAPCD Criteria Pollutant Thresholds of Significance

Pollutant	Construction Emissions (tons/yr)	Operational Emissions (tons/yr)
ROG	10	10
NO_X	10	10
CO	100	100
SO_X	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

Source: SJVAPCD, March 19, 2015.

In addition, the SJVAPCD includes screening-level thresholds, expressed in pounds per day (lbs/day), that can be used to evaluate whether project-related emissions would cause a significant impact on air quality. When assessing the significance of project-related impacts on air quality, impacts may be significant when on-site emission increases from construction activities or operational activities exceed the 100 lbs/day screening-level of any criteria pollutant after implementation of all enforceable mitigation measures. Under such circumstances, SJVAPCD recommends that an ambient air quality analysis be performed. In the event that emissions exceed the daily thresholds, modeling would be required to demonstrate that the project's total air quality impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels. The analysis included herein estimates the maximum daily construction and operational mass emissions related to the Initial Phase of the proposed project against the daily significance screening thresholds. Specific Plan Buildout is estimated to be complete following a projected 30-year construction period, as discussed in the Method of Analysis section below, which may be subject to change based on market demand and speed at which each subsequent phase of the project is constructed. Due to the uncertainty of the construction schedule and intensity of construction activities, only the Initial Phase has been assessed against the daily significance screening thresholds. Construction and operational impacts for the subsequent phases would be assessed against the daily significance screening thresholds at the time of application when project-specific details are better understood.

The SJVAPCD does not maintain specific thresholds of significance for determining whether a project's impact would be cumulatively considerable; however, the guidance notes that if a project is significant based on the thresholds of significance for criteria pollutants, then it is also cumulatively significant.[49]

Ascertaining cancer risk, or similar measurements of health effects from air pollutants, is very difficult for regional pollutants such as the ozone precursors ROG and NO_X. This challenge was addressed in Sierra Club v. County of Fresno (2018) 6 Cal.5th 502, 510, 517-522. In that case, the California Supreme Court held generally that an EIR should "make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences." A possible example of such a connection would be to calculate a project's "impact on the days of nonattainment per year." But the court recognized that there might be scientific limitations on an agency's ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies. Thus, the court acknowledged that another option for an agency preparing an EIR might be "to explain why it was

[49] San Joaquin Valley Air Pollution Control District. *Guidance for Assessing and Mitigating Air Quality Impacts* [pg 109]. March 19, 2015.

not feasible to provide an analysis that connected the air quality effects to human health consequences."

Here, the SJVAPCD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of emissions in San Joaquin County. At present, SJVAPCD has not provided any methodology to assist local governments in reasonably and accurately assessing the specific connection between mass emissions of ozone precursors (e.g., ROG and NO_X) and other pollutants of concern on a regional basis and any specific effects on public health or regional air quality concentrations that might result from such mass emissions. Ozone concentrations, for instance, depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. To achieve the health-based standards established by the EPA, the air districts prepare air quality management plans that detail regional programs to attain the AAQS. However, if a project within SJVAPCD exceeds the regional significance thresholds, the proposed project could contribute to an increase in health effects in the basin until the attainment standards are met in the SJVAB.

Notably, during the litigation process that led to the California Supreme Court decision in Sierra Club v. County of Fresno, the SJVAPCD submitted an amicus curiae brief that provided scientific context and expert opinion regarding the feasibility of performing regional dispersion modeling for ozone. In the brief, SJVAPCD states that "CEQA does not require an EIR to correlate a project's air quality emissions to specific health impacts, because such an analysis is not reasonably feasible." As SJVAPCD explains:

> Attainment of a particular NAAQS occurs when the concentration of the relevant pollutant remains below a set threshold on a consistent basis throughout a particular region. For example, the San Joaquin Valley attained the 1-hour ozone NAAQS when ozone concentrations remained at or below 0.124 parts per million Valley-wide on 3 or fewer days over a 3-year period. Because the NAAQS are focused on achieving a particular concentration of pollution region-wide, the Air District's tools and plans for attaining the NAAQS are regional in nature.
>
> For instance, the computer models used to simulate and predict an attainment date for the ozone or particulate matter NAAQS in the San Joaquin Valley are based on regional inputs, such as regional inventories of precursor pollutants (NOx, SOx and VOCs) and the atmospheric chemistry and meteorology of the Valley. At a very basic level, the models simulate future ozone or PM levels based on predicted changes in precursor emissions Valley wide. Because the NAAQS are set levels necessary to protect human health, the closer a region is to attaining a particular NAAQS, the lower the human health impact is from that pollutant.
>
> The goal of these modeling exercises is not to determine whether the emissions generated by a particular factory or development project will affect the date that the Valley attains the NAAQS. Rather, the Air District's modeling and planning strategy is regional in nature and based on the extent to which all of the emission-generating sources in the Valley (current and future) must be controlled in order to reach attainment.
>
> Accordingly, the Air District has based its thresholds of significance for CEQA purposes on the levels that scientific and factual data demonstrate that the [SJVAB] can accommodate without affecting the attainment date for the NAAQS. The Air District has tied its CEQA significance thresholds to the level at which stationary pollution sources must "offset" their

> emissions…Thus, the CEQA air quality analysis for criteria air pollutants is not really a localized, project-level impact analysis but one of regional cumulative impacts.

The brief explains that these CEQA thresholds of significance are not intended to be applied such that any localized human health impact associated with a project's regional pollutant emissions could be identified. Rather, CEQA thresholds of significance are used to determine whether a project's emissions would obstruct a region's capability of attaining the NAAQS and CAAQS according to the emissions inventory prepared in a SIP, which is then submitted and reviewed by CARB and EPA. This sentiment is corroborated in an additional brief submitted by the South Coast Air Quality Management District (SCAQMD). Based on the expert analyses submitted by these leading air districts, the County has concluded that it is not scientifically feasible to predict in a meaningful manner how mass emissions of pollutants of regional concern (e.g., ozone precursors) from a project of the size of the proposed project could lead to specific public health consequences, changes in pollutant concentrations, or changes in the number of days for which the SJVAB will be in nonattainment for regional pollutants.

Localized CO Emissions

In accordance with the State CO Protocol, the SJVAPCD has established preliminary screening criteria for determining whether the effect that a project would have on any given intersection would cause a potential CO hotspot. If either of the following is true for the proposed project, further CO analysis would be required:

- 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 would be reduced to LOS E or F; or
- A traffic study indicates that the project would substantially worsen (i.e., increase delay by more than five percent) an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.[50]

TAC Emissions

According to the SJVAPCD, a significant impact related to TACs would occur if a new stationary source would cause any of the following:

- An increase in carcinogen risk levels of more than 20 persons in one million; or
- A non-cancer (chronic or acute) hazard index greater than 1.0.

The foregoing risk thresholds are intended for use in analyzing potential impacts related to the siting of a new stationary source of emissions. In addition, given the lack of other adopted thresholds for TAC emissions, the foregoing thresholds are applied to non-stationary sources as an industry standard approach to analysis (i.e., for evaluating construction emissions).

The proposed project involves development of the project site with a range of warehousing, office, limited industrial, and commercial uses, along with a university and Veterans of Foreign Wars (VFW) post. As discussed in further detail below, in order to assess the health risk impacts associated with the proposed project, construction and operational HRAs were prepared and are included in the analysis herein.

[50] The language presented herein is quoted directly from the SJVAPCD Guidance. However, there is a typo. The actual language should be "one or more intersections".

GHG Emissions

As discussed above, SJVAPCD has adopted guidance documents for assessing and mitigating GHG impacts on global climate change. However, rather than establishing specific numeric thresholds of significance, the SJVAPCD guidance uses a tiered approach to assess cumulative impacts on global climate change. Notably, the SJVAPCD establishes that a project can demonstrate compliance with an approved GHG emissions reduction program (such as CARB's statewide GHG Cap-and-Trade Program) to determine significance of the proposed project's GHG emissions. With regard to whether the proposed project would conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs, the GHG analysis presented herein will be based on consistency with the SJCOG RTP/SCS, 2022 CARB Scoping Plan, and San Joaquin County General Plan.

With regard to whether the proposed project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, the analysis presented herein is based on an assessment of the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting (CEQA Guidelines Section 15064.4[b][1]) and whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project (CEQA Guidelines Section 15064.4[b][2]).

Given the scope of the proposed project, San Joaquin County has determined to utilize a numeric threshold to evaluate the cumulative significance of the increase in GHG emissions associated with the proposed project. Placer County Air Pollution Control District (Placer APCD) covers portions of 3 different air basins: Sacramento Valley Air Basin, Mountain Counties Air Basin, and Lake Tahoe Air Basin. Covering the counties of Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare and portions of Kern County, the San Joaquin Valley Air Basin is adjacent to the Sacramento Valley Air Basin and the Mountain Counties Air Basin. The San Joaquin Valley Air Basin and the Sacramento Valley Air Basin share similar characteristics.

In 2016, Placer APCD adopted a bright-line 10,000 $MTCO_2e$/year GHG threshold for all land use projects.[51] Placer APCD justified and supported the adopted thresholds of significance with a Threshold Justification Report.[52] In developing the 10,000 $MTCO_2e$/year GHG threshold, Placer APCD expressly considered general industrial.[53]

Corresponding size of projects for 10,000 MT CO_2e/yr					
Residential			Commercial/Industrial		
(# of units)			(square foot)		
Single Family	Condo	Apartment	General Commercial	General Office Building	General Industrial
646	957	1,044	323,955	756,170	901,709

In the absence of an applicable local numeric threshold, San Joaquin County, in its discretion as the lead agency, has determined it is appropriate to utilize Placer APCD's bright-line 10,000

[51] Placer APCD. *Policy 8C*. Available at: https://www.placerair.org/DocumentCenter/View/55349. Most recently amended August 12, 2021.

[52] Placer APCD. *CEQA Thresholds of Significance Justification Report.* Available at: https://www.placerair.org/DocumentCenter/View/2061. October 2016.

[53] Placer APCD. *CEQA Thresholds of Significance Justification Report* [Appendix D, pg. D-1]. Available at: https://www.placerair.org/DocumentCenter/View/2059. October 2016.

MTCO2e/year GHG threshold to evaluate the cumulative significance of the increase in GHG emissions associated with the proposed project.

Method of Analysis

A comparison of project-related emissions (including emissions generated from the Initial Phase and Specific Plan Buildout) to the thresholds discussed above shall determine the significance of the potential impacts to air quality and climate change resulting from the proposed project. Emissions attributable to the proposed project which exceed the significance thresholds could have a significant effect on regional air quality and the attainment of the federal and State AAQS, global climate change, and energy. Where potentially significant impacts are identified, mitigation measures are described, as feasible, that would reduce or eliminate the impact.

The analysis protocol and guidance provided by the SJVAPCD was used to analyze the proposed project's air quality impacts, including screening criteria and pollutant thresholds of significance. Details regarding the methodology and assumptions used for the proposed project's air quality and GHG impact analysis are provided below.

Construction Emissions

As part of the Air Quality Technical Report and GHG Emissions Technical Report prepared for the proposed project by Ramboll, short-term construction emissions associated with the Initial Phase and Specific Plan Buildout were estimated using the CalEEMod version 2022.1.1.29 web-based software, which is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the Institute of Transportation Engineers (ITE) Manual, vehicle mix (i.e., the proportion of diesel, gasoline, electric, natural gas, and plug-in hybrid vehicle types), trip length, average speed, etc. In addition, the model applies inherent default values related to construction equipment usage. For example, the model assumes that a diesel generator set would operate for eight hours a day every day over the course of the entire building construction phase. Where project-specific data was available, such data was input into the model. Accordingly, the construction modeling assumed the following (with dates for construction approximated):

- Construction of the Initial Phase would commence in 2026, and would occur over an approximately five-year period from 2026 to 2031 (see Table 4.3-7); and
- Construction of the subsequent development phases is conservatively assumed to commence in 2032 and is anticipated occur over an approximately 25-year period from 2032 to 2056, as shown in Table 4.3-7.[54]

The results of construction emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results are included as Appendix A to the Air Quality Technical Report, GHG Emissions Technical

[54] As discussed throughout this EIR, development of the proposed project would be driven by economic conditions and market demand over the course of decades following the Initial Phase. As such, the proposed project includes project-level detail for the Initial Phase of the project only. A comparable level of detail is not yet available for subsequent components of the Pacific Gateway Specific Plan. Thus, the construction schedule analyzed herein San Joaquin County is intended as a tentative, programmatic schedule to provide meaningful environmental review associated with the balance of full Specific Plan Buildout. Emission factors for construction decrease as time passes due to emission regulations becoming more stringent and due to the gradual retirement and replacement of older, dirtier construction equipment with newer equipment with reduced emissions.

Report, and Energy Technical Report prepared for the proposed project by Ramboll (see Appendix D, Appendix E, and Appendix F to this EIR).

Table 4.3-7
Project Phased Construction Schedule

Development Area	Construction Phase	Start Date	End Date	Phase Duration (days)
Initial Phase	Site Preparation	1/1/2026	3/8/2026	57
	Grading	3/9/2026	8/25/2026	146
	Building Construction	8/26/2026	4/27/2026	1,462
	Paving	4/28/2031	8/26/2031	104
	Architectural Coating	8/27/2031	12/25/2031	104
Pacific Gateway East	Site Preparation	1/1/2032	3/28/2032	75
	Grading	3/292032	11/10/2032	195
	Building Construction	11/11/2032	2/1/2039	1,949
	Paving	2/2/2039	7/12/2039	138
	Architectural Coating	7/13/2039	12/20/2039	138
Pacific Gateway Central	Demolition	1/1/2038	1/5/2038	4
	Site Preparation	1/6/2038	4/25/2038	94
	Grading	4/26/2038	2/2/2039	243
	Building Construction	2/3/2039	11/11/2046	2,433
	Paving	11/12/2046	5/31/2047	173
	Architectural Coating	6/1/2047	12/19/2047	173
Pacific Gateway West[1]	Site Preparation	1/1/2047	4/19/2047	94
	Grading	4/20/2047	1/29/2048	244
	Building Construction	1/30/2048	11/10/2055	2,436
	Paving	11/11/2055	5/30/2056	173
	Architectural Coating	5/31/2056	12/18/2056	173
University Center	Demolition	1/1/2032	3/4/2032	55
	Site Preparation	3/5/2032	9/13/2032	165
	Grading	9/14/2032	1/6/2034	412
	Building Construction	1/7/2034	1/3/2047	4,067
	Paving	1/4/2047	12/22/2047	302
	Architectural Coating	12/23/2047	12/8/2048	302
Gateway Center	Site Preparation	1/1/2032	6/20/2032	147
	Grading	6/21/2032	8/23/2033	368
	Building Construction	8/24/2033	3/23/2045	3,626
	Paving	3/24/2045	2/1/2046	270
	Architectural Coating	2/2/2046	12/13/2046	270

[1] Due to limitations in the CalEEMod model, construction mobile and off-road equipment emission factors are not available in calendar years 2051 and beyond. Thus, calendar year 2050 was used in CalEEMod to estimate emissions from construction activities occurring in years 2051 and beyond.

Source: Ramboll, 2025.

Operational Emissions

Ramboll also estimated the operational emissions associated with the Initial Phase and Specific Plan Buildout using the CalEEMod version 2022.1.1.29, as well as through the use of off-model calculations. Based on project-specific information provided by the project applicant, the Initial Phase is anticipated to be fully operational by approximately 2032 and the first year of Specific Plan Buildout operations is anticipated to occur in 2057. The operational emissions analysis

performed for the proposed project included compliance with SJVAPCD rules and regulations as well as with the California Building Energy Efficiency Standards Code, which is part of the CBSC. The proposed project's compliance with such would be verified as part of the County's building approval review process.

In addition, the following assumptions were applied within the operational emissions analysis:

- Trip generation rates and trip lengths were adjusted consistent with project-specific trip generation and vehicle miles travelled (VMT) data provided by Fehr & Peers;
- Approximately five percent of the warehouse delivery trucks were assumed to be Transport Refrigeration Units (TRUs), which are refrigeration systems powered by diesel internal combustion engines designed to refrigerate or heat perishable products that are transported in various containers, including truck vans, semi-truck trailers, shipping containers, and railcars. TRUs were assumed to be plugged in at the loading docks. Emission factors for the TRUs were obtained for San Joaquin County in 2032 for the Initial Phase and 2050[55] for Full Buildout using CARBs Off-Road Emissions Inventory (OFFROAD2021).
- Consumer product emission factors were adjusted based on consumer product usage in San Joaquin County for the operational years of 2032 and 2057, as shown in Table 4-8 of the Air Quality Technical Report.
- Emission factors for the proposed gas dispensing facility (GDF) were obtained from SJVAPCD staff for Enhanced Vapor Recovery (EVR) Phase I and EVR Phase II installed underground tanks.
- Yard truck and/or forklift related emissions were estimated using OFFROAD2021, as shown in Table 4-11 of the Air Quality Technical Report. Warehouse off-road equipment estimates were based on studies conducted by SCAQMD and the warehouse area associated with each project-specific development area.
- A diesel generator was assumed to be operational at the proposed wastewater treatment facility. Emission factors for the diesel generator were derived from the USEPA AP-42 Compilation of Air Emissions Factors from Stationary Sources, as shown in Table 4-12 of the Air Quality Technical Report. Specifications for the wastewater treatment facility (WWTP) diesel generator were based on generators present at similar facilities.

The results of operational emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results are included as Appendix A to the Air Quality Technical Report, GHG Emissions Technical Report, and Energy Technical Report prepared for the proposed project by Ramboll (see Appendix D, Appendix E, and Appendix F to this EIR).

Localized CO Analysis

The localized CO analysis prepared for the project is based on the LOS analysis included in the Local Transportation Analysis (LTA) prepared for the proposed project by Fehr & Peers. The LTA prepared for the proposed project evaluated LOS at 21 existing study intersections within the project vicinity under five scenarios:

- Existing Conditions (2024);

[55] Assuming an operational year of 2050 for the TRUs is a conservative approach, as emission factors are expected to decrease over time due to regulations likely becoming more stringent in the future.

- Existing Plus Initial Phase Conditions;
- Existing Plus Project Buildout Conditions;
- Cumulative No Project Conditions; and
- Cumulative Plus Project Buildout Conditions.

In addition, according to the Air Quality Technical Report, the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at any given intersection exceeds more than 400,000 vehicles per day. Thus, traffic counts at each of the 21 existing study intersections were compared to the 400,000 vehicle per day threshold to determine whether the proposed project would result in localized CO impacts.

Health Risk Assessments

Ramboll evaluated lifetime cancer and chronic hazard index risks for nearby receptors from project construction emissions, as well as project operational emissions. Four exposure scenarios were calculated for the project HRAs:

- Scenario 1 – Initial Phase Operations;
- Scenario 2 – Initial Phase Operations and Construction;
- Scenario 3 – Specific Plan Buildout Operations; and
- Scenario 4 – Specific Plan Buildout Operations and Construction.

For all scenarios, Ramboll assumed an exposure period of 70 years for resident receptors and 40 years for worker receptors, in accordance with the 2015 OEHHA Guidance Manual for Preparation of Health Risk Assessments. Scenarios 1 and 3 include exposure to operational emissions during the full exposure period, while Scenarios 2 and 4 include exposure to construction emissions for the length of the construction period, and exposure to operational emissions for the remainder of the exposure period.

Although pollutant concentrations at all nearby receptors were estimated, for the purpose of determining potential health risks, only the highest estimated pollutant concentrations were used in calculating cancer risk and hazard indices. The receptor experiencing the highest estimated pollutant concentrations was considered to be the maximally exposed receptor and would experience the highest potential health risks. Health risks to all other receptors would be lower than the health risks to the maximally exposed receptor, because all other receptors would be exposed to lower concentrations of pollutants as compared to the maximally exposed receptor.

All HRA modeling results are included in Appendices D through G of the AQ Technical Report (see Appendix D to this EIR).

The methodology used to conduct the construction and operational HRAs is discussed in further detail below.

Construction Health Risk Assessment

The construction HRA assessed the lifetime cancer risk and chronic hazard index associated with DPM emissions from off-road diesel construction equipment and hauling and vendor trucks during construction of the proposed project. Acute non-cancer toxicity has not been identified for DPM.[56] Thus, an acute hazard index from project construction was not calculated.

[56] Ramboll Americas Engineering Solutions, Inc. *Air Quality Technical Report* [pg. 31]. April 2025.

To analyze potential health risks to off-site receptors that could result from DPM emissions from off-road diesel construction equipment and diesel hauling and vendor trucks during construction of the proposed project, total DPM emissions from construction of the proposed project were estimated. The CalEEMod estimated PM_{10} emissions from diesel-fueled equipment and trucks used during construction was conservatively assumed to represent all DPM emitted during project construction activities. The CalEEMod estimated PM_{10} emissions were then used to calculate the concentration of DPM at the worker and resident receptors near the project site.

DPM concentrations resulting from project implementation were estimated using the American Meteorological Society/Environmental Protection Agency (AMS/EPA) Regulatory Model (AERMOD) Version 24142. The following information was input into the AMS/EPA AERMOD Model:

- Meteorology data was sourced from the SJVAPCD's Tracy Station (Station ID 99008);
- Area sources covering the planned construction areas were used to represent DPM exhaust emissions from the off-road equipment, and line-volume sources were used to represent haul trucks and vendor vehicles traveling on the roadway links within or near the site boundary;
- Area sources were assumed to have a release height of five meters and an initial lateral dimension of 1.4 meters;
- Emissions from all modeled construction sources including off-road construction equipment, off-site vendor vehicle travel, and off-site hauling vehicle travel – were assumed to occur between the hours of 7:00 AM and 7:00 PM and 6 days per week for the project construction duration; and
- Surrounding area receptors were placed in polygon grid pattern with the closest receptors (i.e., within 100-meter radius) placed 25 meters apart, and farther receptors placed up to 100 meters apart as distance increases.

As presented in Table 5-1 of the Air Quality Technical Report, the exposure duration, pathways, and exposure analysis methods (e.g., OEHHA 95th High End Method) evaluated in the HRA and used to estimate excess lifetime cancer risks for exposed populations were selected in accordance with SJVAPCD risk assessment guidelines, which are based on assessment guidelines of the 2015 OEHHA Guidance Manual for Preparation of Health Risk Assessments.[57] A deposition rate of 0.05 meters per second (m/s) was used for multi-pathway analysis. Exposure was conservatively assumed to begin at birth (age 0), rather than at the third trimester due to higher overall intake of DPM.[58]

Finally, cancer risk estimates were weighted by a factor of 10 for exposures that occur from the third trimester of pregnancy to two years of age and by a factor of 3 for exposures that occur from two years through 15 years of age. A weighting factor was not applied to ages 16 and older.

Operational Health Risk Assessment

Ramboll evaluated the lifetime cancer risk, chronic hazard index, and acute hazard index analyses resulting from project operation, which includes DPM emissions associated with warehouse delivery truck travel and idling, TRU usage, emergency generator usage, operational off-road equipment usage, and TAC emissions (e.g., benzene) from fuel transfer and dispensing

[57] Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments* [pg. 8-18]. February 2015.
[58] Ramboll Americas Engineering Solutions, Inc. *Air Quality Technical Report* [pg. 28]. April 2025.

at the proposed GDF. Passenger vehicles were assumed to be gasoline-fueled, hybrid, and EVs. Therefore, TAC emissions associated with passenger vehicles were not included in the operational HRA based on direction from the SJVAPCD.[59]

DPM concentrations resulting from project implementation were estimated using the AMS/EPA AERMOD Model Version 24142. The following information was input into the AMS/EPA AERMOD Model:

- Meteorology data was sourced from the SJVAPCD's Tracy Station (Station ID 99008);
- DPM emissions from mobile sources traveling on the roadway links within or near the site boundary were modeled as line-volume sources. Point sources were used to represent on-site idling for warehouse delivery trucks and TRU emissions when in-use by warehouse delivery trucks at the warehouse loading docks. The GDF emission sources were modeled as point sources (loading and breathing emissions) and volume sources (refueling, hose permeation, and spillage). The emergency generator for the on-site WWTP was modeled as a point source.
- All sources, including warehouse trucks, TRUs, the emergency generator, operational off-road equipment, and the GDF, were conservatively assumed to operate 24 hours per day, seven days per week.
- Surrounding area receptors were placed in polygon grid pattern with the closest receptors (i.e., within 100-meter radius) placed 25 meters apart, and farther receptors placed up to 100 meters apart as distance increases.

Fueling facility TAC emissions and air dispersion results were input into CARB's Hotspot Analysis Reporting Program (HARP), Version 25003. Health risks associated with other sources were calculated outside of HARP using equivalent methodology. Similar to the above, the exposure duration, pathways, and exposure analysis methods (e.g., OEHHA 95th High End Method) evaluated in the HRA and used to estimate excess lifetime cancer risks for exposed populations were selected in accordance with SJVAPCD risk assessment guidelines, which are based on assessment guidelines of the 2015 OEHHA Guidance Manual for Preparation of Health Risk Assessments[60] (see Table 5-1 of the Air Quality Technical Report). A deposition rate of 0.05 m/s was used for multi-pathway analysis. Exposure was conservatively assumed to begin at the third trimester. Finally, cancer risk estimates were weighted by a factor of 10 for exposures that occur from the third trimester of pregnancy to two years of age and by a factor of 3 for exposures that occur from two years through 15 years of age. A weighting factor was not applied to ages 16 and older.

Energy Consumption

Quantitative thresholds for the analysis of potential impacts related to energy consumption have not been adopted by any local, regional, or statewide entities. Consequently, potential impacts of the project related to energy is determined based on whether the project would result in wasteful, inefficient, or unnecessary use of energy. In addition, the potential for the project to conflict with or obstruct a State or local plan for renewable energy generation or energy efficiency, such as applicable State renewable energy and energy efficiency strategies, the County General Plan policies related to energy, and the SJCOG RTP/SCS, is considered. The analysis of energy

59 *Ibid.*

60 Office of Environmental Health Hazard Assessment. *Air Toxics Hot Spots Program Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments* [pg. 8-18]. February 2015.

consumption includes consideration of energy demand during project construction and operations.

In order to assess whether the project's energy consumption would be wasteful, inefficient, or unnecessary, Ramboll prepared regulatory compliance-based energy projections associated with the project, which include one-time demand from construction and annual operational demand using CalEEMod.

Operational energy (i.e., electricity and natural gas) consumption was evaluated for Initial Phase buildout (2032) and Specific Plan Buildout (2057). In the absence of data available for 2051-2056, data for 2050 was substituted. The total electricity use for the proposed project conservatively incorporates 2019 Title 24 standards, even though subsequent, more energy-efficient iterations of the code would apply for buildings built at a later time.

Fuel consumption from construction equipment and worker, vendor, and hauling trips, was estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of diesel gasoline, or natural gas. Worker vehicles are assumed to include light-duty automobiles and trucks, vendor vehicles are assumed to include an equal mix of medium heavy-duty trucks and HHD trucks, and hauling vehicles are assumed to include heavy HHD trucks.

In addition, operational gasoline, diesel, natural gas, and EV fuel consumption for the proposed project was calculated by dividing VMT for each vehicle type by average fuel efficiency of gasoline, diesel, natural gas, and EV vehicles in San Joaquin County from the EMFAC2021 database for calendar year 2032 and 2050 for the Initial Phase and Specific Plan Buildout, respectively.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above. It should be noted that GHG emissions are inherently cumulative; thus, the discussion of GHG impacts is included under the Cumulative Impacts and Mitigation Measures section below.

4.3-1 Conflict with or obstruct implementation of the applicable air quality plan. Based on the analysis below, even with mitigation, the impact is *significant and unavoidable*.

The following discussion includes an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well the Off-Site Improvements Study Area.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

CARB has developed a three-step approach to determine project conformity with the applicable air quality plan:

1. Determination that an air quality plan is being implemented in the area where the project is being proposed.

2. The proposed project must be consistent with the growth assumptions of the applicable air quality plan.
3. The project must contain in its design all reasonably available and feasible air quality control measures.

As discussed above, SJVAPCD adopted the 2016 Plan for the 2008 8-hour Ozone Standard in June 2016, which has been approved by CARB and the USEPA. SJVAPCD's air quality plans rely on information from CARB and the SJCOG to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SJCOG growth projections are based on population, vehicle trends, and land use plans developed by the cities and San Joaquin County as part of General Plan development. As such, projects that propose development that is consistent with the growth anticipated by the City and County General Plans would be consistent with the growth projections of the SIP, as associated emissions of criteria pollutants in a designated non-attainment area would be accounted for in the air quality plans. If a project proposes development that is greater than anticipated in SJCOG's growth projections, the project would be considered to conflict with the regional air quality attainment plans and the SIP, and could potentially result in a significant air quality impact.

The County's General Plan currently designates the project site as General Agriculture (A/G), Resource Conservation (OS/RC), and Rural Service Commercial (C/RS). The project site is zoned by the County as AG-40-acres (AG-40) and Rural Service Commercial (C-RS). The proposed project would require approval of several entitlements, including a General Plan Map Amendment from 1,556.61 acres of A/G, 19 acres of OS/RC, and 1.09 acres of C/RS to 18.5 acres of General Commercial; 4.3 acres of Industrial Park; 1,375.8 acres of Limited Industrial; 76.3 acres of university campus, and 61.8 acres of Public Facilities for open space and parks; Zone Reclassification from AG-40 and C-RS to ensure conformance with the amended General Plan land use designations; and adoption of the Pacific Gateway Specific Plan. Given that the proposed project would require a General Plan Amendment, the proposed project has not been anticipated by the County in the General Plan. Thus, development of the project would not have been included in the growth assumptions of the SIP. Because the SIP takes into account growth assumptions to determine when and how air quality standards could be achieved, emissions that are not accounted for in the SIP have the potential to conflict with the attainment goals set forth in the SIP.

In addition, adopted SJVAPCD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with the applicable air quality plan. Thus, if a project's operational emissions exceed the SJVAPCD's thresholds of significance, a project would be considered to conflict with or obstruct implementation of the SJVAPCD's air quality planning efforts. As discussed in further detail within this chapter, the proposed project incorporates various policy and rule-required implementation measures, as well as project-specific mitigation measures, that would reduce project-related emissions. However, even with inclusion of such measures, operational emissions associated with the Initial Phase and Specific Plan Buildout would exceed the SJVAPCD's thresholds of significance.



Based on the above, implementation of the proposed project could conflict with or obstruct implementation of the applicable air quality plan, and a ***significant*** impact could occur.

Mitigation Measure(s)

The following mitigation measures would reduce emissions associated with the proposed project. However, as discussed under Impact 4.3-3 below, additional feasible mitigation sufficient to reduce the proposed project's operational criteria pollutant emissions to below the SJVAPCD's thresholds of significance is not currently available. Therefore, even with implementation of the following mitigation measures, the impact would remain *significant and unavoidable*.

Initial Phase, Specific Plan Buildout

4.3-1(a) Implement Mitigation Measures 4.3-2(a), 4.3-2(b), and 4.3-3(a) through 4.3-3(c).

Off-Site Improvements Study Area

4.3-1(b) Implement Mitigation Measure 4.3-2(c).

4.3-2 Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project construction. Based on the analysis below and with the implementation of mitigation, the impact is *less than significant*.

During construction of the proposed project, various types of equipment and vehicles would temporarily operate on the project site. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which include PM emissions. As construction of the proposed project would generate emissions of criteria air pollutants intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM.

The proposed project would be required to comply with all applicable SJVAPCD rules and regulations for construction, including, but not limited to, Regulation VIII (Fugitive PM_{10} Prohibition), Rule 4101 (Visible Emissions), Rule 4601 (Architectural Coatings), and Rule 4641 (Cutback Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations), which would help to minimize emissions generated during construction activities. However, the proposed project was modeled without the inclusion of such rules and regulations to provide a conservative, worst-case emissions scenario.

The following discussions include an analysis of the potential for the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area to result in a net

increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project construction.

Initial Phase

Based on the CalEEMod results, the maximum annual unmitigated emissions from construction of the Initial Phase are presented in Table 4.3-8.

Table 4.3-8
Maximum Annual Unmitigated Construction Emissions – Initial Phase (tons/yr)

Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2026	0.8	4.9	7.7	0.0	2.5	1.0
2027	1.2	5.7	12.9	0.0	3.1	0.8
2028	1.1	5.5	12.2	0.0	3.2	0.8
2029	1.0	5.2	11.5	0.0	3.1	0.8
2030	0.9	5.0	11.0	0.0	3.1	0.8
2031	**10.7**	1.9	4.4	0.0	1.2	0.8
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Threshold?	**YES**	**NO**	**NO**	**NO**	**NO**	**NO**

[1] **Bolded red text** indicates that emissions are over the SJVAPCD threshold.

Source: Ramboll, 2025 (see Appendix D).

The maximum daily unmitigated emissions from construction of the Initial Phase are presented in Table 4.3-9.

Table 4.3-9
Maximum Daily Unmitigated Construction Emissions – Initial Phase (lbs/day)

Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2026	3.1	29.0	29.0	0.1	21.0	11.0
2027	1.0	9.4	13.0	0.0	0.3	0.3
2028	1.0	8.9	13.0	0.0	0.3	0.3
2029	1.0	8.6	13.0	0.0	0.3	0.3
2030	0.9	8.4	13.0	0.0	0.3	0.2
2031	**197.0**	8.1	13.0	0.0	0.2	0.2
SJVAPCD Threshold	*100*	*100*	*100*	*100*	*100*	*100*
Exceeds Threshold?	**YES**	**NO**	**NO**	**NO**	**NO**	**NO**

[1] **Bolded red text** indicates that emissions are over the SJVAPCD threshold.

Source: Ramboll, 2025 (see Appendix D).

As shown in Table 4.3-8 and Table 4.3-9, the maximum annual and daily unmitigated construction emissions from the Initial Phase would be below the applicable thresholds of significance for NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. However, ROG emissions are

projected to exceed the SJVAPCD annual and daily thresholds of significance in the year 2031.

Specific Plan Buildout

As discussed above, Specific Plan Buildout is estimated to be complete following a projected 30-year construction period, which may be subject to change based on market demand and speed at which each subsequent phase of the project is constructed. Due to the uncertainty of the construction schedule and intensity of construction activities, buildout of the Specific Plan has not been assessed against the daily significance screening thresholds. Specific construction and operational impacts for the subsequent phases would be assessed against the daily significance screening thresholds at the time of application for development, when project-specific details are better understood. Thus, the following analysis includes an assessment of the Specific Plan Buildout against the SJVAPCD's annual thresholds only.

Based on the CalEEMod results, the maximum annual unmitigated construction-related emissions estimated for Specific Plan Buildout are presented in Table 4.3-10.

As shown in Table 4.3-10, the maximum annual unmitigated construction emissions from Specific Plan Buildout are estimated to be below the applicable thresholds of significance for CO, SO_X, PM_{10}, and $PM_{2.5}$. However, ROG and NO_X emissions are estimated to exceed the SJVAPCD annual thresholds of significance during several years of construction.

Off-Site Improvements Study Area

The proposed project includes potential future intersection and roadway improvements that would be triggered by full buildout of the proposed project in the Off-Site Improvements Study Area, which is generally located north of the project site. However, the list of off-site physical roadway improvements that would be constructed by the proposed project is not definitive at this time due to a variety of factors, with the main factor being that many of the intersections/roadways are in jurisdictions other than San Joaquin County, and, thus, successful implementation of identified improvements would require other agency approval (e.g., City of Tracy, Caltrans). In such instances of extraterritorial jurisdiction, the County cannot impose the improvements on the other jurisdictions. As such, specific phasing, timing information, and other details regarding the extent of construction activities associated with the off-site improvements are not available at this time. Given that construction details associated with the off-site improvements would be highly speculative, emissions associated with such have not been modeled in this analysis. However, further analysis of the construction emissions associated with the off-site improvements would be required prior to any ground disturbing activities to ensure that the off-site improvements would not result in emissions above the SJVAPCD thresholds. Without such analysis, construction of the off-site improvements could potentially result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project construction, and a significant impact could occur.

Table 4.3-10
Maximum Annual Unmitigated Construction Emissions – Specific Plan Buildout (tons/yr)[1]

Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2032	1.4	**10.2**	13.8	0.1	7.1	3.4
2033	2.1	**12.3**	23.4	0.1	8.2	2.6
2034	2.4	**11.7**	27.8	0.1	9.1	2.4
2035	2.3	**11.4**	27.1	0.1	9.1	2.3
2036	2.3	**11.1**	26.3	0.1	9.1	2.3
2037	2.2	**10.9**	25.5	0.1	9.1	2.3
2038	2.5	**13.1**	28.6	0.1	11.1	3.3
2039	**19.6**	**11.0**	25.9	0.1	9.4	2.4
2040	1.8	**10.0**	23.7	0.1	8.9	2.3
2041	1.7	9.8	23.3	0.1	8.9	2.3
2042	1.7	9.7	23.0	0.1	8.9	2.3
2043	1.6	9.6	22.9	0.1	8.9	2.3
2044	1.6	9.6	22.6	0.1	8.9	2.3
2045	1.5	8.9	21.4	0.1	8.4	2.1
2046	3.3	7.5	18.6	0.1	7.6	1.9
2047	**17.8**	3.0	6.4	0.0	2.5	1.1
2048	9.0	4.6	11.0	0.0	4.9	1.3
2049	0.7	4.6	10.4	0.0	4.6	1.2
2050	0.7	4.6	10.4	0.0	4.6	1.2
2051	0.7	4.6	10.4	0.0	4.6	1.2
2052	0.7	4.6	10.4	0.0	4.6	1.2
2053	0.7	4.6	10.4	0.0	4.6	1.2
2054	0.7	4.6	10.4	0.0	4.6	1.2
2055	0.7	4.1	9.2	0.0	4.0	1.0
2056	**15.4**	0.5	2.3	0.0	0.8	0.2
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Threshold?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

[1] Combustion emissions associated with construction activities occurring in 2051 and beyond were estimated using calendar year 2050 due to limitations in CalEEMod.
[2] **Bolded red text** indicates that emissions are over the SJVAPCD threshold.

Source: Ramboll, 2025 (see Appendix D).

Conclusion

Based on the above, maximum unmitigated emissions generated during construction of the Initial Phase and Specific Plan Buildout are projected to exceed the SJVAPCD's thresholds of significance. In addition, further analysis of the construction emissions associated with the off-site improvements would be required prior to any ground disturbing activities to ensure that the off-site improvements would not result in emissions above the SJVAPCD thresholds. Thus, the proposed project could result in a net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, and a ***significant*** impact could occur associated with construction.

Mitigation Measure(s)

Implementation of Mitigation Measure 4.3-2(a) would require the use of architectural coatings with a VOC content of a maximum of 15 grams per liter (g/L) at all industrial warehouse buildings during construction of both the Initial Phase and Specific Plan Buildout. Implementation of Mitigation Measure 4.3-2(b) would require the use of Tier 4 Final off-road construction equipment during construction of the proposed project, including the Initial Phase and Specific Plan Buildout. The estimated maximum annual and maximum daily mitigated emissions from construction of the Initial Phase are presented in Table 4.3-11 and Table 4.3-12, respectively. In addition, the estimated maximum annual mitigated construction-related emissions from Specific Plan Buildout are presented in Table 4.3-13.

Table 4.3-11
Maximum Annual Mitigated Construction Emissions – Initial Phase (tons/yr)[1]

Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2026	0.5	2.2	8.4	0.0	2.4	0.9
2027	1.1	4.7	13.2	0.0	3.1	0.8
2028	1.0	4.6	12.5	0.0	3.1	0.8
2029	0.9	4.3	11.9	0.0	3.1	0.8
2030	0.9	4.1	11.3	0.0	3.1	0.8
2031	4.2	1.5	4.5	0.0	1.2	0.3
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Threshold?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

[1] Emissions reductions associated with Tier 4 construction equipment estimated in CalEEMod for equipment greater than 50 HP. Emission reductions associated with low-VOC architectural coatings were estimated in CalEEMod based on an adjusted VOC content as shown in Table 4-3 of the Air Quality Technical Report.

Source: Ramboll, 2025 (see Appendix D).

Table 4.3-12
Maximum Daily Mitigated Construction Emissions – Initial Phase (lbs/day)[1]

Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2026	0.8	5.0	35.0	0.1	20.1	10.0
2027	0.5	3.1	15.0	0.0	0.1	0.1
2028	0.4	3.0	15.0	0.0	0.1	0.1
2029	0.4	3.0	15.0	0.0	0.1	0.1
2030	0.4	3.0	15.0	0.0	0.1	0.1
2031	72.0	3.0	15.0	0.0	0.1	0.1
SJVAPCD Threshold	*100*	*100*	*100*	*100*	*100*	*100*
Exceeds Threshold?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

[1] Emissions reductions associated with Tier 4 construction equipment estimated in CalEEMod for equipment greater than 50 HP.

Source: Ramboll, 2025 (see Appendix D).

Table 4.3-13
Maximum Annual Mitigated Construction Emissions – Specific Plan Buildout (tons/yr)[1,2]

Year	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2032	0.5	2.6	16.5	0.1	6.8	3.1
2033	1.5	7.7	26.4	0.1	8.0	2.4
2034	2.2	9.5	28.8	0.1	9.0	2.3
2035	2.1	9.4	28.1	0.1	9.1	2.3
2036	2.1	9.2	27.4	0.1	9.1	2.3
2037	2.0	9.0	26.6	0.1	9.1	2.3
2038	2.1	9.5	31.5	0.1	11.0	3.2
2039	7.8	8.8	27.3	0.1	9.4	2.4
2040	1.6	8.2	24.9	0.1	8.9	2.2
2041	1.5	8.1	24.5	0.1	8.8	2.2
2042	1.5	8.0	24.2	0.1	8.8	2.2
2043	1.5	7.9	24.1	0.1	8.8	2.2
2044	1.5	7.9	23.9	0.1	8.9	2.2
2045	1.5	7.3	22.4	0.1	8.4	2.1
2046	1.4	6.4	19.4	0.1	7.6	1.9
2047	2.3	1.2	8.7	0.0	2.5	1.1
2048	6.4	4.0	11.6	0.0	4.9	1.3
2049	8.9	4.1	10.8	0.0	4.6	1.2
2050	0.7	4.1	10.8	0.0	4.6	1.2
2051	0.7	4.1	10.8	0.0	4.6	1.2
2052	0.7	4.1	10.8	0.0	4.6	1.2
2053	0.7	4.1	10.8	0.0	4.6	1.2
2054	0.7	4.1	10.8	0.0	4.6	1.2
2055	0.6	3.6	9.6	0.0	4.0	1.0
2056	5.4	0.3	2.4	0.0	0.8	0.2
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Threshold?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

1 Combustion emissions associated with construction activities occurring in 2051 and beyond were estimated using calendar year 2050 due to limitations in CalEEMod.
2 Emissions reductions associated with Tier 4 construction equipment estimated in CalEEMod for equipment greater than 50 HP. Emission reductions associated with low-VOC architectural coatings were estimated in CalEEMod based on an adjusted VOC content as shown in Table 4-3 of the Air Quality Technical Report.

Source: Ramboll, 2025 (see Appendix D).

As shown in the tables, use of low-VOC architectural coatings and Tier 4 final off-road equipment during construction of the Initial Phase and Specific Plan Buildout would reduce the proposed project's construction-related emissions to below the applicable thresholds of significance.

In addition, as discussed above, a development project would be subject to the ISR requirements under SJVAPCD Rule 9510 if full buildout of the project would include or exceed the size limits specified by the SJVAPCD. As the proposed project would exceed the size limit specified, the proposed project would be subject to Rule 9510, which requires a reduction of construction-related NO_X and PM_{10} emissions of 20

percent and 45 percent, respectively, compared to the unmitigated baseline. Implementation of Mitigation Measures 4.3-2(a) and 4.3-2(b) would ensure that the proposed project's construction-related NO_X and PM_{10} emissions would be reduced by 20 percent and 45 percent, respectively, as compared to the unmitigated baseline. Thus, with implementation of Mitigation Measures 4.3-2(a) and 4.3-2(b), the proposed project would also comply with the ISR requirements included in SJVAPCD Rule 9510, and further SJVAPCD-approved on-site emission reduction measures and/or off-site mitigation fees would not be required to reduce the proposed project's construction emissions.

Furthermore, Mitigation Measure 4.3-2(c) would require preparation of a construction emissions analysis prior to construction of any of the off-site improvements to ensure that construction emissions related to such would not exceed the SJVAPCD thresholds of significance.

Based on the above, implementation of the following mitigation measures would reduce the above potential construction-related impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout

4.3-2(a) *The following requirement shall be noted on project improvement plans for all industrial warehouse buildings: Only architectural coatings with a VOC content of a maximum of 15 grams per liter (g/L) shall be used for the interior and exterior of all industrial warehouse buildings on the project site. Prior to approval of improvement plans for each phase of the proposed project, draft language shall be provided to the San Joaquin County Community Development Department for review and approval.*

4.3-2(b) *Prior to the initiation of ground disturbance for each phase of development, the project applicant shall show on project improvement plans via notation that the contractor shall ensure that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction of the proposed project, including owned, leased, and subcontractor vehicles, shall be Tier 4 final off-road construction equipment. In addition, all off-road equipment operating at the construction site must be maintained in proper working condition according to manufacturer's specifications.*

Idling shall be limited to five minutes or less in accordance with the In-Use Off-Road Diesel Vehicle Regulation as required by CARB. Clear signage regarding idling restrictions shall be placed at the entrances to the construction site.

Portable equipment over 50 horsepower must have either a valid SJVAPCD Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.

The aforementioned requirements shall be noted on grading plans and submitted for review and approval by the San Joaquin County Community Development Department.

Off-Site Improvements Study Area

4.3-2(c) *Prior to issuance of a grading permit associated with any off-site improvement, the project applicant shall retain a qualified air quality consultant to conduct an analysis to quantify the off-site improvement's construction emissions and compare the emissions to the applicable SJVAPCD thresholds of significance. Quantified emissions and identified reduction measures, if warranted, shall be submitted to the San Joaquin County Community Development Department for review and approval, or for roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. If emissions are determined to be below the applicable SJVAPCD thresholds of significance, further mitigation is not required.*

If emissions are determined to exceed the applicable thresholds of significance, the qualified air quality consultant shall identify measures sufficient to reduce the project's construction emissions to below the SJVAPCD's thresholds of significance. Emission reduction measures may include, but are not limited to, use of heavy-duty off-road vehicles (50 horsepower or more) with late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

If on-site emissions reduction measures are not sufficient to achieve a fleet-wide average reduction in construction-related emissions to below the applicable SJVAPCD thresholds of significance, the project applicant shall pay a mitigation fee based on the equivalent amount of the project's contribution of criteria pollutant emissions that exceeds the applicable threshold of significance, as well as the per ton cost-effectiveness identified by the CARB's most current Carl Moyer Program Guidance. The final details of the mitigation fee shall be determined in coordination with, and reviewed and approved by, the SJVAPCD and San Joaquin County Community Development Department, or for roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. Proof of payment shall be submitted to the San Joaquin County Community Development Department, City of Tracy, or Caltrans, as applicable.

4.3-3 Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project operation.

Based on the analysis below, even with mitigation, the impact is *significant and unavoidable*.

Emissions would be generated during operations of the proposed project from both mobile and stationary sources. Emissions related to operation of the proposed project would include sources such as architectural coatings, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, detergents, cleaning products, spray paint, insecticides, floor finishes, polishes, etc.). The most significant source of emissions related to the proposed project would be from mobile sources. As discussed in the Method of Analysis section above, to capture the potential emissions related to mobile sources from the proposed project, the project-specific trip generation rates and VMT estimates prepared by Fehr & Peers were applied to the project modeling.

As stated above, the proposed project would be required to comply with all SJVAPCD rules and regulations, such as those listed previously for construction, as well as the following for operations:

- Rule 4101 (Visible Emissions); and
- Rule 4102 (Nuisance).

The following discussions include an analysis of the potential for the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area to result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project operations.

Initial Phase

Based on the CalEEMod results, the maximum annual unmitigated operational emissions associated with the Initial Phase are presented in Table 4.3-14.

As shown in Table 4.3-14, maximum annual unmitigated operational emissions associated with the Initial Phase are projected to be below the applicable thresholds of significance for SO_X and $PM_{2.5}$. However, ROG, NO_X, CO, and PM_{10} emissions are projected to exceed the SJVAPCD annual thresholds of significance.

In addition, the maximum daily unmitigated operational emissions associated with the Initial Phase are presented in Table 4.3-15.

As shown in Table 4.3-15, maximum daily unmitigated operational emissions associated with the Initial Phase are estimated to be below the applicable thresholds of significance for SO_X, PM_{10}, and $PM_{2.5}$. However, ROG, NO_X, and CO emissions are projected to exceed the SJVAPCD daily thresholds of significance.

Table 4.3-14
Maximum Annual Unmitigated Operational Emissions – Initial Phase (tons/yr)[1]

Emission Source	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area[2]	14.9	0.1	16.1	0.0	0.0	0.0
Energy[2]	0.3	5.8	4.9	0.0	0.5	0.5
Mobile[2]	2.8	49.5	58.9	0.6	37.0	10.2
TRUs[3]	4.6	3.8	0.6	0.0	0.0	0.0
Off-Road Equipment[4]	6.2	40.3	98.6	0.2	1.2	1.1
WWTP[5]	0.2	2.4	0.5	0.2	0.2	0.2
Total Annual Emissions	29.0	101.9	179.6	1.0	38.9	12.0
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Threshold?	**YES**	**YES**	**YES**	**NO**	**YES**	**NO**

1 Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.
2 Total area, energy, and mobile emissions were estimated using CalEEMod.
3 TRU emissions were calculated as shown in Table 4-13 and Table 4-15 of the Air Quality Technical Report.
4 Off-road equipment emissions include emissions from on-site yard trucks and forklifts (see Table 4-11 of the Air Quality Technical Report for detailed calculations).
5 Wastewater facility emissions include emissions from an on-site emergency diesel generator (see Table 4-12 of the Air Quality Technical Report for detailed calculations).

Source: Ramboll, 2025 (see Appendix D).

Table 4.3-15
Maximum Daily Unmitigated Operational Emissions – Initial Phase (lbs/day)[1]

Emission Source	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area[2]	96.2	1.5	179.0	0.0	0.3	0.2
Energy[2]	1.8	31.9	26.8	0.2	2.4	2.4
Mobile[2]	7.7	6.3	1.0	0.0	0.1	0.1
TRUs[3]	0.9	12.2	22.9	0.2	10.8	3.0
Off-Road Equipment[4]	33.8	220.7	540.4	0.9	6.8	6.2
WWTP[5]	1.1	13.1	2.8	0.9	0.9	0.9
Total Annual Emissions	141.4	285.7	772.9	2.2	21.3	12.8
SJVAPCD Threshold	*100*	*100*	*100*	*100*	*100*	*100*
Exceeds Threshold?	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**

1 Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.
2 Total area, energy, and mobile emissions were estimated using CalEEMod. The on-site portion of on-road mobile emissions was estimated by taking a ratio of mobile emissions based on an assumption of the on-site trip distance (two miles) and the average auto and truck trip lengths.
3 TRU emissions were calculated as shown in Table 4-14 of the Air Quality Technical Report.
4 Off-road equipment emissions include emissions from on-site yard trucks and forklifts (see Table 4-11 of the Air Quality Technical Report for detailed calculations).
5 Wastewater facility emissions include emissions from an on-site emergency diesel generator (see Table 4-12 of the Air Quality Technical Report for detailed calculations).

Source: Ramboll, 2025 (see Appendix D).

Specific Plan Buildout

As discussed above, Specific Plan Buildout is estimated to be complete following a projected 30-year construction period, which may be subject to change based on market demand and speed at which each subsequent phase of the project is constructed.

Due to the uncertainty of the construction schedule and intensity of construction activities, buildout of the Specific Plan has not been assessed against the daily significance screening thresholds. Construction and operational impacts for the subsequent phases would be assessed against the daily significance screening thresholds at the time of application when project-specific details are better understood. Thus, the following analysis includes an assessment of the Specific Plan Buildout against the SJVAPCD's annual thresholds only.

Based on the CalEEMod results, the estimated maximum annual unmitigated operational emissions from Specific Plan Buildout are presented in Table 4.3-16. As shown in Table 4.3-16, maximum annual unmitigated operational emissions from Specific Plan Buildout are projected to be below the applicable thresholds of significance for SO_X. However, ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$ emissions are projected to exceed the SJVAPCD annual thresholds of significance.

Table 4.3-16
Maximum Annual Unmitigated Operational Emissions – Specific Plan Buildout (tons/yr)[1,2]

Emission Source	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area[3]	113.7	1.8	128.0	0.1	2.4	2.2
Energy[3]	2.2	39.0	32.3	0.3	3.0	3.0
Mobile[3]	14.9	261.5	298.8	3.2	223.3	61.3
TRUs[4]	29.4	19.7	3.8	0.0	0.2	0.2
Off-Road Equipment[5]	37.1	189.7	613.4	1.0	4.1	3.8
WWTP[6]	0.2	2.4	0.5	0.2	0.2	0.2
GDF[7]	10.0	-	-	-	-	-
Total Annual Emissions	207.5	513.9	1,076.8	4.7	233.2	70.7
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Threshold?	**YES**	**YES**	**YES**	**NO**	**YES**	**YES**

1 Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.
2 Specific Plan Buildout includes all land uses, inclusive of land uses in the Initial Phase.
3 Total area, energy, and mobile emissions were estimated using CalEEMod.
4 TRU emissions were calculated as shown in Table 4-13 and Table 4-15 of the Air Quality Technical Report.
5 Off-road equipment emissions include emissions from on-site yard trucks and forklifts (see Table 4-11 of the Air Quality Technical Report for detailed calculations).
6 Wastewater facility emissions include emissions from an on-site emergency diesel generator (see Table 4-12 of the Air Quality Technical Report for detailed calculations).
7 See Table 4-10 of the Air Quality Technical Report for detailed calculations.

Source: Ramboll, 2025 (see Appendix D).

Off-Site Improvements Study Area

As discussed above, the proposed project includes potential future intersection and roadway improvements that would be triggered by full buildout of the proposed project

in the Off-Site Improvements Study Area. However, considering the nature of the potential future off-site intersection and roadway improvements, new substantial criteria pollutant emissions would not be generated during operation of such improvements. Construction of the off-site improvements would not inherently increase traffic within the project vicinity. Rather, the potential future intersection and roadway improvements are intended to alleviate traffic delays associated with Specific Plan Buildout.

Therefore, operation of the potential future intersection and roadway improvements would not increase emissions, as operation of the improvements would not generate any new vehicle trips within the project area. The only sources of operational emissions for the potential future intersection and roadway improvements would be off-gassing of asphalt. Such off-gassing would emit a negligible volume of criteria pollutants. Thus, operational emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ associated with the potential future intersection and roadway improvements would be well below the SJVAPCD's applicable thresholds of significance.

Conclusion

Based on the above, operational criteria pollutant emissions associated with the potential future intersection and roadway improvements would be well below the SJVAPCD's applicable thresholds of significance. However, operational emissions associated with the Initial Phase and Specific Plan Buildout are projected to exceed the SJVAPCD's thresholds of significance. Thus, the proposed project would result in a net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, and a ***significant*** impact would occur associated with operation of the proposed project.

Mitigation Measure(s)

Implementation of Mitigation Measure 4.3-3(a) would require the use of architectural coatings with a VOC content of a maximum of 15 g/L at all industrial warehouse buildings during operations of both the Initial Phase and Specific Plan Buildout over the lifetime of the project. Implementation of Mitigation Measure 4.3-3(b) would require the use of zero emission heavy-duty off-road equipment, including forklift equipment and yard mules, at all industrial warehouse buildings greater than 300,000 sf during operations, and use of zero emission landscape equipment to maintain all landscaping associated with individual on-site buildings and all on-site parks and open space.

The estimated maximum annual and daily mitigated operational emissions associated with the Initial Phase are presented in Table 4.3-17 and Table 4.3-18, respectively.

In addition, the estimated maximum annual mitigated operational emissions from Specific Plan Buildout are presented in Table 4.3-19.

As shown in the tables, with implementation of Mitigation Measures 4.3-3(a) and 4.3-3(b), maximum *daily* operational emissions associated with the Initial Phase are projected to be below the applicable thresholds of significance for all criteria pollutants; however, maximum *annual* operational emissions associated with the Initial Phase are projected to still exceed the applicable thresholds of significance for ROG, NO_X, and PM_{10}, and maximum *annual* operational emissions from Specific Plan Buildout are also projected to remain above the applicable thresholds of significance for ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$.

Table 4.3-17
Maximum Annual Mitigated Operational Emissions – Initial Phase (tons/yr)[1]

Emission Source	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area[2,3]	11.6	0.0	0.0	0.0	0.0	0.0
Energy[2]	0.3	5.8	4.9	0.0	0.5	0.5
Mobile[2]	2.8	49.5	58.9	0.6	37.0	10.2
TRUs[4]	4.6	3.8	0.6	0.0	0.0	0.0
Off-Road Equipment[5]	0.3	1.6	4.0	0.0	0.1	0.0
WWTP[6]	0.2	2.4	0.5	0.2	0.2	0.2
Total Annual Emissions	19.8	63.1	68.9	0.8	37.7	10.9
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Threshold?	**YES**	**YES**	**NO**	**NO**	**YES**	**NO**

1 Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.
2 Total area, energy, and mobile emissions were estimated using CalEEMod.
3 Mitigated area emissions incorporate the zero-emissions landscaping equipment using mitigation measure LL-1 in CalEEMod. Low-VOC architectural coatings were estimated in CalEEMod based on an adjusted VOC content, as shown in Table 4-9 of the Air Quality Technical Report.
4 TRU emissions were calculated as shown in Table 4-13 and Table 4-15 of the Air Quality Technical Report.
5 Off-road equipment emissions include emissions from on-site yard trucks and forklifts (see Table 4-11 of the Air Quality Technical Report for detailed calculations).
6 Wastewater facility emissions include emissions from an on-site emergency diesel generator (see Table 4-12 of the Air Quality Technical Report for detailed calculations).

Source: Ramboll, 2025 (see Appendix D).

Table 4.3-18
Maximum Daily Mitigated Operational Emissions – Initial Phase (lbs/day)[1]

Emission Source	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area[2,3]	63.3	0.0	0.0	0.0	0.0	0.0
Energy[2,3]	1.8	31.9	26.8	0.2	2.4	2.4
Mobile[2]	7.7	6.3	1.0	0.0	0.1	0.1
TRUs[4]	0.9	12.2	22.9	0.2	10.8	3.0
Off-Road Equipment[5]	1.4	8.9	22.1	0.0	0.3	0.3
WWTP[6]	1.1	13.1	2.8	0.9	0.9	0.9
Total Annual Emissions	76.0	72.5	75.6	1.3	14.5	6.6
SJVAPCD Threshold	*100*	*100*	*100*	*100*	*100*	*100*
Exceeds Threshold?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

1 Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.
2 Total area, energy, and mobile emissions were estimated using CalEEMod. The on-site portion of on-road mobile emissions was estimated by taking a ratio of mobile emissions based on an assumption of the on-site trip distance (two miles) and the average auto and truck trip lengths.
3 Mitigated area emissions incorporate the use of zero-emissions landscaping equipment using mitigation measure LL-1 in CalEEMod. The low-VOC architectural coatings were estimated in CalEEMod based on an adjusted VOC content, as shown in Table 4-9 of the Air Quality Technical Report.
4 TRU emissions were calculated as shown in Table 4-14 of the Air Quality Technical Report.
5 Off-road equipment emissions include emissions from on-site yard trucks and forklifts (see Table 4-10 of the Air Quality Technical Report for detailed calculations).
6 Wastewater facility emissions include emissions from an on-site emergency diesel generator.

Source: Ramboll, 2025 (see Appendix D).

Table 4.3-19
Maximum Annual Mitigated Operational Emissions – Specific Plan Buildout (tons/yr)[1,2]

Emission Source	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area[3,4]	91.8	0.8	15.0	0.1	2.2	2.1
Energy[3]	2.2	39.0	32.3	0.3	3.0	3.0
Mobile[3]	14.9	261.5	298.8	3.2	223.3	61.3
TRUs[5]	29.4	19.7	3.8	0.0	0.2	0.2
Off-Road Equipment[6]	2.5	12.6	42.0	0.1	0.3	0.2
WWTP[7]	0.1	2.4	0.5	0.2	0.2	0.2
GDF[8]	10.0	-	-	-	-	-
Total Annual Emissions	151.0	335.9	392.4	3.8	229.1	67.0
SJVAPCD Threshold	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Threshold?	**YES**	**YES**	**YES**	**NO**	**YES**	**YES**

1 Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.
2 Specific Plan Buildout includes all land uses, inclusive of land uses in the Initial Phase.
3 Total area, energy, and mobile emissions were estimated using CalEEMod.
4 Mitigated area emissions incorporate zero-emissions landscaping equipment using mitigation measure LL-1 in CalEEMod. The low-VOC architectural coatings were estimated in CalEEMod based on an adjusted VOC content, as shown in Table 4-9 of the Air Quality Technical Report.
5 TRU emissions were calculated as shown in Table 4-13 and Table 4-15 of the Air Quality Technical Report.
6 Off-road equipment emissions include emissions from on-site yard trucks and forklifts (see Table 4-11 of the Air Quality Technical Report for detailed calculations).
7 Wastewater facility emissions include emissions from an on-site emergency diesel generator (see Table 4-12 of the Air Quality Technical Report for detailed calculations).
8 See Table 4-10 of the Air Quality Technical Report for detailed calculations.

Source: Ramboll, 2025 (see Appendix D).

In addition, as discussed above, a development project would be subject to the ISR requirements under SJVAPCD Rule 9510 if full buildout of the project would include or exceed the size limits specified by the SJVAPCD. As the proposed project would exceed the size limit specified, the proposed project would be subject to Rule 9510, which requires a reduction of operational NO_X and PM_{10} emissions of 33.3 percent and 50 percent, respectively, compared to the unmitigated baseline. Table 4.3-20 presents the required reductions in project emissions to comply with Rule 9510 for both the Initial Phase and Specific Plan Buildout. The reductions were applied to annual operational emissions only, as this reduction is related to total annual emissions rather than the maximum daily emissions. Table 4.3-20 presents the project's emissions with implementation of Mitigation Measures 4.3-3(a) and 4.3-3(b) in comparison with the required reductions to comply with Rule 9510. As shown in the table, the proposed project's operational NO_X emissions would be reduced by more than 33.3 percent below the unmitigated baseline. However, PM_{10} emissions would not be reduced by 50 percent. Thus, the proposed project would be required to implement further SJVAPCD-approved on-site emission reduction measures and/or off-site mitigation fees to reduce the proposed project's operational PM_{10} emissions sufficient to comply with Rule 9510. Even with implementation of further measures and/or fees sufficient to meet the ISR requirements, the proposed project's operational emissions would still exceed the SJVAPCD's thresholds of significance.

Table 4.3-20
Maximum Annual Operational Emissions with ISR Required Reductions (tons/yr)[1]

	NO_X	PM_{10}
Initial Phase		
Total Annual Emissions	63.1	37.7
Required Annual Emissions Reduction to Comply with Rule 9510[2]	25.5	19.4
Estimated Annual Emissions Reduction from Mitigation Measures 4.3-3(a) and 4.3-3(b)	38.8	1.2
Additional Annual Emissions Reduction Needed for Rule 9510 Compliance	0.0	18.2
Specific Plan Buildout		
Total Annual Emissions	335.9	229.1
Required Annual Emissions Reduction to Comply with Rule 9510[2]	128.5	116.6
Estimated Annual Emissions Reduction from Mitigation Measures 4.3-3(a) and 4.3-3(b)	178.0	4.1
Additional Annual Emissions Reduction Needed for Rule 9510 Compliance	0.0	112.5

1 Specific Plan Buildout includes all land uses, inclusive of land uses in the Initial Phase.
2 The required annual emissions reduction to comply with Rule 9510 was calculated based on SJVAPCD Rule 9510 guidance, which includes other factors such as CARB's tailpipe control and the consideration of 10 years of emissions specified in the rule, as well as the SJVAPCD's Indirect Source Rule Fee Estimator.

Source: Ramboll, 2025 (see Appendix D).

Finally, implementation of Mitigation Measures 4.12-4(a) through 4.12-4(f), as set forth in the Transportation chapter of this EIR, which require compliance with SJVAPCD Rule 9410 and implementation of TDM strategies to reduce the number of vehicle trips that would be generated by employees associated with the proposed project, would reduce the project's operational criteria pollutant emissions. However, existing evidence indicates that the effectiveness of the TDM strategies with regard to vehicle trip reduction can vary based on a variety of factors, including the context of the surrounding built environment (e.g., urban versus suburban) and the aggregate effect of multiple TDM strategies deployed together. Moreover, many TDM strategies are not just site specific, but also rely on implementation and/or adoption by private entities (e.g., elective use of carpool program by residents) and other agencies (e.g., transit service operators). Thus, the effectiveness of Rule 9410 and the TDM strategies set forth within Mitigation Measures 4.12-4(a) through 4.12-4(f) cannot be quantified at this time and subsequent vehicle trip reduction effects cannot be guaranteed.

Furthermore, the proposed project's inherent site and/or design features that would contribute to a reduction in vehicle trips and VMT, such as site enhancements and features that encourage alternative modes of transportation, which subsequently result in a reduction in mobile source emissions of criteria pollutants, have already been accounted for in the project-specific VMT applied in the modeling. Additional measures for the reduction of mobile source emissions (beyond the proposed project's inherent site and/or design features and the measures included in Mitigation Measures 4.12-4[a] through 4.12-4[f]), sufficient to reduce criteria pollutant emissions to below the applicable thresholds of significance, are not available, nor feasible for the proposed project at this time.

Based on the above, even with the implementation of the following mitigation measures, the above potential impact would remain *significant and unavoidable*.

Initial Phase, Specific Plan Buildout

4.3-3(a) *The following requirement shall be noted on any Tenant/Lease Agreement and/or Purchase and Sale Agreement for all on-site industrial warehouse buildings: Only architectural coatings with a VOC content of a maximum of 15 grams per liter (g/L) shall be used for the interior and exterior of all industrial warehouse buildings on the project site. Proof of compliance with the above requirement shall be provided to the San Joaquin County Community Development Department for review and approval.*

4.3-3(b) *Prior to approval of any Improvement Plans for each phase of development, the project applicant shall provide proof of compliance with the following to the satisfaction of the San Joaquin County Community Development Department:*

- *The project applicant shall show on the Improvement Plans via notation that all forklift equipment and yard mules at all industrial warehouse buildings greater than 300,000 sf shall be zero emission equipment. Additionally, all landscape equipment used to maintain individual on-site and all on-site landscaping, parks, and open space shall be zero emission equipment.*

4.3-3(c) *Implement Mitigation Measures 4.12-4(a) through 4.12-4(f).*

Off-Site Improvements Study Area

None required.

4.3-4 Expose sensitive receptors to substantial pollutant concentrations. Based on the analysis below, even with mitigation, the impact is *significant and unavoidable*.

The major pollutant concentrations of concern are localized CO emissions, TAC emissions, and criteria pollutant emissions, which are addressed in further detail below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Traffic congestion near a roadway's intersection with vehicles moving slowly or idling could result in localized CO emissions at that intersection due to a vehicle engine's inefficient combustion. High levels of localized CO concentrations are only expected where background levels are high, and traffic volumes and congestion levels are high. Accordingly, a land use project could result in impacts associated with localized CO concentrations at roadway intersections if the project generates substantial traffic.

As discussed above, the SJVAPCD has established preliminary screening criteria for determining whether a project would cause a potential CO hotspot. If either of the following is true for the proposed project, further CO analysis would be required:

- A traffic study for the project indicates that the LOS on one or more streets or at one or more intersections in the project vicinity would be reduced to LOS E or F; or
- A traffic study indicates that the project would substantially worsen (i.e., increase delay by more than five percent) an already existing LOS F on one or more streets or at more or more[61] intersections in the project vicinity.

The following includes a discussion of potential impacts related to the generation of localized CO emissions associated with the Initial Phase and Specific Plan Buildout, as well as the potential future off-site intersection and roadway improvements associated with the proposed project.

Initial Phase, Specific Plan Buildout

As discussed above, an LOS analysis was included in the LTA prepared for the proposed project by Fehr & Peers, and evaluated LOS at 21 existing study intersections within the project vicinity under five scenarios.

Based on the LTA analysis, the addition of traffic associated with the proposed project would cause increases in delays at several intersections, such that the affected intersections would operate at LOS E or LOS F under Existing Plus Initial Phase Conditions, Existing Plus Project Buildout Conditions, and Cumulative Plus Project Conditions.

As such, the LTA includes recommended improvements to address deficient conditions under Existing Plus Initial Phase Conditions, Existing Plus Project Buildout Conditions, and Cumulative Plus Proposed Project Conditions. Implementation of the recommendations included in the LTA would restore operations at all study intersections to acceptable LOS, with the exception of the South Chrisman Road/Eleventh Street intersection, which would continue to operate at LOS F in the Cumulative Plus Project Buildout Condition. However, as described previously, the list of off-site physical roadway improvements that would be constructed by the proposed project is not definitive at this time due to a variety of factors, with the main factor being that many of the intersections/roadways are in jurisdictions other than San Joaquin County, and, thus, successful implementation of identified improvements would require other agency approval (e.g., City of Tracy, Caltrans). In such instances of extraterritorial jurisdiction, the County cannot impose the improvements on the other jurisdictions. Thus, an assessment of all existing intersections within the project vicinity operating at LOS E or F was conducted as part of the Air Quality Technical Report prepared for the proposed project.

According to the Air Quality Technical Report, the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at any given intersection exceeds more than 400,000 vehicles per day. The LOS analysis prepared for the

[61] The language presented herein is quoted directly from the SJVAPCD Guidance. However, it appears to be a typo. The actual language is believed to be “one or more”.

proposed project shows that the highest peak hour traffic volume associated with the proposed project was anticipated to occur at the Corral Hollow Road/Linne Road intersection during Cumulative Plus Project Buildout Conditions, resulting in an hourly peak traffic volume of 5,330 vehicles per hour. While the peak hour traffic volume is not expected to stay elevated for 24 hours, if traffic volumes at the intersection were conservatively scaled up assuming peak hour volumes for 24 hours a day, the daily traffic volume at the intersection would be approximately 127,920 vehicles, which is well below the daily traffic volumes that would be expected to generate CO which would exceed the most stringent 1-hour CO standard (20.0 ppm). All other intersections are expected to operate at lower peak hourly traffic volumes and are, therefore, also expected to be well below the daily traffic volumes that could generate CO that would exceed the most stringent 1-hour CO standard (20.0 ppm). Thus, Ramboll concluded that the proposed project would not expose sensitive receptors to substantial concentrations of localized CO.

Off-Site Improvements Study Area

Construction of the potential future off-site intersection and roadway improvements would not inherently increase traffic within the project vicinity. Rather, the potential future intersection and roadway improvements are intended to alleviate traffic delays associated with Specific Plan Buildout. Considering the nature of the potential future off-site intersection and roadway improvements, such improvements are not anticipated to result in the generation of new substantial CO emissions. Thus, the potential future intersection and roadway improvements would not expose sensitive receptors to substantial concentrations of localized CO.

Localized CO Conclusion

Based on the discussion above, the proposed project would not expose sensitive receptors to substantial concentrations of localized CO and impacts related to localized CO emissions would be less than significant.

TAC Emissions

Another category of environmental concern is TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommendations for siting new sensitive land uses near sources typically associated with significant levels of TAC emissions, including, but not limited to, freeways and high traffic roads, distribution centers, GDFs, and rail yards.[62] The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high-volume roadways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure.

As discussed above, Ramboll evaluated lifetime cancer and chronic hazard index risks for nearby receptors from project construction emissions, as well as project operational emissions. The construction HRA assessed the lifetime cancer risk and chronic hazard index associated with DPM emissions from off-road diesel construction equipment and hauling and vendor trucks during construction of the proposed project. The operational

62 California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.

HRA evaluated the lifetime cancer risk, chronic hazard index, and acute hazard index analyses resulting from project operation, which includes DPM emissions associated with warehouse delivery truck travel and idling, TRU usage, emergency generator usage, operational off-road equipment usage, and TAC emissions (e.g., benzene) from fuel transfer and dispensing at the proposed GDF.

As stated previously, four exposure scenarios were calculated for the project HRAs:

- Scenario 1 – Initial Phase Operations;
- Scenario 2 – Initial Phase Operations and Construction;
- Scenario 3 – Specific Plan Buildout Operations; and
- Scenario 4 – Specific Plan Buildout Operations and Construction.

For all scenarios, Ramboll assumed an exposure period of 70 years for resident receptors and 40 years for worker receptors, in accordance with the 2015 OEHHA Guidance Manual for Preparation of Health Risk Assessments. Scenarios 1 and 3 include exposure to operational emissions during the full exposure period, while Scenarios 2 and 4 include exposure to construction emissions for the length of the construction period, and exposure to operational emissions for the remainder of the exposure period.

The results of the HRAs prepared for the Initial Phase and Specific Plan Buildout are discussed in further detail below, along with a discussion of TAC emissions associated with the Off-Site Improvements Study Area.

Initial Phase

The cancer risk and non-cancer hazard indices associated with the Initial Phase were estimated and are presented in Table 4.3-21.

Table 4.3-21
Maximum Unmitigated Cancer Risk and Hazard Indices – Initial Phase

Scenario[1]	Receptor Type	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
Scenario 1 – Initial Phase Operation Only	Resident	11.8	0.002	-
	Worker	9.7	0.02	-
Scenario 2 – Initial Phase Construction and Operation	Resident	7.4	0.012	-
	Worker	8.2	0.023	-
Thresholds of Significance		**20.0**	**1.0**	**1.0**
Exceed Thresholds?		**NO**	**NO**	**NO**

[1] Scenario 2 would result in lesser risks as compared to Scenario 1 due to the lower DPM emission rates observed during construction compared to operational activities. Construction TAC emissions are lower in comparison to operational TAC emissions and occur in the beginning of the exposure period, which generally has more conservative exposure parameters. Thus, in Scenario 1, when the exposure to construction emissions is replaced with full operation, the total risk is increased due to an overall higher exposure to TAC emissions throughout the exposure period. Further, construction activities are spread out across each of the development areas, which results in lower pollutant concentrations at receptor locations relative to the more condensed modeling of operational sources due to the distribution of emissions.

Source: Ramboll, 2025 (see Appendix D).

As shown in Table 4.3-21, TAC emissions associated with the Initial Phase of the proposed project would not result in health risks to the maximally exposed receptors in excess of the SJVAPCD's thresholds for cancer risk and/or non-cancer hazard index. Thus, the Initial Phase would not expose sensitive receptors to substantial concentrations of TACs during construction or operations.

Specific Plan Buildout

The cancer risk and non-cancer hazard indices associated with Specific Plan Buildout were estimated and are presented in Table 4.3-22.

Table 4.3-22
Maximum Unmitigated Cancer Risk and Hazard Indices – Specific Plan Buildout

Scenario[1]	Receptor Type	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
Scenario 3 – Specific Plan Buildout Operation Only	Resident	**41.3**	0.01	0.036
	Worker	10.4	0.021	0.22
Scenario 4 – Specific Plan Buildout Construction and Operation	Resident	9.2	0.03	0.036
	Worker	2.4	0.036	0.22
Thresholds of Significance		**20.0**	**1.0**	**1.0**
Exceed Thresholds?		**YES**	**NO**	**NO**

[1] Scenario 4 would result in lesser risks as compared to Scenario 3 due to the lower DPM emission rates observed during construction compared to operational activities. Construction TAC emissions are lower in comparison to operational TAC emissions, and occur in the beginning of the exposure period which generally has more conservative exposure parameters. Thus, in Scenario 3, when the exposure to construction emissions is replaced with full operation, the total risk is increased due to an overall higher exposure to TAC emissions throughout the exposure period. Further, construction activities are spread out across each of the development areas, which results in lower pollutant concentrations at receptor locations relative to the more condensed modeling of operational sources due to the distribution of emissions.

[2] **Bolded red text** indicates that emissions are over the SJVAPCD threshold.

Source: Ramboll, 2025 (see Appendix D).

As shown in Table 4.3-22, TAC emissions associated with Specific Plan Buildout during Scenario 4 would not result in health risks to the maximally exposed receptor in excess of the SJVAPCD's thresholds. However, Scenario 3 would result in cancer risk impacts to the maximally exposed residential receptor in excess of the SJVAPCD's thresholds. As shown in Figure 4.3-3, the maximally exposed residential receptor was determined to be an existing residence located near the center of the project site along South Chrisman Road, just below the University Center development area. Additionally, a second residence is located just north of the maximally exposed residential receptor, and according to Ramboll, would also be subject to cancer risks above the SJVAPCD threshold (see Figure 4.3-3).

Based on the above, Specific Plan Buildout could expose sensitive receptors to substantial concentrations of TACs during operations.

Figure 4.3-3
Maximally Exposed Receptor Locations

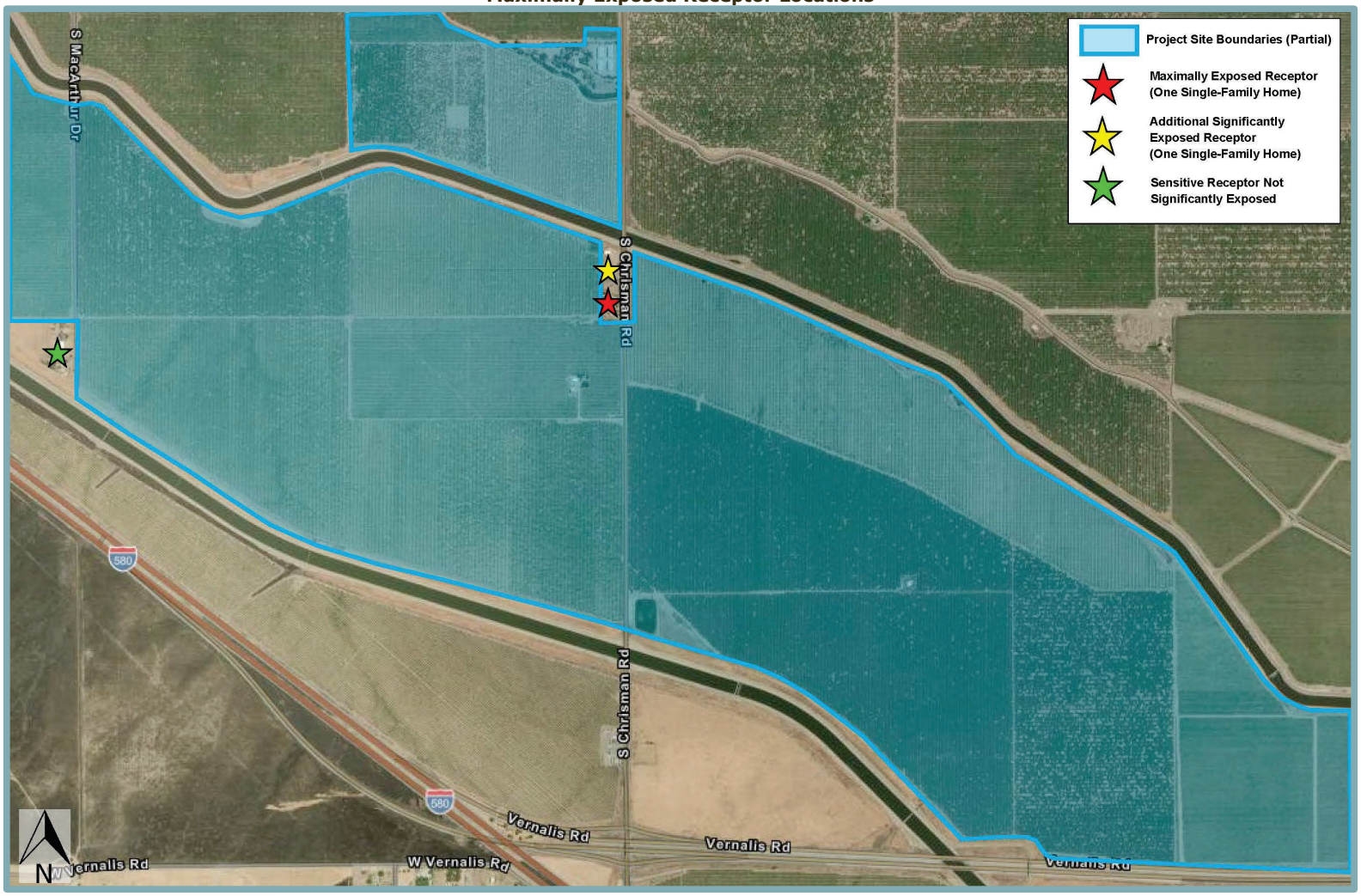


*Figure not OCR compatible.

Off-Site Improvements Study Area

As discussed above, construction of the potential future off-site intersection and roadway improvements would not inherently increase traffic within the project vicinity. Rather, the potential future intersection and roadway improvements are intended to alleviate traffic delays associated with Specific Plan Buildout. Thus, the potential future off-site intersection and roadway improvements would not include any operations that would be considered a substantial source of TACs and would not expose sensitive receptors to excess concentrations of TACs during operation.

Short-term, construction-related activities associated with the potential future off-site intersection and roadway improvements could result in the generation of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction of the off-site improvements would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. Health risks are typically associated with exposure to high concentrations of TACs over extended periods of time (e.g., 30 years or greater), whereas the construction period associated with the off-site improvements would likely be much shorter. All construction equipment and operation thereof would be regulated in accordance with the In-Use Off-Road Diesel Vehicle Regulation, which is intended to help reduce emissions associated with off-road diesel vehicles and equipment, including DPM.

Construction associated with the off-site improvements would also be required to comply with all applicable SJVAPCD rules and regulations, particularly associated with permitting air pollutant sources.

Because construction equipment associated with the off-site improvements would not operate for long periods of time and would be used at varying locations associated with each individual intersection and/or roadway segment, associated emissions of DPM would not occur at the same location for long periods of time. Due to the temporary nature of construction and the relatively short duration of potential exposure to associated emissions, the potential for any one sensitive receptor in the area to be exposed to concentrations of pollutants for a substantially extended period of time would be low. Therefore, construction of the off-site improvements would not be expected to expose nearby sensitive receptors to substantial pollutant concentrations.

TAC Emissions Conclusion

Considering the above, construction of all project components, and operation of the Initial Phase and the off-site improvements would not expose sensitive receptors to substantial concentrations of TACs. However, operations during Specific Plan Buildout conditions (i.e., Scenario 3) would result in cancer risk impacts to residents in the project vicinity in excess of the SJVAPCD's thresholds. Thus, Specific Plan Buildout could expose sensitive receptors to substantial concentrations of TACs during operations.

Criteria Pollutants

As discussed in the Existing Environmental Setting section and summarized in Table 4.3-1, criteria pollutant emissions can cause negative health effects. With regard to the proposed project, the principal criteria pollutants of concern for health impacts are

localized CO, ozone and PM. As discussed above, the proposed project is not anticipated to result in impacts related to localized exposure of sensitive receptors to substantial concentrations of CO. Unlike CO and many TACs, due to atmospheric chemistry and dynamics, ozone and atmospheric PM typically act to impact public health on a cumulative and regional level, rather than a localized level. Due to the cumulative and regional nature of effects from criteria pollutants, the analysis of potential health effects of criteria pollutants is further discussed in Impact 4.3-7.

Conclusion

As discussed above, the proposed project would not expose sensitive receptors to substantial concentrations of localized CO. In addition, construction of all project components, and operation of the Initial Phase and the off-site improvements would not expose sensitive receptors to substantial concentrations of TACs. However, operations during Specific Plan Buildout conditions (i.e., Scenario 3) would result in a cancer risk impact in excess of the SJVAPCD's thresholds to two residences located near the center of the project site along South Chrisman Road, just below the University Center development area. Thus, Specific Plan Buildout could expose sensitive receptors to substantial concentrations of TACs during operations, and a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.3-4 would require the installation of high efficiency particulate air (HEPA) filters within the maximally exposed sensitive receptors within the project area, as recommended by various guidance documents as an approach to addressing operational impacts, including the California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act.[63] Use of HEPA filters can reduce particulate matter concentrations by 99.97 percent.[64] The assumption can be made that a reduction in DPM-related health risks would be approximately equal to the filtration efficiency of the HEPA filters. The mitigated cancer risk and non-cancer hazard indices associated with Scenario 3 (i.e., Specific Plan Buildout operations) were estimated and are presented in Table 4.3-23.

Table 4.3-23
Maximum Mitigated Cancer Risk and Hazard Indices – Specific Plan Buildout

Scenario	Receptor Type	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
Scenario 3 – Specific Plan Buildout Operation Only	Resident	19.7	0.004	0.036
	Worker	10.4	0.021	0.22
Thresholds of Significance		**20.0**	**1.0**	**1.0**
Exceed Thresholds?		**NO**	**NO**	**NO**

Source: Ramboll, 2025 (see Appendix D).

[63] Ramboll Americas Engineering Solutions, Inc. *Air Quality Technical Report* [pg. 40]. April 2025.
[64] *Ibid.*

As shown in Table 4.3-23, with implementation of Mitigation Measure 4.3-4, cancer risks would be reduced to below the SJVAPCD significance threshold. However, because installation of HEPA filters in the existing residences would require resident approval, neither San Joaquin County, nor the project applicant, can legally impose such improvements on private properties. Therefore, impacts associated with Specific Plan Buildout operations could remain *significant and unavoidable*.

Initial Phase

None required.

Specific Plan Buildout

4.3-4 *Prior to approval of project improvement plans for the first phase of development subsequent to the Initial Phase, the project applicant shall install a central heating, ventilation and air conditioning (HVAC) system or other air intake system at the maximally exposed residences (see Figure 4.3-3 of this EIR), that includes high efficiency particulate air (HEPA) filters. The project applicant shall also prepare an operation and maintenance manual for the HVAC system and the filter. The manual shall include the operating instructions and the maintenance and replacement schedule. Proof of compliance with the above requirements shall be submitted to the San Joaquin County Community Development Department.*

Off-Site Improvements Study Area

None required.

4.3-5 Result in other emissions (such as those leading to odors) affecting a substantial number of people. Based on the analysis below, the impact is *less than significant*.

Pollutants of principal concern include emissions leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in Impacts 4.3-1 through 4.3-3 above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

The following includes a discussion of potential odor impacts associated with the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area.

Initial Phase, Specific Plan Buildout

Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative or formulaic methodologies to determine the presence of a significant odor impact do not exist. The intensity of an odor source's operations and its proximity to sensitive receptors influences the potential significance of odor emissions. Common types of facilities that have been known to produce odors in the San Joaquin Valley include, but are not limited to, wastewater treatment facilities, landfills, composting facilities, petroleum refineries, food processing facilities, feed lots, and/or dairies. The

SJVAPCD's Air Quality Guidelines provide the minimum distance from the aforementioned sources at which odor impacts may not be significant. Nonetheless, the project would also be subject to the SJVAPCD's Rule 4102, which allows members of the public to submit complaints regarding odor. Thus, although not anticipated, if odor complaints are made after the proposed project is developed, the SJVAPCD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

The proposed project would include the development of an on-site WWTP. According to the SJVAPCD's Air Quality Guidelines, the minimum buffer distance for a new WWTP is two miles. The nearest off-site receptor would be located less than two miles from the proposed WWTP. However, the proposed WWTP would use a membrane bioreactor (MBR) technology, which would result in a reduced odor impact relative to traditional open pond designs due to the fully enclosed and compact design of the MBR systems. Specifically, in MBR systems, the biological processes associated with wastewater treatment occur within sealed units, minimizing the exposure of raw or partially treated wastewater to open air and reducing the potential for odors to escape. Additionally, where odors are of particular concern, MBR treatment plants often incorporate additional odor control measures like activated carbon filters, or chemical scrubbers. Solid waste collected during the treatment process would be transported to landfills, which would minimize the potential for odor impacts. Thus, according to the Air Quality Technical Report, the proposed WWTP would not result in odors adversely affecting a substantial number of people.

Diesel fumes from construction equipment and heavy-duty trucks could be found to be objectionable; however, operation of construction equipment would be regulated by SJVAPCD rules and regulations and restricted to the hours of 7:00 AM to 7:00 PM per the San Joaquin County Code. All construction equipment and operation thereof would be regulated in accordance with the statewide In-Use Off-Road Diesel Vehicle Regulation. In addition, construction is temporary and construction equipment would operate intermittently throughout the course of a day, and would only occur over portions of the project site at a time. For the aforementioned reasons, the project would not result in any noticeable objectionable odors associated with construction.

Off-Site Improvements Study Area

The off-site improvements would not introduce any land uses known to produce odors in the San Joaquin Valley. Similar to the above, diesel fumes from construction equipment and heavy-duty trucks associated with the off-site improvements could be found to be objectionable; however, operation of construction equipment would be regulated by SJVAPCD rules and regulations and restricted to the hours of 7:00 AM to 7:00 PM per the San Joaquin County Code. All construction equipment and operation thereof would be regulated in accordance with the statewide In-Use Off-Road Diesel Vehicle Regulation. In addition, construction is temporary and construction equipment would operate intermittently throughout the course of a day, and would only occur over portions of the Off-Site Improvements Study Area at any given time. For the aforementioned reasons, the off-site improvements would not result in any noticeable objectionable odors associated with construction.

Dust

The following includes a discussion of potential dust impacts associated with the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

As discussed previously, Valley Fever, a disease of the lungs caused by inhalation of spores of the *Coccidioides immitis* fungus is present within the soils within San Joaquin County. The spores are found in the top few inches of soil, and become airborne when the soil is disturbed by wind, vehicles, excavation, or other ground-moving activities, and can then subsequently be inhaled into the lungs.

On-site construction workers potentially could be exposed to Valley Fever from dust generated during construction of the proposed project, notably during grading and other earthmoving activities. However, scientific research shows that agricultural soils are less likely to contain spores of the *Coccidioides immitis* fungus, as the fungus favors dry, undisturbed soils.[65,66] In addition, the project would be required to comply with all applicable SJVAPCD rules and regulations regarding fugitive dust, including Regulation VIII. The provisions of Regulation VIII are listed previously in this chapter, under Local Regulations. As noted therein, for projects in which construction-related activities would disturb greater than one acre of land, the SJVAPCD requires preparation of a Dust Control Plan or Construction Notification form before issuance of the first grading permit. The proposed project would be subject to this regulation, and submittal of the Dust Control Plan or Construction Notification would be ensured by the County as a condition of project approval. By reducing fugitive dust emissions, Regulation VIII reduces potential exposure to Valley Fever. In addition, because current long-term residents typically already have been exposed to and may have developed immunity to Valley Fever, construction activities are not expected to add significantly to exposure of off-site residents to the fungus.

In addition, following project construction, vehicles operating within the project site would be limited to paved areas of the site, and non-paved areas would be landscaped. Thus, project operations would not include sources of dust that could adversely affect a substantial number of people, or add significantly to exposure of off-site residents to the Valley Fever fungus.

Conclusion

For the reasons discussed above, construction and operation of the proposed project would not result in emissions, such as those leading to odors and/or dust, that would adversely affect a substantial number of people, and a ***less-than-significant*** impact would occur

Mitigation Measure(s)

None required.

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65 Wagner et al. *Coccidioides Undetected in Soils from Agricultural Land and Uncorrelated with Time or the Greater Soil Fungal Community on Undeveloped Land.* May 25, 2023.

66 Lauer et al. *Valley Fever: Environmental Risk Factors and Exposure Pathways Deduced from Field Measurements in California.* July 22, 2020.

4.3-6 Result in the inefficient or wasteful use of energy, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the impact is *less than significant*.

The following includes a discussion of the potential for the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area to result in the inefficient or wasteful use of energy, or conflict with a State or local plan for renewable energy or energy efficiency.

Initial Phase, Specific Plan Buildout

The proposed project involves development of the project site with a range of warehousing, office, limited industrial, and commercial uses, along with a university and VFW post. Energy use associated with operation of the proposed project would be typical of such uses, requiring electricity for interior and exterior building lighting, HVAC systems, electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of zero emission equipment, as included in Mitigation Measure 4.3-3(b). In addition to on-site energy use, the development of the proposed project would result in transportation energy use associated with vehicle trips generated by students, employees, and all other visitors travelling to and from the project site. Energy use associated with construction of the proposed project, as well as building energy use and transportation energy use are discussed separately below.

Construction Energy Use

Construction of the proposed project would involve increased energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. However, as shown in Table 6-1 of the Energy Technical Report, relative to total annual fuel consumption countywide, project construction would use approximately 0.26 percent of gasoline, 0.47 percent of diesel fuel, and 0.61 percent of natural gas over the duration of construction. In comparison to annual Statewide usage, construction of the proposed project would equate to approximately 0.005 percent of gasoline usage and 0.01 percent of diesel fuel usage. Therefore, Ramboll concluded that fuel use during construction would be temporary and negligible. Further, according to the Energy Technical Report, the proposed project would not include any unusual characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies).

The electricity demand associated with construction of the proposed project would be supplied by existing on-site power poles, when available. In the event of an emergency or during a power outage, the use of generator sets would be used, which are comprised of a generator and diesel engine used to produce power off-grid. According to the Energy Technical Report, relatively negligible impacts to energy demand are expected as a result of construction activities. As such, construction of the proposed project would not cause a permanent or substantial increase in demand that would exceed PG&E's demand projections or exceed the ability of PG&E's existing

infrastructure to handle such an increase. Therefore, construction activities would not result in any significant impacts on local or regional electricity supplies, the need for additional capacity, or on peak or base period electricity demands. In addition, standards or regulations specific to construction-related electricity usage do not currently exist.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), and the phased nature of the proposed project, only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the site, rather than a single location.

In addition, while construction of the proposed project would require on-road trucks for soil hauling and deliveries, and off-road equipment such as excavators, tractors/loaders/backhoes, forklifts, and graders, all construction equipment and operation thereof would be regulated pursuant to the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing a five-minute limit on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. Furthermore, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. Engine tiers are used to describe the emissions intensity and efficiency of an engine. Construction equipment with Tier 0 or Tier 1 engines are the least efficient, and Tier 4 is the most efficient. In November 2021, the CARB began developing standards for Tier 5 engines. As of 2015, vehicles with Tier 0 and Tier 1 engines are prohibited from being added to equipment fleets. Fleets with a total horsepower over 2,501, excluding non-profit training centers, may not add any Tier 2 engines and, starting January 1, 2024, all newly added engines must be Tier 4 final or higher.[67] The In-Use Off-Road Diesel Vehicle Regulation would, therefore, help to improve fuel efficiency for equipment used in construction of the proposed project. As discussed previously, in compliance with Mitigation Measure 4.3-2(b), all off-road diesel-powered construction equipment greater than 50 HP used for all construction activities would be equipped with Tier 4 final engines.

The CARB enforces off-road equipment regulations through their reporting system, Diesel Off-road Online Reporting System (DOORS). Each construction fleet is required to update their DOORS account within 30 days of buying or selling a vehicle, and DOORS automatically calculates the fleet average index for each fleet. The fleet average index is an indicator of a fleet's overall emission rate, and is based on each vehicle's engine horsepower and model year, and whether it is equipped with a Verified Diesel Emission Control Strategy (VDECS). If a fleet cannot, or does not want to, meet the fleet average target in a given year, the fleet may instead choose to comply with the Best Available Control Technology (BACT) requirements. A fleet may meet the BACT requirements each year by turning over or installing VDECS on a certain percentage of its total fleet horsepower. 'Turnover' means retiring a vehicle,

[67] California Air Resources Board. *In-Use Off Road Diesel-Fueled Fleets Regulation Overview*, *Revised October 2016*. 2016.

designating a vehicle as permanent low-use (a vehicle used less than 200 hours per year), repowering a vehicle with a higher tier engine, or rebuilding the engine to a more stringent emission standard. By each compliance date (annually on January 1st), the fleet must either show that its fleet average index was less than or equal to the calculated fleet average target rate, or that the fleet has met the BACT requirements.[68] Construction activities associated with the proposed project would be required to comply with such regulations, which would ensure that construction equipment meets all State efficiency requirements.

Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction. Over time, as technology progresses and more stringent emissions standards are put in place, construction equipment engines become increasingly efficient. Construction of the proposed project would also be required to comply with all applicable SJVAPCD rules and regulations, which are indirectly related to energy efficiency, which would help to further reduce energy use associated with the proposed project.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project construction activities would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Building Energy Demand

Development associated with the proposed project is required to comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, including the CBSC and CARB standards, which would ensure that the future uses would be designed to be energy efficient to the maximum extent practicable. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed development within the proposed project would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. The 2022 Building Energy Efficiency Standards also requires that newly constructed non-residential buildings, including grocery stores, offices, financial institutions, unleased tenant space, retail space, schools, warehouses, auditoriums, convention centers, hotel/motels, libraries, medical office building/clinics, and theaters, be developed to include a solar PV system. As discussed in further detail within Impact 4.3-8, below, Mitigation Measure 4.3-8(a) would require that the proposed project incorporate solar PV panels for "Base Building" energy needs for I-L zoned buildings (see Figure 3-4 of the Project Description chapter of this EIR), as well as for additional forklift charging anticipated as part of Mitigation Measure 4.3-3(b) discussed above. Therefore, a portion of the electricity demand associated with development of the proposed project would be met by on-site renewable energy. Furthermore, State regulations promote the generation of renewable energy and encourage energy efficiency through requirements placed on utility providers and strict

[68] California Air Resources Board. *Frequently Asked Questions, Regulation for In-Use Off-Road Diesel-Fueled Fleets (Off-Road Regulation)*. August 2014.

development standards. For instance, the RPS requires utilities, including PG&E, to procure an increasing proportion of electricity from renewable sources. Ultimately the RPS requirements mandate that all electricity produced within the State be renewably sourced by the year 2045.

As shown in Table 6-4 of the Energy Technical Report, with incorporation of Mitigation Measure 4.3-8(a), the proposed project is anticipated to result in increased electricity consumption of approximately 69,618,205 kilowatt hours (kWh) in 2032 associated with the Initial Phase and 477,666,888 kWh in 2050 associated with Specific Plan Buildout. Compared to the electricity consumption for all of San Joaquin County, the proposed project's contribution would represent a 1.2 percent increase in electricity demand for the Initial Phase and an 8.3 percent increase during Specific Plan Buildout. Compared to the annual electricity consumption for the State, the proposed project's contribution would represent a 0.02 percent increase in annual electricity demand for the Initial Phase and a 0.17 percent increase during Specific Plan Buildout.

Without consideration of the on-site rooftop solar commitment prescribed within Mitigation Measure 4.3-8(a), the proposed project would be anticipated to result in increased electricity consumption of approximately 86,614,752 kWh in 2032 associated with the Initial Phase and 543,521,755 kWh in 2050 associated with Specific Plan Buildout (see Table 4-3 of the Energy Technical Report). As such, the provision of rooftop solar PV systems associated with the proposed project would result in a reduction of 16,996,547 kWh in 2032 associated with the Initial Phase, and a reduction of 6,585,487 kWh in 2050 associated with Specific Plan Buildout.

Although the proposed project would increase electricity demand in the project area, the increased demand is not anticipated to conflict with the PG&E's ability to meet the RPS requirements, or exceed the PG&E's capacity such that the proposed project's energy demands would not be met. In 2021, California's peak grid demand was 43,982 MW (megawatts). On September 8, PG&E reached a maximum demand of 20,118 MW. While PG&E data was not available for 2023, the 2023 California's peak grid demand was similar to 2021 demand at 44,534 MW. In comparison, the project's maximum demand is expected to be approximately 80 MW in 2057. Thus, the proposed project would have a relatively negligible effect on Statewide and PG&E peak demands.

In addition, the proposed project is anticipated to result in increased natural gas consumption of approximately 127,401,649 one-thousand British thermal units (kBTU) in 2032 associated with the Initial Phase and 827,201,409 kBTU in 2050 associated with Specific Plan Buildout. Compared to the annual natural gas consumption for all of San Joaquin County, the proposed project's contribution would represent a 0.68 percent increase in natural gas demand for the Initial Phase and a 4.42 percent increase during Specific Plan Buildout. Compared to the annual natural gas consumption for the State, the proposed project's contribution would represent a 0.01 percent increase in natural gas demand for the Initial Phase and a 0.07 percent increase during Specific Plan Buildout.

Increased energy does not necessarily mean that a project would have an impact related to energy resources. Based on Appendix F of the CEQA Guidelines, a project would result in an impact related to energy resources if a project would result in the

inefficient use or waste of energy. As stated above, the proposed project would be required to comply with the efficiency standards set forth in the CBSC, CALGreen Code, Building Energy Efficiency Standards, and by CARB, and the proposed project would not conflict or obstruct with any State or local plans related to renewable energy. In addition, according to the Energy Technical Report, the proposed project would not include any unusual characteristics that would require energy consumption that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies).

With regard to landscaping and maintenance equipment, AB 1346 requires that all small off-road engines sold after January 1, 2024 are all-electric. As discussed above, Mitigation Measure 4.3-3(b) would require that all landscape equipment used to maintain individual on-site buildings and all on-site landscaping, parks, and open space be zero emission equipment. Given that electricity from PG&E is partially generated from renewable sources, the use of electric maintenance equipment would be considered more energy efficient than diesel- or gas-powered maintenance equipment.

In addition, Mitigation Measure 4.3-3(b) would require that the proposed project use various zero emission equipment, including forklift equipment and yard mules at all industrial warehouse buildings greater than 300,000 sf. Additional forklift charging anticipated as part of Mitigation Measure 4.3-3(b) is assumed to be met by solar PV, as required by Mitigation Measure 4.3-8(a). Thus, the use of electric forklift and yard mules would be considered more energy efficient than diesel- or gas-powered equipment.

Transportation Energy Demand

As shown in Table 6-4 of the Energy Technical Report, gasoline consumption from mobile sources associated with the Initial Phase was estimated to be approximately 2,104,642 gallons/year, which would represent approximately 0.8 percent of the gasoline used within San Joaquin County and 0.016 percent of the Statewide gasoline usage in 2032. For Full Buildout, gasoline consumption would increase to 10,637,735 gallons/year, which would represent 4.1 percent of the gasoline that would be used countywide, and 0.09 percent of the gasoline used Statewide, in 2050.

In addition, diesel consumption associated with the Initial Phase was estimated to be approximately 4,024,425 gallons/year, which is 2.9 percent of the diesel that would be used in San Joaquin County, and 0.08 percent of the diesel used Statewide, in 2032. For Full Buildout, diesel consumption would increase to an estimated 21,539,745 gallons/year, which is 13.8 percent of the countywide diesel usage and 0.37 percent of the Statewide diesel usage in 2050. According to Ramboll, diesel usage would decrease over time due to regulations likely becoming more stringent in the future, and increased use of zero-emission technologies.

The calculations above are likely an overestimate, as the estimates do not account for the increasing ownership of EVs. California leads the nation in registered alternatively-fueled and hybrid vehicles. In fact, under SB 500, the State has required that, starting in the year 2030, all cars sold shall be zero-emission/EVs. In addition, State-specific regulations encourage fuel efficiency and reduction of dependence on oil.

Improvements in vehicle efficiency and fuel economy standards help to reduce consumption of gasoline and reduce the State's dependence on petroleum products. The 2022 CBSC also requires new developments to include the necessary electrical infrastructure for EV charging stations. Based on the above, the actual consumption of gasoline and diesel associated with the proposed project is anticipated to be even lower than the contributions noted above.

Consistency with Applicable Energy Plans

Applicable local plans for renewable energy or energy efficiency relevant to the proposed project were determined to be the SJCOG RTP/SCS and the San Joaquin County General Plan. In addition, the State has adopted several regulations related to renewable energy and energy efficiency including, but not limited to, the RPS Standard, SB 100, Title 24, the CalGreen Code, AB 1493, and SB 375.

As demonstrated in Table 4.3-24, the proposed project would comply with all applicable State regulations for renewable energy or energy efficiency to the extent required by law. Further, as shown in in Table 4.3-25 and Table 4.3-26, the proposed project would be consistent with the renewable energy and energy efficiency provisions of the San Joaquin County General Plan and the SJCOG RTP/SCS. Thus, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Off-Site Improvements Study Area

Construction of the potential future intersection and roadway improvements would involve increased energy demand and consumption similar to the proposed project, and would be regulated pursuant to the requirements and standards described above, including the CARB's In-Use Off-Road Diesel Vehicle Regulation, engine tier requirements, DOORS Reporting System, VDECS or BACT requirements, as well as all other State efficiency requirements and SJVAPCD rules and regulations.

In addition, technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with future construction of the off-site improvements. Over time, as technology progresses and more stringent emissions standards are put in place, construction equipment engines become increasingly efficient. As such, regulations pertaining to energy use, including, but not limited to, State and federal vehicle standards, have been getting progressively more stringent over time. Thus, as future construction occurs within the Off-Site Improvements Study Area under the increasingly stringent regulations, the energy use associated with such construction activities is anticipated to be increasingly energy efficient over time as well.

The potential future intersection and roadway improvements would not induce additional vehicle travel in the project area. Rather, the off-site improvements are intended to alleviate traffic delays associated with Specific Plan Buildout. Thus, the off-site improvements would not result in any increases in operational energy usage.

Table 4.3-24
Consistency with Applicable State Renewable Energy and Energy Efficiency Strategies

Plan	Category Description	Consistency Analysis
California RPS and SB 100	As most recently amended by SB 100 (2018), California's RPS increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020; 50 percent renewable power by 2026; and 60 percent renewable power by 2030. SB 350 (2015) also requires the State Energy Resources Conservation and Development Commission to double (by 2030) the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	**Consistent.** The proposed project would be consistent with and not impair implementation of the State's RPS. The electricity for the operation of the proposed project would be supplied by Pacific Gas & Electric (PG&E), which is composed of 33 percent renewable resources, and 100 percent GHG-free resources as of 2023.
CCR, Title 24, Part 6	Title 24, Part 6 of the California Code of Regulations establishes energy and water efficiency requirements for residential and non-residential new construction, additions to existing buildings, and alterations to existing buildings. Standards include requirements for water heating, HVAC, lighting, electrical systems, and solar design.	**Consistent.** The proposed project would meet or exceed the Title 24 energy efficiency standards in effect at the time of building permit application.
AB 1109	The Lighting Efficiency and Toxics Reduction Act (AB 1109) requires a reduction in average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018.	**Consistent.** The proposed project would meet the applicable requirements from AB 1109.
CALGreen Code Requirements	CALGreen establishes green building standards to meet the goals of AB 32. CALGreen includes standards for residential and nonresidential structures such as new buildings or portions of new buildings, additions and alterations, and all occupancies where no other state agency has the authority to adopt green building standards applicable to those occupancies. Standards include requirements for site development, indoor and outdoor water use, construction waste reduction, disposal and recycling and building maintenance and operation.	**Consistent.** To the extent applicable to the proposed project, the proposed project would meet the CALGreen Building Standards Code in effect at the time of building permit application.



Table 4.3-24
Consistency with Applicable State Renewable Energy and Energy Efficiency Strategies

Plan	Category Description	Consistency Analysis
Mobile Sources		
AB 1493 (Pavley Regulations)	Reduces GHG emissions in new passenger vehicles from model years 2012 to 2016 (Phase I) and model years 2017 to 2025 (Phase II). Also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020.	**Consistent.** The proposed project would not impair implementation of the AB 1493 regulations.
Low Carbon Fuel Standard	Establishes protocols for measuring and reducing the life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels.	**Consistent.** The proposed project would not conflict with implementation of the Low Carbon Fuel Standard.
Advanced Clean Cars Program	In 2012, the CARB adopted the Advanced Clean Cars program to reduce criteria pollutant emissions and GHG emissions for model year vehicles 2015 through 2025. The Advanced Clean Cars Program includes the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light-and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulations that require manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The final phase of the Advanced Clean Cars Program includes requirements for 2026 model years and beyond. The final phase extends the existing manufacturer requirements to sell a certain number of vehicles as ZEVs and PHEVs, with 100 percent of sales in 2035 and beyond required to be made from ZEVs and PHEVs. As discussed in the Regulatory Context section above, in late April to early May, the U.S. House of Representatives passed three CRA resolutions to rescind the USEPA's waiver for the Advanced Clean Cars II Program. The Senate passed all three resolutions on May 22, 2025, and President Donald Trump signed the CRA resolutions on June 12, 2025. Subsequently, a lawsuit has been filed by the State	**Consistent.** The proposed project would not conflict with implementation of the Advanced Clean Cars program.

Table 4.3-24
Consistency with Applicable State Renewable Energy and Energy Efficiency Strategies

Plan	Category Description	Consistency Analysis
	Attorney General on June 12, 2025, against the federal government's use of the CRA to upend California's clean vehicles program. As such, the future enforceability of the Advanced Clean Cars II Program is currently unknown.	
SB 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the State's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	**Consistent**. The proposed project would not conflict with the implementation of SB 375. Furthermore, the proposed project would be consistent with the goals of the SJCOG's RTP/SCS, which demonstrates how the San Joaquin Valley region under SJCOG's jurisdiction will meet the emission reduction targets of SB 375.

Source: Ramboll, 2025 (see Appendix F).

Table 4.3-25
Consistency with San Joaquin County General Plan Policies Related to Energy

Policy Number	Policy Name	Policy Description	Consistency Analysis
LU-1.1	Compact Growth and Development	The County shall discourage urban sprawl and promote compact development patterns, mixed-use development, and higher development intensities that conserve agricultural land resources, protect habitat, support transit, reduce vehicle trips, improve air quality, make efficient use of existing infrastructure, encourage healthful, active living, conserve energy and water, and diversify San Joaquin County's housing stock.	**Consistent.** The proposed project would include mixed-use development, including a number of land uses including but not limited to: Limited Industrial, Industrial Park, University, General Commercial, and Open Space. The proposed project would attract a wide variety of development that would generate construction and permanent jobs and provide for workforce and business development within San Joaquin County and the surrounding communities, which would in tum contribute to a vibrant workplace in the San Joaquin Valley. Additionally, transit service is not currently provided to the area, and the project plans to extend public transit service to the project site. Extending service would include expanding San Joaquin RTD fixed-route bus service to the project site. Additionally, an Altamont Commuter Express (ACE) train station is situated on Tracy Boulevard at Linne Road (two miles north of the project).
LU-2.2	Sustainable Building Practices	The County shall promote and, where appropriate, require sustainable building practices that incorporate a “whole system" approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.	**Consistent.** The proposed project would implement strategies and build infrastructure to promote the efficient use of resources, which includes but is not limited to (see proposed Specific Plan Section 7.2): • Consistency with CALGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements. • Design of the site would reduce the mass grading to the extent feasible and decrease the use of earth moving equipment needed to grade the site, which leads to a reduction in

Table 4.3-25
Consistency with San Joaquin County General Plan Policies Related to Energy

Policy Number	Policy Name	Policy Description	Consistency Analysis
			total emissions from construction equipment and dust. • Site planning and building design shall consider building orientation, window placements, and materials selection to assist in minimizing energy use. • Energy efficient LED lighting and control systems would be used for buildings, traffic, street, and any other outdoor lighting. • Buildings shall be designed to accept roof-mounted solar panels affording tenants/users the opportunity to use solar energy. • Where warehouse spaces are required to be climate controlled, install insulated dock doors and dock door seals to reduce energy loss. • Section warehouse spaces by temperature and group cool and warm temperature spaces together to decrease energy usage. • Lighting levels for outdoor illumination would be required to meet the minimum standards required for safety. All exterior lighting would be required to be LED and controlled by timers, and unless otherwise required, only lighting required for parking lot security and safety would be provided at night. • The use of daylight or clerestory windows and roof skylights would be used as a means of providing natural light and reducing the need for lighting during daytime. • Light colored “cool” roofs would be required for all new buildings, which helps to reduce heat gain and conserve energy use. • Canopies, awnings, and architectural shade structures would also be encouraged on the

Table 4.3-25
Consistency with San Joaquin County General Plan Policies Related to Energy

Policy Number	Policy Name	Policy Description	Consistency Analysis
			south and west elevations to minimize heat gain. • Tree species would be chosen based on their large canopy characteristics at maturity and would be strategically placed on the west and east portions of the site to shade paving areas and building elevations to reduce sun exposure and minimize heat gain.
LU-3.11	Solar Access	The County shall encourage new residential subdivisions and new commercial, office, industrial, and public buildings to be oriented and landscaped to enhance natural lighting and solar access in order to maximize energy efficiency.	**Consistent.** The proposed project would implement the use of daylight or clerestory windows and roof skylights would be used as a means of providing natural light and reducing the need for lighting during daytime (see proposed Specific Plan Section 7.2).
LU-6.8	Sustainable Technologies	The County shall encourage all employment and industrial projects to incorporate sustainable technologies including energy and water efficient practices.	**Consistent.** The proposed project would use sustainable technologies, including energy and water efficient practices where available, which would include the use of high-efficiency irrigation systems and designing buildings to include energy efficient appliances, building systems, and HVAC control systems (see proposed Specific Plan Sections 4.2[c], 7.2).
ED-2.4	Green Economy	The County shall encourage the development and expansion of industries and businesses that rely on environmentally-sustainable products and services, such as renewable energy, green building, clean transportation, water conservation, waste management and recycling, and sustainable land management.	**Consistent.** The proposed project would implement strategies and build infrastructure to promote the efficient use of resources, including the use of recycled water generated from the treated wastewater for landscape irrigation, consideration of locally sourced, salvaged, and recycled materials for use throughout the landscape and hardscape design, and design of buildings to accept roof-mounted solar allowing tenants/users the opportunity to use solar energy (see proposed Specific Plan Sections 4.2[c], 7.2).

Table 4.3-25
Consistency with San Joaquin County General Plan Policies Related to Energy

Policy Number	Policy Name	Policy Description	Consistency Analysis
PHS-5.14	Energy Consumption Reduction	The County shall encourage new development to incorporate green building practices and reduce air quality impacts from energy consumption.	**Consistent.** As noted for NCR-5.11, the proposed project would meet the CALGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements.
NCR-5.1	Nonrenewable Energy and Energy Efficiency	The County shall support the efforts of residents, businesses, and energy providers to reduce the consumption of nonrenewable energy and shall promote energy providers' programs to increase energy efficiency and implement demand response programs.	**Consistent.** The proposed project would support reduced energy consumption and increased energy efficiency through green building practices, as discussed in PHS-5.14, LU-2.2, and NCR-5.11.
NCR-5.11	Green Building Practices	The County shall encourage green building practices in new construction.	**Consistent.** The proposed project would comply with the applicable requirements in the Green Building Code, which include the following: • Reducing water consumption by 20 percent. • Diverting 50 percent of construction waste from landfills. • Installation of low pollutant-emitting materials. • Installation of separate water meters for nonresidential buildings' indoor and outdoor water use. • Moisture-sensing irrigation systems for larger landscape projects. • Mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity and design efficiencies.

Table 4.3-25
Consistency with San Joaquin County General Plan Policies Related to Energy

Policy Number	Policy Name	Policy Description	Consistency Analysis
			In addition, the proposed Specific Plan (Section 7.4) requires project buildings to be LEED compliant and become certified.
NCR-5.14	Natural Daylighting in Commercial Operations	The County shall encourage commercial and employment operations to incorporate natural daylighting by the use of windows and skylights to reduce energy demand for lighting.	**Consistent.** The proposed project would use daylight or clerestory windows and roof skylights as a means of providing natural light and reducing the need for lighting during daytime (see proposed Specific Plan Section 7.2).
NCR-5.2	Alternative Energy	The County shall encourage residents, businesses, and energy providers to develop and use alternative, renewable energy sources, including but not limited to, biomass, solar, wind, and geothermal.	**Consistent.** The proposed project buildings shall be designed to accept roof-mounted solar panels affording tenants/users the opportunity to use solar energy, with a mitigation measure requiring the installation of solar to cover base building needs at industrial zoned buildings (see proposed Specific Plan Section 7.2, Mitigation Measure 4.3-8[a]).

Source: Ramboll, 2025 (see Appendix F).

Table 4.3-26
Consistency with SJCOG RTP/SCS Strategies Related to Energy

Goal Number	Goal	Strategy	Consistency Analysis
1	Enhance the environment for existing and future generations and conserve energy.	Strategy No. 1: Encourage efficient development patterns that maintain agricultural viability and natural resources.	**Consistent.** The proposed project would include parks and open spaces throughout the project area. In addition, the proposed project would include sustainable design practices for landscape, which would include the use of native and climate adapted plant species, high efficiency weather-based irrigation systems, locally sourced and recycled materials, and stormwater best management practices. Water use for landscape irrigation is also in the forefront of current design practices and guidelines have been included to address water conservation. The approach to the design would create a contemporary landscape that is attractive, yet resource-efficient and relatively low-maintenance (see proposed Specific Plan Section 4.2).
		Strategy No. 2: Encourage preservation of natural resources.	**Consistent.** The proposed project would include parks and open spaces throughout the project area and would be well connected through pedestrian and bicycle networks. Typically, such areas would include exercise stations, picnic areas, sitting areas, concession/food truck service areas, natural areas, and trails.
		Strategy No. 3: Enhance the connection between land use and transportation choices through projects supporting energy and water efficiency.	**Consistent.** The proposed project would implement strategies and build infrastructure to promote the efficient use of resources, including the use of recycled water generated from the treated wastewater for landscape irrigation, consideration of locally sourced, salvaged, and recycled materials for use throughout the landscape and hardscape design, and design of buildings to accommodate the installation of roof-mounted solar (see proposed Specific Plan Sections 4.2, 7.2). The project has also committed to incorporating solar photo voltaic (PV) panels sized to accommodate "base building" energy needs for limited industrial zoned buildings, as described in Mitigation Measure 4.3-8(a). Additionally, the proposed project would meet the CALGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements.
		Strategy No. 4: Improve air quality by reducing transportation-related emissions.	**Consistent.** The proposed project would implement a Voluntary Commute Trip Reduction (CTR) program. Required elements of the program include (Mitigation Measure 4.12-4[b]):

Table 4.3-26
Consistency with SJCOG RTP/SCS Strategies Related to Energy

Goal Number	Goal	Strategy	Consistency Analysis
			• CTR Marketing – implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program). • Ridesharing Program – implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers. • Subsidized or Discounted Transit Program – provides subsidized or discounted, or free transit passes for employees. • End-of-Trip Bicycle Facilities – installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use. • Employer-Sponsored Vanpool – implements an employer-sponsored vanpool service for employee groups of five to 15 people. Additionally, the proposed project would establish pedestrian and bicycle circulation system within the project site to encourage employee wellness and provide non-vehicle alternatives.
4	Preserve the efficiency of the existing transportation system.	Strategy No. 12: Prioritize projects that make more efficient use of the existing road network.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 13: Support the continued maintenance and preservation of the existing transportation system.	**Consistent.** The proposed project includes several potential future intersection and roadway improvements that would be triggered by full buildout of the proposed project in the Off-Site Improvements Study Area, which is generally located north of the project site. However, the list of off-site physical roadway improvements that would be constructed by the proposed project is not definitive at this time due to a variety of factors, with the main factor being that many of the intersections/roadways are in jurisdictions other than San Joaquin County, and, thus, successful implementation of identified improvements would require other agency approval (e.g., City of

Table 4.3-26
Consistency with SJCOG RTP/SCS Strategies Related to Energy

Goal Number	Goal	Strategy	Consistency Analysis
			Tracy, Caltrans). In such instances of extraterritorial jurisdiction, the County cannot impose the improvements on the other jurisdictions.
		Strategy No. 14: Promote electric power, alternative fuels and autonomous technologies for freight and agriculture.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 15: Manage the adoption of electric vehicles and private connected and autonomous vehicles.	**Consistent.** The proposed project would provide preferential parking space locations for electric vehicles and other clean air vehicles in all parking structures and lots to encourage energy-efficient vehicular use (see proposed Specific Plan Section 7.2).
		Strategy No. 16: Promote electric power, alternative fuels, and autonomous technologies for public transit.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.

Source: Ramboll, 2025 (see Appendix F).

Based on the above, the potential future intersection and roadway improvements would not result in the inefficient or wasteful use of energy, or conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Conclusion

Based on the above, the proposed project would not be considered to result in a wasteful, inefficient, or unnecessary use of energy, and the proposed project is not anticipated to conflict with a State or local plan for renewable energy or energy efficiency. Thus, impacts would be considered ***less than significant***.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The geographic context for the cumulative air quality analysis includes San Joaquin County and surrounding areas within the portions of the SJVAB that are designated nonattainment for ozone and PM.

As discussed previously, climate change occurs on a global scale, and emissions of GHGs, even from a single project, contribute to the global impact. However, due to the existing regulations within the State, for the purposes of this analysis, the geographic context for the analysis of GHG emissions presented in this EIR is the State of California.

Finally, a project's impacts related to energy use may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The following discussion of energy impacts is based on the implementation of the proposed project in combination with buildout of a list of reasonably foreseeable projects within the project area. Additional detail regarding the cumulative project setting can be found in Chapter 6, Statutorily Required Sections, of this EIR.

4.3-7 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard. Based on the analysis below, even with mitigation, the project's incremental contribution to the significant cumulative impact is *cumulatively considerable* and *significant and unavoidable*.

Buildout of the proposed project would lead to the release of emissions that would contribute to the cumulative regional air quality setting. The following section includes

a discussion of the proposed project's contribution to the cumulative operational emissions associated with implementation of the project, including the Initial Phase Specific Plan Buildout, and the cumulative health effects of exposure to criteria pollutants. Because construction would occur over a relatively short time period as compared to the operational lifetime of the proposed project, construction emissions are not considered to be cumulative in nature. Given that the potential future intersection and roadway improvements within the Off-Site Improvements Study Area would not result in the generation of any operational emissions, such improvements are not discussed further.

Cumulative Operational Emissions

The following includes a cumulative discussion of impacts regarding operational criteria pollutant emissions associated with the Initial Phase and Specific Plan Buildout.

Initial Phase, Specific Plan Buildout

A cumulative impact analysis considers a project over time in conjunction with other past, present, and reasonably foreseeable future projects whose impacts might compound those of the project being assessed. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development. Future attainment of ambient air quality standards is a function of successful implementation of SJVAPCD attainment plans. Consequently, the SJVAPCD's application of thresholds of significance for criteria pollutants is relevant to the determination of whether a project's individual emissions would have a cumulatively significant impact on air quality.

A lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project would comply with the requirements in a previously approved plan or mitigation program, including, but not limited to an air quality attainment or maintenance plan that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area in which the project is located [CCR Section15064(h)(1)]. Thus, as stated in Section 7.14 of the SJVAPCD *Guidance for Assessing and Mitigating Air Quality Impacts*, if project-specific emissions would exceed the thresholds of significance for criteria pollutants, the project would be expected to result in a cumulatively considerable net increase of any criteria pollutant for which the area is in non-attainment under applicable ambient air quality standards. As further discussed in Section 8.8 of the SJVAPCD *Guidance for Assessing and Mitigating Air Quality Impacts*, the SJVAPCD would consider projects consistent with the following to result in a less-than-cumulatively-significant impact related to air quality:

- SJVAPCD attainment plans;
- SJVAPCD rules and regulations;
- State air quality regulations;
- Project emissions below SJVAPCD thresholds of significance for criteria pollutants, localized CO, and TACs; and
- Project emissions below AAQS.

As presented above, even with implementation of Mitigation Measures 4.3-3(a) through 4.3-3(c), operational emissions associated with the Initial Phase and Specific Plan Buildout would exceed the SJVAPCD's thresholds of significance. Therefore, the proposed project could be considered to result in a cumulatively considerable net increase in any criteria pollutant for which the area is under nonattainment for a federal or State ambient air quality standard (i.e., ozone and PM). Consequently, in accordance with SJVAPCD guidance, because the proposed project would result in emissions above the applicable thresholds of significance, the proposed project would correspondingly be considered to result in a significant cumulative impact to air quality.

Cumulative Health Effects of Criteria Pollutants

The following includes a discussion of cumulative health effect impacts regarding operational criteria pollutant emissions associated with the Initial Phase and Specific Plan Buildout.

Initial Phase, Specific Plan Buildout

As noted in Table 4.3-1, exposure to criteria air pollutants can result in adverse health effects. The AAQS presented in Table 4.3-2 are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the SJVAB is designated as nonattainment for State and federal eight-hour ozone, State PM_{10} standards, and State and federal $PM_{2.5}$ standards, the SJVAPCD, has adopted federal and State attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the SJVAB are not exposed to excess concentrations of criteria pollutants. The SJVAPCD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS.[69] Thus, if a project's criteria pollutant emissions exceed the SJVAPCD's emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the SJVAPCD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM standards.

However, as noted above, ascertaining cancer risk, or similar measurements of health effects from air pollutants, is very difficult for regional pollutants such as the ozone precursors ROG and NO_X, as there might be scientific limitations on an agency's ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies. For example, ozone concentrations depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. In addition, as discussed in detail within the

[69] San Joaquin Valley Air Pollution Control District. *Guidance for Assessing and Mitigating Air Quality Impacts* [pg. 90]. March 19, 2015.

Standards of Significance section of this chapter, the SJVAPCD submitted an amicus curiae brief during the litigation process that led to the California Supreme Court decision in *Sierra Club v. County of Fresno* that provided scientific context and expert opinion regarding the feasibility of performing regional dispersion modeling for ozone. In the brief, SJVAPCD states that "CEQA does not require an EIR to correlate a project's air quality emissions to specific health impacts, because such an analysis is not reasonably feasible." The brief explains that the CEQA thresholds of significance are not intended to be applied such that any localized human health impact associated with a project's regional pollutant emissions could be identified. Rather, CEQA thresholds of significance are used to determine whether a project's emissions would obstruct a region's capability of attaining the NAAQS and CAAQS according to the emissions inventory prepared in a SIP, which is then submitted and reviewed by CARB and the EPA.

Nonetheless, as discussed in Impact 4.3-3, even with implementation of Mitigation Measures 4.3-3(a) through 4.3-3(c), operational emissions associated with the Initial Phase and Specific Plan Buildout would exceed the SJVAPCD's thresholds of significance. Consequently, implementation of the proposed project would conflict with the SJVAPCD's adopted attainment plans and could inhibit attainment of regional AAQS. Therefore, implementation of the proposed project could contribute towards regional health effects associated with the existing nonattainment status of ozone and PM standards.

Conclusion

As discussed above, implementation of the project would result in criteria pollutant emissions above the applicable thresholds of significance. Therefore, criteria pollutant emissions resulting from project operations could result in a cumulatively considerable net increase in criteria pollutant emissions, for which the region is in nonattainment for federal and state ozone standards. As such, the proposed project's incremental contribution to regional air quality impacts would be ***significant***.

Mitigation Measure(s)

Implementation of Mitigation Measures 4.3-3(a) and 4.3-3(b) would reduce operational criteria pollutant emissions associated with the Initial Phase and Specific Plan Buildout. However, as described under Impact 4.3-3, above, even with implementation of Mitigation Measures 4.3-3(a) and 4.3-3(b), maximum annual operational emissions associated with the Initial Phase and Specific Plan Buildout would still remain above the applicable SJVAPCD thresholds of significance.

Mitigation Measure 4.3-3(c) would require implementation of Mitigation Measures 4.12-4(a) through 4.12-4(f), as set forth in the Transportation chapter of this EIR, which would further reduce operational mobile-source criteria pollutant emissions associated with the Initial Phase and Specific Plan Buildout. However, the effectiveness of Rule 9410 and the TDM strategies set forth within Mitigation Measures 4.12-4(a) through 4.12-4(f) cannot be quantified at this time and subsequent vehicle trip reduction effects cannot be guaranteed.

Based on the above, even with implementation of the following mitigation measure, the proposed project's incremental contribution to the significant cumulative impact would remain *cumulatively considerable* and *significant and unavoidable*.

Initial Phase, Specific Plan Buildout
4.3-7 Implement Mitigation Measures 4.3-3(a) through 4.3-3(c).

Off-Site Improvements Study Area
None required.

4.3-8 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Based on the analysis below, even with mitigation, the project's incremental contribution to the significant cumulative impact is *cumulatively considerable* and *significant and unavoidable*.

An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to GHG emissions are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions that are associated with global climate change. Estimated GHG emissions attributable to future development would be primarily associated with increases of CO_2 and, to a lesser extent, other GHG pollutants, such as CH_4 and N_2O. Sources of GHG emissions include area sources, mobile sources or vehicles, utilities (electricity and natural gas), water usage, wastewater generation, and the generation of solid waste.

The following includes a discussion of GHG emissions associated with the Initial Phase and Specific Plan Buildout, as well as the Off-Site Improvements Study Area.

Initial Phase, Specific Plan Buildout

Based on the modeling conducted as part of the GHG Technical Report, construction of the project was estimated to generate maximum unmitigated GHG emissions of 23,892 $MTCO_2e$ for the Initial Phase and 226,691 $MTCO_2e$ for Specific Plan Buildout. However, neither the County nor SJVAPCD has an adopted threshold of significance for construction-related GHG emissions. In addition, construction of the proposed project would result in GHG emissions over a short-period of time in comparison to the operational lifetime of the project. Therefore, to capture the construction-related GHG emissions due to buildout of the proposed project, such emissions have been amortized over the duration of the construction period and added to the operational GHG emissions. Given that construction-related GHG emissions would not occur concurrently with operational emissions and would cease upon completion of construction activities, combining the two emissions sources represents a conservative estimate of total project GHG emissions. The emissions from vegetation changes (i.e., loss of sequestration from existing on-site orchards) associated with the

proposed project were also amortized over a 30-year period and added to the operational GHG emissions.

The maximum annual unmitigated operational GHG emissions for the Initial Phase and Specific Plan Buildout were estimated as presented in Table 4.3-27.

Table 4.3-27
Maximum Annual Unmitigated GHG Emissions

Emission Source	GHG Emissions ($MTCO_2e$/yr)	
	Initial Phase	Specific Plan Buildout
Area	60	1,401
Energy	7,122	42,380
Mobile	58,022	309,482
TRUs[1]	851	5,353
Off-Road Equipment	15,929	97,042
WWTP[2]	82	82
Refrigerants	171	1,419
Water	1,310	7,947
Waste	1,593	10,435
Amortized Construction[3]	796	7,556
Amortized Vegetation[3]	22	158
Total	**85,938**	**483,254**

1 TRU emissions were calculated as shown in Table 4-7 and Table 4-8 of the GHG Technical Report.
2 Wastewater facility emissions include emissions from an on-site emergency diesel generator (see Table 4-11 of the GHG Technical Report for detailed calculations).
3 One-time emissions from construction and vegetation were amortized over a 30-year period.

Source: Ramboll, 2025 (see Appendix E).

As discussed above in the Standards of Significance section, SJVAPCD has not adopted quantitative thresholds of significance for GHG emissions that would apply to the proposed project. In the absence of an applicable local numeric threshold, San Joaquin County has determined it is appropriate to utilize Placer APCD's bright-line 10,000 $MTCO_2e$/year GHG threshold to evaluate the cumulative significance of the increase in GHG emissions associated with the proposed project.

As presented in Table 4.3-27, the proposed project would result in GHG emissions well beyond 10,000 $MTCO_2e$/yr associated with both the Initial Phase and Specific Plan Buildout. Thus, the proposed project would generate GHG emissions that may have a significant impact on the environment.

Off-Site Improvements Study Area

As discussed above, the proposed project includes potential future intersection and roadway improvements that would be triggered by full buildout of the proposed project in the Off-Site Improvements Study Area. However, considering the nature of the potential future off-site intersection and roadway improvements, new substantial GHG emissions would not be generated during operation of such improvements, as the off-site improvements would not inherently increase traffic within the project vicinity. Rather, the potential future intersection and roadway improvements are intended to alleviate traffic delays associated with Specific Plan Buildout.

While the potential future intersection and roadway improvements would result in the generation of GHG emissions during construction, construction GHG emissions are a one-time release and are, therefore, not typically expected to generate a significant contribution to global climate change. Therefore, construction of the off-site improvements is not anticipated to generate GHG emissions that may have a significant impact on the environment.

Conclusion

Based on the above, the project would generate GHG emissions that may have a significant impact on the environment, and the project's incremental contribution to the significant impact would be ***cumulatively considerable***.

Mitigation Measure(s)

Implementation of Mitigation Measure 4.3-8(a) would require that the proposed project incorporate solar PV panels for "Base Building" energy needs for I-L zoned buildings (see Figure 3-4 of the Project Description chapter of this EIR). In addition, as described under Impact 4.3-3, above, implementation of Mitigation Measure 4.3-3(b) would require use of zero emission equipment, including forklift equipment and yard mules, at all industrial warehouse buildings greater than 300,000 sf, and use of zero emission landscape equipment to maintain all landscaping associated with individual on-site buildings and all on-site parks and open space. The maximum annual mitigated operational GHG emissions associated with the Initial Phase and Specific Plan Buildout are presented in Table 4.3-28. As shown in Table 4.3-28, implementation of Mitigation Measures 4.3-8(a) and 4.3-3(b) would result in a reduction in operational GHG emissions associated with both the Initial Phase and Specific Plan Buildout.

Mitigation Measures 4.3-8(a) and 4.3-3(b) are feasible measures that were determined to result in meaningful emissions reductions associated with the proposed project. Given that individual tenants for the proposed industrial warehouses are currently unknown, additional feasible measures associated with the proposed project that would have meaningful GHG reductions cannot be determined at this time. In addition, several measures typical of industrial warehouse projects have already been determined to be infeasible for the proposed project.

For example, as shown in Table 4.3-27, the largest GHG emission source associated with the proposed project is mobile emissions. However, the proposed project is intended to facilitate the movement of goods throughout the region. As discussed further in Chapter 4.12, Transportation, of this EIR, SB 743 and the associated CEQA Guidelines Section 15064.3 were established in order to reduce statewide GHG emissions from mobile sources, but VMT related to heavy truck use for the movement of goods is not required to be analyzed under SB 743. VMT associated with non-heavy-duty vehicles has been analyzed within this EIR, and would be reduced to the maximum extent feasible through implementation of Mitigation Measures 4.12-4(a) through 4.12-4(f). In addition, electrification of the heavy-duty truck fleet could result in additional GHG reductions. However, the feasibility of electrification of a heavy-duty truck fleet relies on the adequate availability of zero emission heavy-duty trucks, as well as PG&E's ability to provide adequate charging infrastructure at the time of building occupancy. Given the lack of current grid infrastructure and available electric heavy-duty truck technology, requiring the fleet to be zero emission is not feasible for

the proposed project. In addition, California recently withdrew its request for a waiver and authorization for the addition of the Advanced Clean Fleets (ACF) Regulation to its emissions control program. Thus, the State is no longer requiring that manufacturers only manufacture zero emission trucks starting in the 2036 model year. Without this requirement, the availability of zero emission trucks is currently unknown.

Table 4.3-28
Maximum Annual Mitigated GHG Emissions

Emission Source	GHG Emissions ($MTCO_2e$/yr)	
	Initial Phase	Specific Plan Buildout
Area[1]	0	989
Energy[2]	6,619	42,380
Mobile	58,022	309,482
TRUs[3]	851	5,353
Off-Road Equipment[4]	654	6,642
WWTP[5]	82	82
Refrigerants	171	1,419
Water	1,310	7,947
Waste	1,593	10,435
Amortized Construction[6]	796	7,556
Amortized Vegetation[6]	22	158
Total	**70,099**	**392,443**

1 GHG emission reductions associated with zero-emission landscaping equipment were assumed to be equivalent to the total landscaping GHG emissions estimated in CalEEMod.
2 GHG emission reductions associated with solar PV installation were estimated based on the Title 24-related electricity consumption at industrial land uses from CalEEMod, and forklift charger usage as estimated in Table 4-12 of the GHG Technical Report. Emissions associated with forklift charger usage were added to the total Initial Phase and Specific Plan Buildout energy usage. The portion of GHG reductions associated with base building electricity use was assumed to be equivalent to the default Title 24-related electricity consumption calculated by CalEEMod.
3 TRU emissions were calculated as shown in Table 4-7 and Table 4-8 of the GHG Technical Report.
4 Off-road equipment emissions include emissions from on-site yard trucks and forklifts. GHG emission reductions associated with the use of zero-emission operational off-road equipment were estimated in Table 4-10 of the GHG Technical Report.
5 Wastewater facility emissions include emissions from an on-site emergency diesel generator (see Table 4-11 of the GHG Technical Report for detailed calculations).
6 One-time emissions from construction and vegetation were amortized over a 30-year period.

Source: Ramboll, 2025 (see Appendix E).

Based on the above, additional feasible mitigation measures beyond Mitigation Measures 4.3-8(a) through 4.3-8(c) are not currently available to meaningfully reduce GHG emissions associated with the proposed project, Thus, even with implementation of the following mitigation measures, the proposed project's incremental contribution to the significant cumulative impact would remain *cumulatively considerable* and *significant and unavoidable*.

Initial Phase, Specific Plan Buildout

4.3-8(a) *Prior to approval of any Improvement Plans for each phase of development, the project applicant shall provide proof of compliance with the following to the satisfaction of the San Joaquin County Community Development Department:*

- *The project applicant shall show on the Improvement Plans via notation that solar PV panels shall be incorporated for "Base Building" energy needs for limited industrial (I-L) zoned buildings. Additional forklift charging anticipated as part of Mitigation Measure 4.3-3(b) shall also be met by solar PV.*

4.3-8(b) *Implement Mitigation Measure 4.3-3(b).*

4.3-8(c) *Implement Mitigation Measures 4.12-4(a) through 4.12-4(f).*

Off-Site Improvements Study Area
None required.

4.3-9 Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Based on the analysis below and with implementation of mitigation, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The following discussion includes an analysis of the potential for the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area to conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

Applicable plans, policies, and/or regulations adopted for the purpose of reducing the emissions of GHGs and relevant to the proposed project were determined to be the 2022 CARB Scoping Plan, SJCOG RTP/SCS, and San Joaquin County General Plan. Project consistency with the aforementioned plans is discussed in further detail below.

CARB 2022 Scoping Plan

As noted in the GHG Technical Report, existing and proposed regulations would allow the State to reduce GHG emissions to 40 percent below 1990 levels by 2030, and to 60 percent below 1990 levels by 2050. Various combinations of policies have been demonstrated to allow statewide emissions to remain very low through 2050, suggesting that the combination of new technologies and other regulations could allow the State to meet the 2050 target.

Statewide efforts are underway to facilitate the State's achievement of the 2050 reduction target and, according to the GHG Technical Report, the proposed project's emissions can reasonably be determined to decline as the regulatory initiatives identified by CARB in its 2022 Scoping Plan are implemented, new regulatory programs or incentives are implemented to reduce GHG emissions, and other technological innovations occur. Many of the initiatives include reducing the carbon content of motor fuels and fuels for electricity generation. Reducing the carbon content of motor fuels and fuels for electricity generation would reduce CO_2e emissions from the proposed project over time.

In addition, as demonstrated in Table 4.3-29, the proposed project would be generally consistent with the State's GHG reduction goals as discussed in the 2022 CARB Scoping Plan. The proposed project's emissions sources are regulated (and are foreseeably expected to continue to be regulated in the future) in furtherance of the State's environmental policy objectives and the proposed project would continue to meet the applicable regulations to continually improve and reduce GHG emissions. In addition, the proposed project would include implementation of several mitigation measures in order to reduce the project's GHG emissions. Updates to regulations and improvements to technology would also be incorporated into future construction as available, resulting in a reduction of GHG emissions beyond what is presented in this analysis. Thus, the proposed project would be consistent with the applicable 2022 California Scoping Plan strategies for the reduction of GHG emissions.

SJCOG RTP/SCS

The SJCOG 2022 RTP/SCS, contains four key elements:

- Policy Element– Sets forth SJCOG's transportation goals, objectives, and policies for each transportation mode.
- Sustainable Communities Strategy – Integrates land use and transportation planning efforts to meet San Joaquin County's greenhouse gas emission reduction targets, improve accessibility to major employment and other regional activity centers.
- Action Element – Describes the existing transportation system, discusses recent accomplishments, provides a transportation needs assessment, and proposes short-term and long-term actions for both transportation planning and actual transportation project improvements.
- Financial Element – Identifies both existing and anticipated revenue sources as well as the financing techniques available for the region's planned transportation investments, ongoing operations, and maintenance.

The RTP/SCS is based on an analysis that considers the entire County, and includes all projects involving changes in regional growth and land use in San Joaquin County, as well as the countywide vehicle traffic projections. Cumulative GHG emissions analyzed in the RTP/SCS were compared to regional GHG thresholds and analyzed under statewide plans and regulations. The RTP/SCS analysis concluded that a decrease in GHG emissions from existing conditions to 2046 would occur.

As demonstrated in Table 4.3-30, the proposed project would generally be consistent with the State's GHG reduction goals and strategies as discussed in the SJCOG's 2022 RTP/SCS. In addition, the proposed project would include implementation of several mitigation measures that would reduce the project's GHG emissions.

San Joaquin County General Plan

The San Joaquin County General Plan was developed in consideration of other state, local, and regional plans and guidance, including AB 32 and the SJCOG RTP/SCS.

Table 4.3-29
Consistency with 2022 CARB Scoping Plan Update

Priority Area[1]	Priority GHG Reduction Strategies	Consistency Analysis
Transportation Electrification	Convert local government fleets to ZEVs and provide EV charging at public sites.	**Consistent.** Although this goal is not applicable to an individual development project, the proposed project includes preferential parking spaces equipped with charging stations for electric vehicles and other clean air vehicles in all parking lots to encourage energy-efficient vehicular use.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans).	
VMT Reduction	Reduce or eliminate minimum parking standards.	**Consistent.** Although this goal is not applicable to an individual development project, the proposed project would include TDM strategies to reduce VMT (Mitigation Measures 4.12-4([a]-[f]). Strategies include: 1. Implement a Voluntary CTR program. Required elements of the program include: • CTR Marketing – implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program). • Ridesharing Program – implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers. • Subsidized or Discounted Transit Program – provides subsidized or discounted, or free transit passes for employees. • End-of-Trip Bicycle Facilities – installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use. • Employer-Sponsored Vanpool – implements an employer-sponsored vanpool service for employee groups of five to 15 people.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements.	
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.	
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking.	
	Implement parking pricing or transportation demand management pricing strategies.	
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood).	
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert greenfield land to urban uses (e.g., green belts, strategic conservation easements).	

Table 4.3-29
Consistency with 2022 CARB Scoping Plan Update

Priority Area[1]	Priority GHG Reduction Strategies	Consistency Analysis
		2. Implement Employee Parking Cash-Out program – requires project employers to offer employees the choice of foregoing their current subsidized/free parking for a cash payment (in exchange for not driving). 3. Expand Bikeway Network – construct a Class I off-street multi-use path or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance from the north edge of the project site to Linne Road. 4. Extend Public Transit Service to Project Site – expand San Joaquin Regional Transit District fixed-route bus service to the project site. 5. Operate a private employee shuttle system during peak periods that circulates within the site and off-site to the ACE Station located on Tracy Boulevard at Linne Road.
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses.	**Consistent.** Although this goal is not applicable to an individual development project, the proposed project would meet the CALGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements. The proposed Specific Plan (Section 7.4) requires project buildings to be LEED compliant and to become certified. Additionally, the project buildings shall be designed to accept roof-mounted solar panels affording tenants/users the opportunity to use solar energy, with a mitigation measure requiring the installation of solar to cover base building needs at industrial zoned buildings (see Mitigation Measure 4.3-8[a]). Further, all landscaping equipment used to maintain individual buildings and Pacific Gateway master landscaping, parks, and open space would be required to be zero emission (see Mitigation Measure 4.3-3[b]). Forklifts and yard mules at
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers).	
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances.	
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing).	
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities	

Table 4.3-29
Consistency with 2022 CARB Scoping Plan Update

Priority Area[1]	Priority GHG Reduction Strategies	Consistency Analysis
	(e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings).	industrial buildings greater than 300,000 square feet would be zero emission (see Mitigation Measure 4.3-3[b]). Finally, building construction shall meet the current applicable standards for energy efficiency to include energy efficient heating and cooling systems, energy efficient appliances, building systems equipment, and HVAC control systems. To ensure that all systems are working at their maximum capacity and design efficiencies, the proposed project would include mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet (see proposed Specific Plan Section 7.3.

[1] CARB's 2022 Scoping Plan, Appendix D, lists three Priority Areas that local governments should focus on when preparing a CEQA-qualified CAP in order to address the sources of GHGs within their jurisdiction. The Priority Areas represent areas which local governments have the most authority over and have the highest GHG reduction potential. The Priority Areas include transportation electrification, VMT reduction, and building decarbonization.

Source: Ramboll, 2025 (see Appendix E).

Table 4.3-30
Consistency with SJCOG RTP/SCS Strategies Related to GHG Emissions

Goal Number	Goal	Strategy	Consistency Analysis
1	Enhance the environment for existing and future generations and conserve energy.	Strategy No. 1: Encourage efficient development patterns that maintain agricultural viability and natural resources.	**Consistent.** The proposed project would include parks and open spaces throughout the project area. In addition, the proposed project would include sustainable design practices for landscape, which would include the use of native and climate adapted plant species, high efficiency weather-based irrigation systems, locally sourced and recycled materials, and stormwater best management practices. Water use for landscape irrigation is also in the forefront of current design practices and guidelines have been included to address water conservation. The approach to the design would create a contemporary landscape that is attractive, yet resource-efficient and relatively low-maintenance. (see proposed Specific Plan Section 4.2.)
		Strategy No. 2: Encourage preservation of natural resources.	**Consistent.** The proposed project would include parks and open spaces throughout the project area and would be well connected through pedestrian and bicycle networks. Typically, such areas would include exercise stations, picnic areas, sitting areas, concession/food truck service areas, natural areas, and trails.
		Strategy No. 3: Enhance the connection between land use and transportation choices through projects supporting energy and water efficiency.	**Consistent.** The proposed project would implement strategies and build infrastructure to promote the efficient use of resources, including the use of recycled water generated from the treated wastewater for landscape irrigation, consideration of locally sourced, salvaged, and recycled materials for use throughout the landscape and hardscape design, and design of buildings to accommodate the installation of roof-mounted solar (see proposed Specific Plan Section 7.2). The project has also committed to incorporating solar photo voltaic (PV) panels sized to accommodate "base building" energy needs for limited industrial zoned buildings, as described in Mitigation Measure 4.3-8[a]. Additionally, the proposed project would meet the CALGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements.
		Strategy No. 4: Improve air quality by reducing	**Consistent.** The proposed project would implement a Voluntary CTR program (see Mitigation Measure 4.12-4[b]). Required elements of the program include:

Table 4.3-30
Consistency with SJCOG RTP/SCS Strategies Related to GHG Emissions

Goal Number	Goal	Strategy	Consistency Analysis
		transportation-related emissions.	• CTR Marketing – implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program). • Ridesharing Program – implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers. • Subsidized or Discounted Transit Program – provides subsidized or discounted, or free transit passes for employees. • End-of-Trip Bicycle Facilities – installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use. • Employer-Sponsored Vanpool – implements an employer-sponsored vanpool service for employee groups of five to 15 people. Additionally, the proposed project would establish pedestrian and bicycle circulation system within the project site to encourage employee wellness and provide non-vehicle alternatives.
2	Maximize mobility and accessibility.	Strategy No. 5: Optimize the public transportation system to provide efficient and convenient access for users of all income levels.	**Consistent.** While transit service is not currently provided to the area, the project plans to extend public transit service to the project site, which would include expanding San Joaquin RTD fixed-route bus service to the project site. Additionally, an Altamont Commuter Express (ACE) train station is situated on Tracy Boulevard at Linne Road (two miles north of the project).
		Strategy No. 6: Encourage infill development and development near transit, including transit-oriented development to maximize existing transit investments.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.

Table 4.3-30
Consistency with SJCOG RTP/SCS Strategies Related to GHG Emissions

Goal Number	Goal	Strategy	Consistency Analysis
		Strategy No. 7: Provide transportation improvements to facilitate nonmotorized travel, including incorporation of complete streets elements as appropriate.	**Consistent.** The proposed project would provide end-of-trip bicycle facilities, which includes installation and maintenance of bike parking, bike lockers, showers, and personal lockers for employee use (see Mitigation Measure 4.12-4[b]). Class 1 bicycle paths have been included on all major circulation streets within the project area to encourage and allow for alternatives to motor vehicles. All roads would include a landscape strip on both sides planted with street trees. Landscape setbacks would generally be planted with grasses, evergreen shrubs, and double rows of large screen trees. Sidewalks would be present on both sides of most streets and would incorporate accessible pedestrian signals. The proposed project has also committed to nonmotorized travel-related mitigation measures including Mitigation Measure 4.12-2, which states that, "Prior to the issuance of a building permit for the first building whose vehicle trips would use MacArthur Drive north of the Specific Plan area, the project applicant shall implement the following TDM Strategy: • Expand Bikeway Network – construct a Class I off-street multi-use path on the west side of MacArthur Drive or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance from the north edge of the project site to Linne Road.”
		Strategy No. 8: Improve freight access to key strategic economic centers.	**Consistent.** The proposed project would create new employment generating uses located nearby the following interchanges: • Interstate 580 and Interstate 5 Interchange; • Interstate 580/Highway 132 Interchange; • S Chrisman Road/Highway 132 Interchange; • S Bird Road/Highway 132 Interchange; and • W Lehman Road/Interstate 5 Interchange.

Table 4.3-30
Consistency with SJCOG RTP/SCS Strategies Related to GHG Emissions

Goal Number	Goal	Strategy	Consistency Analysis
		Strategy No. 9: Promote safe and efficient strategies to improve the movement of goods by air, water, rail, and roadway.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
3	Increase safety and security.	Strategy No. 10: Facilitate projects that reduce the number and severity of traffic incidents.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 11: Support local and state efforts for transportation network resiliency, reliability, and climate adaptation.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
4	Preserve the efficiency of the existing transportation system.	Strategy No. 12: Prioritize projects that make more efficient use of the existing road network.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 13: Support the continued maintenance and preservation of the existing transportation system.	**Consistent.** The proposed project includes several potential future intersection and roadway improvements that would be triggered by full buildout of the proposed project in the Off-Site Improvements Study Area, which is generally located north of the project site. However, the list of off-site physical roadway improvements that would be constructed by the proposed project is not definitive at this time due to a variety of factors, with the main factor being that many of the intersections/roadways are in jurisdictions other than San Joaquin County, and, thus, successful implementation of identified improvements would require other agency approval (e.g., City of Tracy, Caltrans). In such instances of extraterritorial jurisdiction, the County cannot impose the improvements on the other jurisdictions.
		Strategy No. 14: Promote electric power, alternative fuels and autonomous	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.



Table 4.3-30
Consistency with SJCOG RTP/SCS Strategies Related to GHG Emissions

Goal Number	Goal	Strategy	Consistency Analysis
		technologies for freight and agriculture.	
		Strategy No. 15: Manage the adoption of electric vehicles and private connected and autonomous vehicles.	**Consistent.** The proposed project would provide preferential parking space locations for electric vehicles and other clean air vehicles in all parking structures and lots to encourage energy-efficient vehicular use (see proposed Specific Plan Section 7.2).
		Strategy No. 16: Promote electric power, alternative fuels, and autonomous technologies for public transit.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
5	Support economic vitality.	Strategy No. 17: Support transportation improvements that improve economic competitiveness, revitalize commercial corridors and strategic economic centers, and enhance travel and tourism opportunities.	**Consistent.** The proposed project plans to construct roadways to support the project, which would attract a wide variety of development that would generate construction and permanent jobs and provide for workforce and business development within San Joaquin County and the surrounding communities, which would in turn contribute to a vibrant workplace in the San Joaquin Valley.
		Strategy No. 18: Support workforce training across industries, particularly transportation-related industries.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 19: Encourage and/or strengthen small business while supporting large employer recruitment.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.

Table 4.3-30
Consistency with SJCOG RTP/SCS Strategies Related to GHG Emissions

Goal Number	Goal	Strategy	Consistency Analysis
		Strategy No. 20: Invest in high-speed internet infrastructure to support e-business and reduce commuting.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
6	Promote interagency coordination and public participation for transportation decision making and planning efforts.	Strategy No. 21: Provide equitable access to transportation planning.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 22: Engage the public early, clearly, and continuously.	**Consistent.** The proposed project would not impede implementation of the strategy.
		Strategy No. 23: Use a variety of methods to engage the public and encourage representation from diverse income and ethnic backgrounds.	**Consistent.** The proposed project would not impede implementation of the strategy.
7	Maximize cost-effectiveness.	Strategy No. 24: Support efforts to streamline the development process.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 25: Support the use of state and federal grants to supplement local funding and pursue discretionary grant funding opportunities from outside the region.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 26: Support projects that maximize cost-effectiveness.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 27: Maximize funding of	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.



Table 4.3-30
Consistency with SJCOG RTP/SCS Strategies Related to GHG Emissions

Goal Number	Goal	Strategy	Consistency Analysis
		existing transportation options.	
8	Improve the quality of life for residents.	Strategy No. 28: Promote a broader range of housing types.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 29: Support the development a regional trust fund dedicated to addressing housing issues.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.
		Strategy No. 30: Enhance public health through active transportation projects.	**Consistent.** While the strategy does not specifically pertain to the proposed project, the project would not impede implementation of the strategy.

Source: Ramboll, 2025 (see Appendix E).

Thus, a demonstration of consistency with the measures established in the General Plan would indicate consistency with the County's vision for aligning with state objectives to meet GHG goals and standards.

As demonstrated in Table 4.3-31, the proposed project would be generally consistent with the applicable General Plan strategies for the reduction of GHG emissions. In addition, the proposed project would include implementation of several mitigation measures that would reduce the project's GHG emissions.

Conclusion

The 2022 CARB Scoping Plan, SJCOG RTP/SCS, and San Joaquin County General Plan are considered the applicable plans, policies, and/or regulations adopted for the purpose of reducing the emissions of GHGs for the proposed project. As demonstrated in Table D-1 through Table D-3 of Appendix E to this EIR, the proposed project would be generally consistent with the 2022 CARB Scoping Plan, SJCOG RTP/SCS, and San Joaquin County General Plan. However, consistency with several policies included in the 2022 CARB Scoping Plan, SJCOG RTP/SCS, and San Joaquin County General Plan is based on the proposed project's implementation of the mitigation measures prescribed within this chapter to reduce GHG emissions. Thus, without verification that the proposed project would implement such mitigation measures, the proposed project could conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and the proposed project's incremental contribution to the significant cumulative impact could be ***cumulatively considerable***.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-cumulatively-considerable* level.

Initial Phase, Specific Plan Buildout

4.3-9 *Implement Mitigation Measures 4.3-8(a), 4.3-3(b), and 4.12-4(a) through 4.12-4(f).*

Off-Site Improvements Study Area

None required.

4.3-10 Result in a cumulatively considerable inefficient or wasteful use of energy or conflict with a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the impact is *less than significant*.

The following discussion includes an analysis of potential impacts associated with development of the Initial Phase, full Specific Plan Buildout, and the Off-Site Improvements Study Area.

Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
LU-1.1	Compact Growth and Development	The County shall discourage urban sprawl and promote compact development patterns, mixed-use development, and higher development intensities that conserve agricultural land resources, protect habitat, support transit, reduce vehicle trips, improve air quality, make efficient use of existing infrastructure, encourage healthful, active living, conserve energy and water, and diversify San Joaquin County's housing stock.	**Consistent.** The proposed project would include mixed-use development, including a number of land uses including but not limited to: Limited Industrial, Industrial Park, University, General Commercial, and Open Space. The proposed project would attract a wide variety of development that would generate construction and permanent jobs and provide for workforce and business development within San Joaquin County and the surrounding communities, which would in tum contribute to a vibrant workplace in the San Joaquin Valley. Additionally, transit service is not currently provided to the area, the project plans to extend public transit service to the project site. Extending service would include expanding San Joaquin RTD fixed-route bus service to the project site. Additionally, an Altamont Commuter Express (ACE) train station is situated on Tracy Boulevard at Linne Road (two miles north of the project). The project is placed along Chrisman Road, an existing Surface Transportation Assistance Act (STAA) route, making efficient use of existing infrastructure.
LU-1.6	New Employment-Generating Uses	The County shall direct new employment generating uses to locate within Urban and Rural Communities and City Fringe Areas, at freeway interchanges, and in other areas designated for commercial or industrial development. The County may allow employment-generating uses in other unincorporated areas when development proposals demonstrate that the project will not conflict with adjacent uses and will provide: jobs to County residents; adequate infrastructure and	**Consistent.** The proposed project would create new employment generating uses located nearby the following interchanges: • Interstate 580 and Interstate 5 Interchange; • Interstate 580/Highway 132 Interchange; • S Chrisman Road/Highway 132 Interchange; • S Bird Rd/Highway 132 Interchange; and • W Lehman Road/Interstate 5 Interchange.

Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
		services (i.e., water, sewer, drainage, and transportation); and positive tax benefits to the County.	In addition, the proposed project would provide jobs to County residents and adequate infrastructure/services. Improvements for the construction of the infrastructure to develop the project area includes without limitation, the complete roadways network of streetlights, traffic signals, medians and joint trench within roads, water system and infrastructure, sewer treatment and infrastructure, fire protection and infrastructure, and electric and natural gas infrastructure.
LU-1.8	Support for Alternative Transportation Modes	The County shall encourage land use patterns that promote walking and bicycling and the use of public transit as alternatives to the personal automobile.	**Consistent.** The proposed project would establish pedestrian and bicycle circulation system within the project site to encourage employee wellness and provide non-vehicle alternatives.
LU-2.2	Sustainable Building Practices	The County shall promote and, where appropriate, require sustainable building practices that incorporate a 'whole system" approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.	**Consistent.** The proposed project would implement strategies and build infrastructure to promote the efficient use of resources, which includes but is not limited to (see proposed Specific Plan Section 7.2): • Consistency with CALGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements. • Design of the site would reduce the mass grading to the extent feasible and decrease the use of earth moving equipment needed to grade the site, which leads to a reduction in total emissions from construction equipment and dust. • Site planning and building design shall consider building orientation, window placements, and materials selection to assist in minimizing energy use.

Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
			• Energy efficient LED lighting and control systems would be used for buildings, traffic, street, and any other outdoor lighting. • Buildings shall be designed to accept roof-mounted solar panels affording tenants/users the opportunity to use solar energy. • Where warehouse spaces are required to be climate controlled, install insulated dock doors and dock door seals to reduce energy loss. • Section warehouse spaces by temperature and group cool and warm temperature spaces together to decrease energy usage. • Lighting levels for outdoor illumination would be required to meet the minimum standards required for safety. All exterior lighting would be required to be LED and controlled by timers, and unless otherwise required, only lighting required for parking lot security and safety would be provided at night. • The use of daylight or clerestory windows and roof skylights would be used as a means of providing natural light and reducing the need for lighting during daytime. • Light colored “cool" roofs would be required for all new buildings, which helps to reduce heat gain and conserve energy use. • Canopies, awnings, and architectural shade structures would also be encouraged on the south and west elevations to minimize heat gain. • Tree species would be chosen based on their large canopy characteristics at maturity and would be strategically placed on the west and east portions of the site to shade paving areas



Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
			and building elevations to reduce sun exposure and minimize heat gain.
LU-3.11	Solar Access	The County shall encourage new residential subdivisions and new commercial, office, industrial, and public buildings to be oriented and landscaped to enhance natural lighting and solar access in order to maximize energy efficiency.	**Consistent.** The proposed project would implement the use of daylight or clerestory windows and roof skylights would be used as a means of providing natural light and reducing the need for lighting during daytime (see proposed Specific Plan Section 7.2).
LU-6.8	Sustainable Technologies	The County shall encourage all employment and industrial projects to incorporate sustainable technologies including energy and water efficient practices.	**Consistent.** The proposed project would use sustainable technologies, including energy and water efficient practices where available. Such sustainable technologies include the use of high-efficiency irrigation systems and designing buildings to include energy efficient appliances, building systems, and HVAC control systems (see proposed Specific Plan Sections 4.2[c], 7.2).
ED-2.4	Green Economy	The County shall encourage the development and expansion of industries and businesses that rely on environmentally-sustainable products and services, such as renewable energy, green building, clean transportation, water conservation, waste management and recycling, and sustainable land management.	**Consistent.** The proposed project would implement strategies and build infrastructure to promote the efficient use of resources, including the use of recycled water generated from the treated wastewater for landscape irrigation, consideration of locally sourced, salvaged, and recycled materials for use throughout the landscape and hardscape design, and design of buildings to accept roof-mounted solar allowing tenants/users the opportunity to use solar energy (see proposed Specific Plan Sections 4.2[c], 7.2). The proposed project has committed to incorporating solar PV panels sized to accommodate "base building" energy needs for limited industrial zoned buildings, as described in Mitigation Measure 4.3-8[a]).
TM-6.7	Bicyclist Amenities	The County shall encourage new large employers to provide bicycle racks.	**Consistent.** The proposed project would provide end-of-trip bicycle facilities, which includes installation and maintenance of bike parking, bike lockers, showers,



Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
			and personal lockers for employee use (see Mitigation Measure 4.12-4[b]).
TM-7.2	Critical Facilities Access	The County shall require new development to provide adequate access to facilities critical to goods movement, including railroad yards, intermodal facilities, the Port of Stockton, the Stockton Metropolitan Airport, and Interstate highways.	**Consistent.** As noted in LU-1.6, the proposed project would be located nearby to Interstate 5 and Interstate 580.
IS-4.18	Graywater and Rainwater Systems	The County shall encourage homeowners, businesses, and developers to install graywater systems and rainwater harvest systems, consistent with local and State guidelines, regulations, and standards, in order to reduce consumption of potable water.	**Consistent.** The proposed project would use the recycled water generated from the treated wastewater for landscape irrigation, which would reduce consumption of potable water. Additionally, Stormwater Best Management Practices, such as rain gardens, bioswales and rainwater harvesting, would be encouraged to be incorporated into the landscape to maximize on-site infiltration of stormwater, to the extent possible. (see proposed Specific Plan Section 4.2[c]).
IS-4.19	Water Efficient Landscaping	The County shall encourage water efficient landscaping and use of native, drought-tolerant plants consistent with the Model Landscape Ordinance.	**Consistent.** The proposed project would include sustainable design practices for landscaping, including the use of native and climate adapted plant species, high efficiency weather-based irrigation systems, locally sourced and recycled materials, and stormwater best management practices. Water use for landscape irrigation is also in the forefront of current design practices and guidelines have been included to address water conservation. Such an approach to the project design would create a contemporary landscape that is attractive, yet resource-efficient and relatively low-maintenance. (see proposed Specific Plan Section 4.2.)
PHS-5.14	Energy Consumption Reduction	The County shall encourage new development to incorporate green building practices and reduce air quality impacts from energy consumption.	**Consistent.** As noted for NCR-5.11, the proposed project would meet the CALGreen Building Standards Code in effect at the time of building



Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
			permit application, which would include a number of energy saving requirements.
PHS-6.3	GHG Reduction Strategies	The County shall promote greenhouse gas emission reductions by encouraging efficient farming methods (e.g., no-till farming, crop rotation, cover cropping); supporting the installation of renewable energy technologies; and protecting grasslands, open space, oak woodlands, riparian forest and farmlands from conversion to urban uses.	**Consistent.** The proposed project would include parks and open spaces throughout the project area and the project buildings shall be designed to accept roof-mounted solar panels providing tenants/users with solar energy. The project has committed to incorporating solar PV panels sized to accommodate "base building" energy needs for limited industrial zoned buildings, as described in Mitigation Measure 4.3-8(a).
PHS-6.6	Business-related GHG Reduction Strategies	The County shall encourage all businesses to help reduce GHG emissions by: replacing high mileage fleet vehicles with more efficient and/or alternative fuel vehicles; increasing the energy efficiency of facilities; transitioning toward the use of renewable energy instead of non-renewable energy sources; adopting purchasing practices that promote emissions reductions and reusable materials; and increasing recycling.	**Consistent.** As noted for PHS-5.14, ED-2.4, LU-2.2, and NCR-5.11, the proposed project would implement strategies and build infrastructure to promote the efficient use of resources and thereby reduce the GHG impact of operations and construction. Please note that there are uncertainties related to which businesses would operate within the project, as businesses/tenants have not yet been selected.
PHS-6.7	New Development	The County shall require new development to incorporate all feasible mitigation measures to reduce construction and operational GHG emissions.	**Consistent.** The proposed project has incorporated the feasible project design features to reduce construction and operational GHG emissions. Such design features include but are not limited to the incorporation of various TDM strategies, as described in Mitigation Measures 4.12-2, 4.12-3, and 4.12-4(a)-(f).
PHS-6.9	Public Awareness	The County shall support public awareness about climate change and encourage County residents and businesses to become involved in activities and lifestyle changes that will aid in reduction of greenhouse gas emissions through alternative energy use, energy and water conservation, waste reduction and recycling, and other sustainable practices.	**Consistent.** The proposed project would support public awareness of sustainable practices, such as through implementation of a Voluntary CTR program (see Mitigation Measure 4.12-4[b]). Required elements of the program include: • CTR Marketing – implements a marketing strategy to promote the project site employer's

Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
			CTR program (which includes a guaranteed ride home program). • Ridesharing Program – implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers. • Subsidized or Discounted Transit Program – provides subsidized or discounted, or free transit passes for employees. • End-of-Trip Bicycle Facilities – installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use. • Employer-Sponsored Vanpool – implements an employer-sponsored vanpool service for employee groups of 5 to 15 people. The Voluntary CTR program would include incentives for commuters to use alternative modes of transportation.
NCR-3.5	Low Impact Development	The County shall require new development to minimize or eliminate stormwater quality and hydro-modification impacts through site design, source controls, runoff reduction measures, best management practices (BMPs), and Low Impact Development (LID).	**Consistent.** As described in the Specific Plan Section 4.2(c), Stormwater Best Management Practices, such as rain gardens, bioswales and rainwater harvesting, should be incorporated into the landscape to maximize on-site infiltration of stormwater, to the extent possible. The project's drainage system has been designed to use retention ponds.
NCR-5.1	Nonrenewable Energy and Energy Efficiency	The County shall support the efforts of residents, businesses, and energy providers to reduce the consumption of nonrenewable energy and shall promote energy providers' programs to increase energy efficiency and implement demand response programs.	**Consistent.** The proposed project would support reduced energy consumption and increased energy efficiency through green building practices, as discussed in PHS-5.14, LU-2.2, and NCR-S.11.

Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
NCR-5.11	Green Building Practices	The County shall encourage green building practices in new construction.	**Consistent.** The proposed project would comply with the applicable requirements in the Green Building Code, which include the following: • Reducing water consumption by 20 percent. • Diverting 50 percent of construction waste from landfills. • Installation of low pollutant-emitting materials. • Installation of separate water meters for nonresidential buildings' indoor and outdoor water use. • Moisture-sensing irrigation systems for larger landscape projects. • Mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity and design efficiencies. In addition, the proposed Specific Plan (Section 7.4) requires project buildings to be LEED compliant and to become certified.
NCR-5.14	Natural Daylighting in Commercial Operations	The County shall encourage commercial and employment operations to incorporate natural daylighting by the use of windows and skylights to reduce energy demand for lighting.	**Consistent.** The proposed project would use daylight or clerestory windows and roof skylights as a means of providing natural light and reducing the need for lighting during daytime (see proposed Specific Plan Section 7.2).
NCR-5.2	Alternative Energy	The County shall encourage residents, businesses, and energy providers to develop and use alternative, renewable energy sources, including	**Consistent.** The proposed project buildings shall be designed to accept roof-mounted solar panels affording tenants/users the opportunity to use solar energy (see proposed Specific Plan Section 7.2),

Table 4.3-31
Consistency with San Joaquin County General Plan Policies Related to GHG Emissions

Policy Number	Policy Name	Policy Description	Consistency Analysis
		but not limited to, biomass, solar, wind, and geothermal.	along with Mitigation Measure 4.3-8(a), which requires the installation of solar to cover base building needs at industrial zoned buildings.

Source: Ramboll, 2025 (see Appendix E).

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

Cumulative energy impacts analyzed herein are based on implementation of the proposed project in combination with buildout of a list of reasonably foreseeable projects within the project area. Based on a cumulative list of projects within San Joaquin County and the cities of Tracy, Stockton, and Lathrop, a cumulative total of approximately 28,667,805 sf of industrial uses, approximately 364,591 sf of retail uses, and approximately 9,011 residential units are reasonably foreseeable.

The San Joaquin County General Plan EIR evaluated the potential for development facilitated by buildout of the General Plan policy area to result in the wasteful, inefficient or unnecessary consumption of energy under Impact 4.P-1. As described therein, implementation of the 2035 General Plan would involve some land use designation changes; development of such uses under the 2035 General Plan would contribute to the need for additional energy supplies (i.e., natural gas, electricity, and transportation fuels) and utility infrastructure. However, the General Plan EIR notes that implementation of policies, implementation programs, and reduction strategies in the 2035 General Plan would assist in the minimization of energy consumption associated with development. In addition, the County would ensure that future CEQA documentation be prepared for individual projects (with project-specific data), as needed, that would (if feasible) specifically mitigate any potential energy impacts to a less-than-significant level. As such, the San Joaquin County General Plan EIR concluded that impacts related to wasteful, inefficient or unnecessary consumption of energy would be less than significant.

In addition, because a substantial number of the reasonably foreseeable projects within the project area considered as part of the cumulative setting for the proposed project are located in the City of Tracy, the City of Tracy General Plan EIR's impact analysis related to energy usage is also summarized herein. As discussed within the City of Tracy General Plan EIR, impacts related to wasteful, inefficient, or unnecessary consumption of energy associated with General Plan buildout were determined to be less than significant with implementation of applicable General Plan policies which would ensure that development is designed for maximum energy efficiency. The City also prepared a Draft Recirculated Supplemental EIR to assess potential environmental consequences of adoption and implementation of the proposed City of Tracy Sustainability Action Plan. The proposed Sustainability Action Plan includes 16 measures to assist the City in reaching its energy conservation targets and six measures to assist the City in reaching its renewable energy targets. As noted within the Draft Recirculated Supplemental EIR, energy measures within the Sustainability Action Plan are projected to reduce energy consumption in Tracy by a 40 percent decrease from business-as-usual conditions. Implementation of the Sustainability Action Plan would also reduce electricity consumption in Tracy by approximately 293 million kWh per year and natural gas consumption by approximately 5 million therms per year.

Impact 4.3-6 discusses the consumption of energy on a project level related to the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area, within the context of existing State plans and regulations. As discussed previously, development of the proposed project would involve consumption of diesel, gasoline,

and electricity throughout construction and operations. However, all proposed structures would be built in compliance with existing statewide mandatory energy efficiency standards, such as those contained in the California Building Energy Efficiency Standards and the CALGreen Code. Compliance with the energy efficiency standards would reduce the amount of electricity consumed by the proposed project. State regulations would also help to reduce the amount of energy consumed by on-road vehicles over time. For instance, State and federal emissions standards and fuel economy standards result in increased fuel efficiency for on-road vehicles. Overall, as concluded above, the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area would result in a less-than-significant impact related to the inefficient or wasteful use of energy or conflicting with a State or local plan for renewable energy or energy efficiency. Furthermore, as described in Impact 4.3-6 above, and as demonstrated in Appendix F to this EIR, the proposed project would be consistent with the renewable energy and energy efficiency provisions of the San Joaquin County General Plan.

Similar to development of the proposed project, all future development within the project area, including within San Joaquin County and the City of Tracy, would be required to comply with applicable State and local regulations related to energy efficiency. Increased efficiency would be ensured in the future as cumulative development occurs due to compliance with the State's robust energy efficiency requirements. For example, pursuant to 2022 CBSC, new residential buildings associated with cumulative development would be required to include on-site solar to meet a portion of the project's energy demands, and new non-residential buildings associated with cumulative development would be required to be solar ready. Furthermore, energy efficiency regulations have been getting progressively more stringent over time. Thus, as cumulative development occurs under the increasingly stringent regulations, the energy use associated with such cumulative development is anticipated to be increasingly energy efficient over time as well. Finally, similar to the proposed project, all future development within the project area would be required to demonstrate consistency with the renewable energy and energy efficiency provisions of the applicable General Plan, such as the San Joaquin County General Plan for projects located within the County or the City of Tracy General Plan for projects located within the City of Tracy.

Conclusion

Based on the above, implementation of the project in combination with other cumulative development in the project region would not result in the wasteful or inefficient use of energy. Because the project would not conflict with a local plan to increase energy efficiency and reduce energy consumption, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.4 Biological Resources

4.4 BIOLOGICAL RESOURCES

4.4.1 INTRODUCTION

The Biological Resources chapter of the EIR evaluates the biological resources known to occur or potentially occur within the project site, off-site improvements study areas, and surrounding environs. The chapter describes the proposed project's potential impacts to biological resources and identifies measures to eliminate or substantially reduce impacts to a less-than-significant level. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed for the project region. The information contained in the analysis is primarily based on a Biological Resources Assessment (BRA) prepared by Bargas Environmental Consulting (Bargas) (see Appendix G of this EIR),[1] and the biological resources report prepared by Bargas for the off-site roadway improvements study areas (see Appendix H of this EIR).[2] Further information was sourced from the San Joaquin County General Plan[3] and the San Joaquin County General Plan EIR,[4] as well as the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).[5]

4.4.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the regional biological setting in which the project site is located, the biological setting of the project site, and the special-status species and sensitive natural communities known to occur within the project site and surrounding environs.

Regional Setting

The project area is within the San Joaquin Valley, which is a broad valley characterized by predominantly agricultural uses and open space, interspersed with urban centers and rural towns. The project site is located within the Central/Southwest Transition Zone of the SJMSCP. The Southwest Zone consists of the Diablo Range and a variety of wildlife species. The project site is located south of two passes through the Diablo Range: the Altamont Pass and the Corral Hollow Pass. A known wildlife corridor, the Corral-Lower San Joaquin Wildlife Corridor, runs from the Corral Hollow Pass through the Central/Southwest Transition Zone, approximately 0.65-mile northwest of the project site. The project site is comprised of 1,576.70 acres in an unincorporated portion of southern San Joaquin County, south of the City of Tracy. San Joaquin County experiences a Mediterranean-type climate with mild winters, and hot, dry summers. Temperatures in the project region fluctuate from average highs in July of 92 degrees Fahrenheit, with average lows in December and January of 40 degrees Fahrenheit.[6] Nearly all precipitation occurs between November and April in the form of rainfall, with February typically the wettest month.

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1 Bargas Environmental Consulting. *Biological Resources Assessment, Pacific Gateway Specific Plan Project, San Joaquin County, California*. September 2025.
2 Bargas Environmental Consulting. *Biological resources letter report for the Pacific Gateway Specific Plan Project off-site areas at Chrisman Road in San Joaquin County, California*. February 28, 2025.
3 San Joaquin County. *San Joaquin County General Plan Policy Document.* December 2016.
4 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report*. October 2014.
5 San Joaquin Council of Governments. *San Joaquin County Multi-Species Habitat Conservation and Open Space Plan*. November 14, 2000.
6 Weather Spark. *Climate and Average Weather Year Round in Tracy*. Available at: https://weatherspark.com/y/1104/Average-Weather-in-Tracy-California-United-States-Year-Round. Accessed February 2025.

Project Setting

The project site is generally bound by Bird Road to the east; the Delta-Mendota Canal to the north; Tracy Boulevard to the west; and the southern boundary is formed by the California Aqueduct, west of South Chrisman Road, and State Route (SR) 132, east of South Chrisman Road. The Banta-Carbona Irrigation District Canal runs through the northernmost portion of the project site.

The project site, relatively flat, features ground surface elevations ranging from approximately 275 feet above mean sea level (amsl) in the western portion of the project site to 150 feet amsl. As discussed further below, various vegetation communities occur on-site. The project site is currently developed with active agricultural almond and cherry orchard uses and limited single-family residential uses, as well as an agricultural processing and manufacturing facility (A.B. FAB, Inc). Surrounding existing uses include agricultural uses to the north, south, and east, as well as several established surface mining operations located northwest of the site.

This EIR also programmatically reviews a range of off-site intersection and roadway improvements that would be triggered by full project buildout, including roadways within the City of Tracy and San Joaquin County.

Land Cover Types and Vegetation Communities

The following sections describe the land cover types and vegetation communities found within the project site and off-site improvements study areas.

Initial Phase and Specific Plan Buildout

According to the BRA, the project site supports five vegetation communities defined by the California Native Plant Society Manual of California Vegetation (MCV) Alliance (see Table 4.4-1). A "crosswalk" between the CNPS MCV alliances and the vegetation communities described in the SJMSCP[7] is also provided in Table 4.4-1. Figure 4.4-1 illustrates the MCV vegetation alliances across the project site.

Cattail Marsh and Wetland

Cattail Marsh (*Typha* [*angustifolia, domingensis, latifolia*] Herbaceous Alliance) and other wetland features were found within the project site. This vegetation community is classified as "Freshwater Emergent Wetlands (W7)" in the SJMSCP. The cattail marsh vegetation community is dominated by cattails (*Typha* spp.), with one or more of the species Narrowleaf cattail (*Typha angustifolia)*, Southern cattail (*T. domingensis)*, or Broadleaf cattail (*T. latifolia)* typically present. The herbaceous layer has a maximum height of five feet, with intermittent to continuous cover. According to the MCV, the vegetation community reflects areas where Typha species comprise greater than 50 percent relative cover. Cattail marsh and wetland habitat is generally found in semi-permanently flooded freshwater or brackish marshes between zero and 1,148 feet amsl.

[7] While not directly synonymous with the naming or acreages in Table 4.4-1 above, it should be noted that the SJMSCP also organizes its 52 vegetation types into four (4) broad categories (i.e., Natural Lands, Agricultural Lands, Multi-Purpose Open Space Lands, and Urban Lands) to help assess and quantify the conversion of open space areas to other land uses. The SJMSCP Habitat Technical Advisory Committee (HTAC) and San Joaquin Council of Governments (SJCOG) oversee the classifications of SJMSCP vegetation into these four (4) categories, which reflect generalized mapping categories from a macro-lens and strongly considers land use, rather than the micro-lens mapping of vegetation composition across the site performed by Bargas. Because the areas of the project site are "unmapped" by the SJMSCP or were mis-classified during the establishment of the SJMSCP, the HTAC conducted a recent aerial review of the project site and applied a current mapping of categorical land use across the site (HTAC; SJCOG, 2025).

Figure 4.4-1
Project Site Land Cover Types

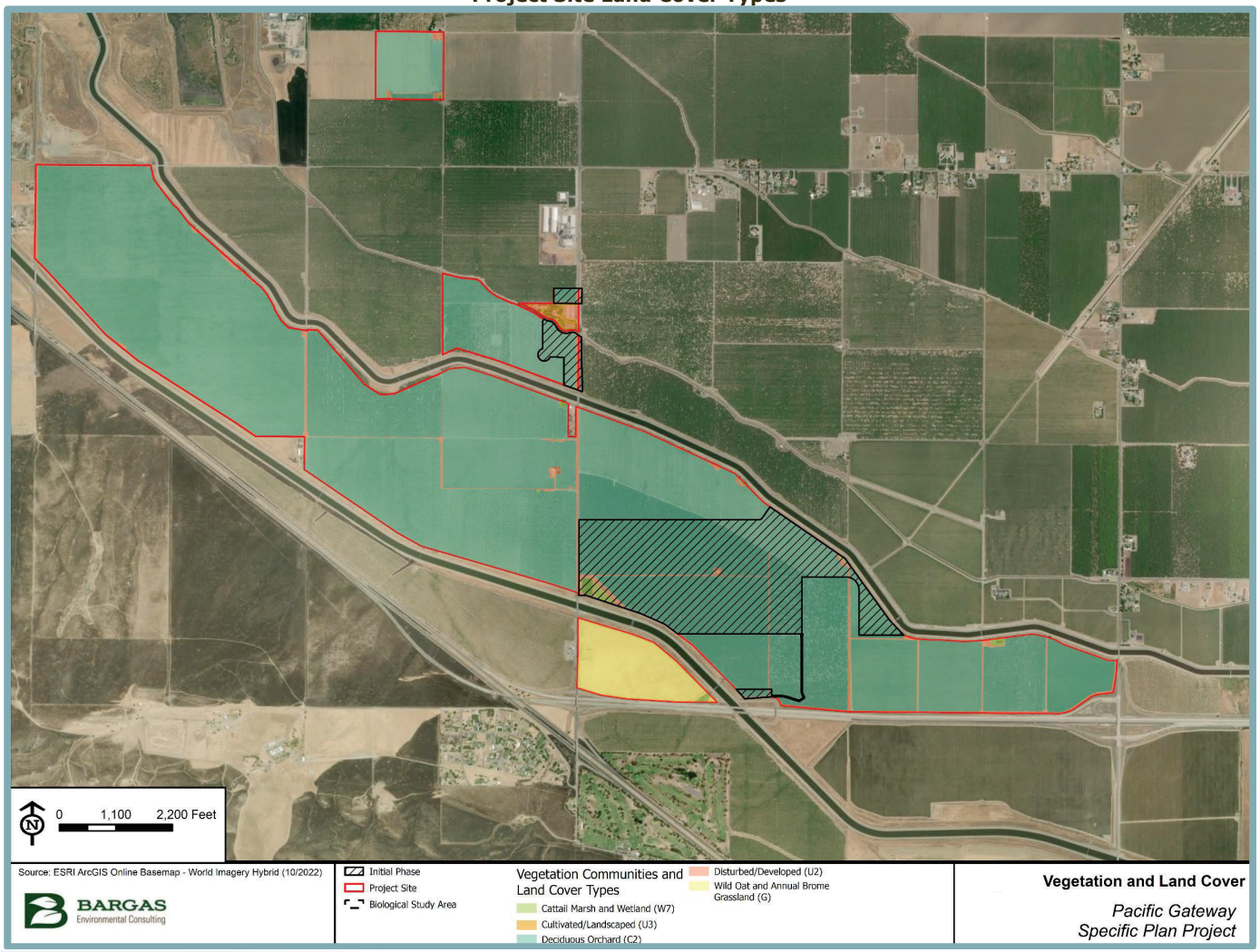


*Figure not OCR compatible.

Table 4.4-1
On-Site Vegetation Communities and Land Cover Types

Vegetation Community Common Name	Scientific Name and MCV Alliance	Mapped Land Cover Type	Initial Phase Acreage	Specific Plan Buildout Acreage
Cattail Marsh and Wetlands	*Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance	Freshwater Emergent Wetland (W7)	3.58	6.32
Cultivated/Landscaped	N/A	Golf Courses/ Cultivated Parks (U3)	0.11	4.93
Deciduous Orchards	N/A	Orchards and Vineyards (C2)	234.39	1,443.89
Disturbed/Developed	N/A	Scraped/Paved Areas (U2)	9.18	46.66
Wild Oats and Annual Brome Grassland	*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance	Valley Grassland (G)	0.00	60.0
		Total	**247.26**	**1,561.78**[1]

Source: Bargas Environmental Consulting, 2025.

[1] The total here differs from the 1,576.70-acre total used elsewhere in the EIR because Bargas treated the proposed North Street, a segment of MacArthur Drive that would be improved, and the proposed West University Street, as off-site improvements. These existing and proposed roadway areas lack habitat and are addressed separately in the Off-Site Improvements Study Area discussions of this chapter.

The on-site cattail marsh vegetation community is associated with certain marshes located south of the Delta-Mendota Canal, located between agricultural fields. The areas include one water basin and 10 marshes. The areas are dominated by cattail species, narrow-leaf willow (*Salix exigua*), duckweed (*Lemna minor*), pacific willow (*Salix lucida*), purple willow (*Salix purpurea*), and stinkwort (*Datura stramonium*). The remaining wetland areas are significantly disturbed and/or have been artificially irrigated to serve an agricultural purpose. The remaining areas include two artificial agricultural water basins characterized by short pod mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), tall flatsedge (*Cyperus eragrostis*), turkey-mullein (*Croton setiger*), stinkwort, and flax leaved horseweed (*Conyza bonariensis*).

Cultivated/Landscaped

One cultivated/landscaped (U3) area occurs along the northern edge of the project site, west of South Chrisman Road by the on-site manufacturing plant and a gated residential property. The maintained landscaped area is intended to provide visual aesthetics and privacy and is primarily ornamental.

Deciduous Orchard

The majority of the project site is comprised of deciduous orchards (C2). The primary crops grown within the project site are comprised of commercial fruit- and nut-bearing trees, including almond and cherry. Multiple fields of vineyards are located east of South Chrisman Road within the project site and are included in this classification. The project site is surrounded by similar agricultural fields and orchards. The orchards have been managed for weed control, resulting in limited understory plant growth. Some areas have been treated with a layer of straw for an additional level of weed suppression.

Developed/Disturbed

Developed and disturbed areas within the project site (U2) are primarily comprised of the existing industrial harvesting and processing facility, residential properties, roadside areas, and the paved and unpaved roads. The main paved roads bisecting the project site include South MacArthur Drive and South Chrisman Road; SR 132 is located south of the site.

Wild Oats and Annual Brome Grassland

Wild Oats and Annual Brome Grassland (*Avena* subspecies; *Bromus* subspecies) are located on the project site. This vegetation community is classified as "Valley Grassland (G)" in the SJMSCP and is characterized by non-native annual grasses, including wild oats (*Avena* spp.) and bromes (*Bromus* spp.). Such lands are located south of the California Aqueduct, bounded by Vernalis Road on the south and South Chrisman Road to the north. The area is characterized by an open, non-agricultural roadside field. According to the BRA, the area may have been historically managed through mowing or shallow tilling for fire fuel abatement. The dominant species in this area is wild oat.

Off-Site Roadway Improvements Study Area

Five land cover types identified by the SJMSCP exist within the off-site roadway improvements study areas, including orchards and vineyards (C2), valley grasslands (G), scraped/paved areas (U2), cultivated/landscaped (U3), and freshwater emergent wetlands (W7). The Delta-Mendota Canal, the Lateral Five East Canal, and an unnamed concrete-lined canal bisect the off-site roadway improvements study areas and are classified as Canal (W9) by the SJMSCP, but are not within the improvements study areas (see Figure 4.4-2 through Figure 4.4-9). Each land cover type and equivalent vegetation community and MCV alliance are described in further detail below.

Developed/Disturbed

The majority of the off-site improvement study areas are comprised of disturbed roadside areas, paved and unpaved roads, and developed retail, residential, industrial, and agriculture lots classified as "Scraped/Paved Areas (U2)" in the SJMSCP. The main paved roads within the study areas include South Chrisman Road, West Linne Road, and South MacArthur Drive, along with various intersections and the Western Pacific Railroad.

Cultivated/Landscaped

Within the off-site improvement study areas, residential areas along South Chrisman Road and West Linne Road are cultivated/landscaped (U3) and include typical residential landscaping, such as sod grass and ornamental trees. Additional plantings along manufacturer lots included species such as oleander (*Nerium oleander*), and Toyon (*Heteromeles arbutifolia*).

Deciduous Orchards

The areas surrounding the off-site improvement study areas are primarily used for agriculture and are mapped as Deciduous Orchards. This land cover type is classified as "Orchards and Vineyards (C2)" in the SJMSCP. The primary crops grown within this vegetation community consist of almonds and cherries. The orchards have been developed for weed control, resulting in limited plant growth, and some areas have been treated with a layer of straw for an additional level of weed suppression. Non-orchard agricultural fields are located on either side of South Chrisman Road and are also included within the Deciduous Orchards classification.

Figure 4.4-2
Off-Site Improvement Study Areas

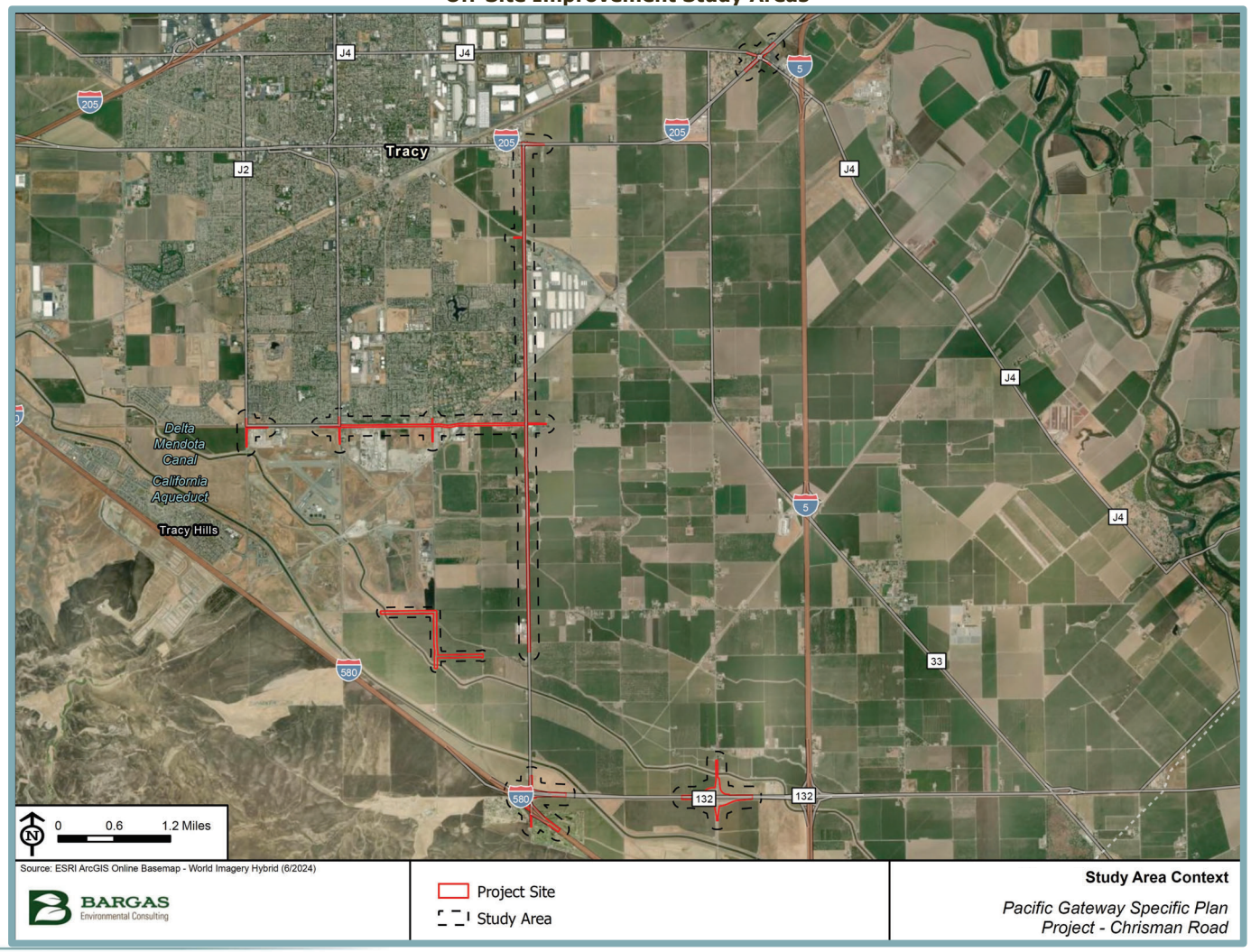


*Figure not OCR compatible.

Figure 4.4-3
Kasson Road/Grant Line Road/11th Street Improvement Study Area Land Covers

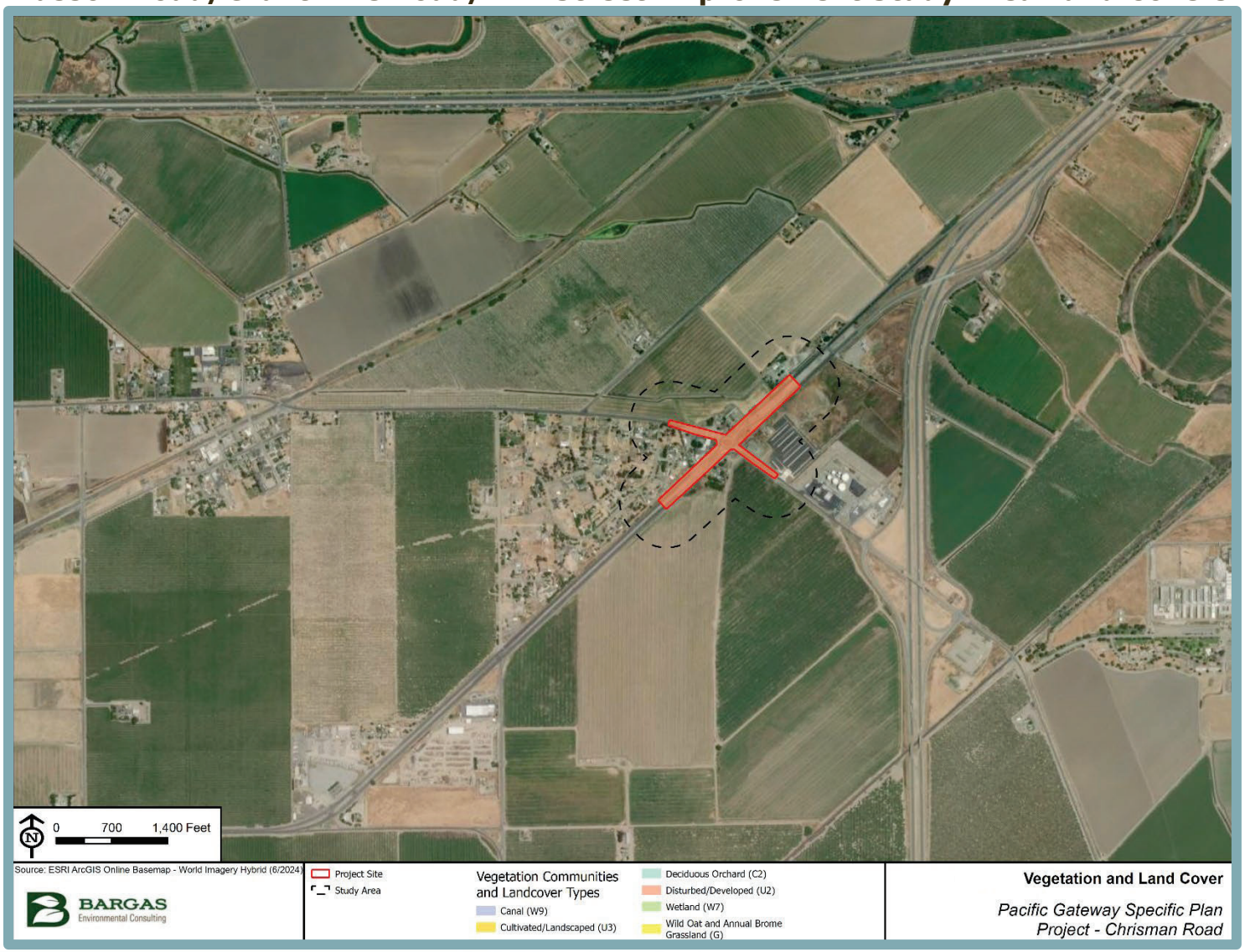


*Figure not OCR compatible.

Figure 4.4-4
South Chrisman Road/West Schulte Road Improvement Study Area Land Covers

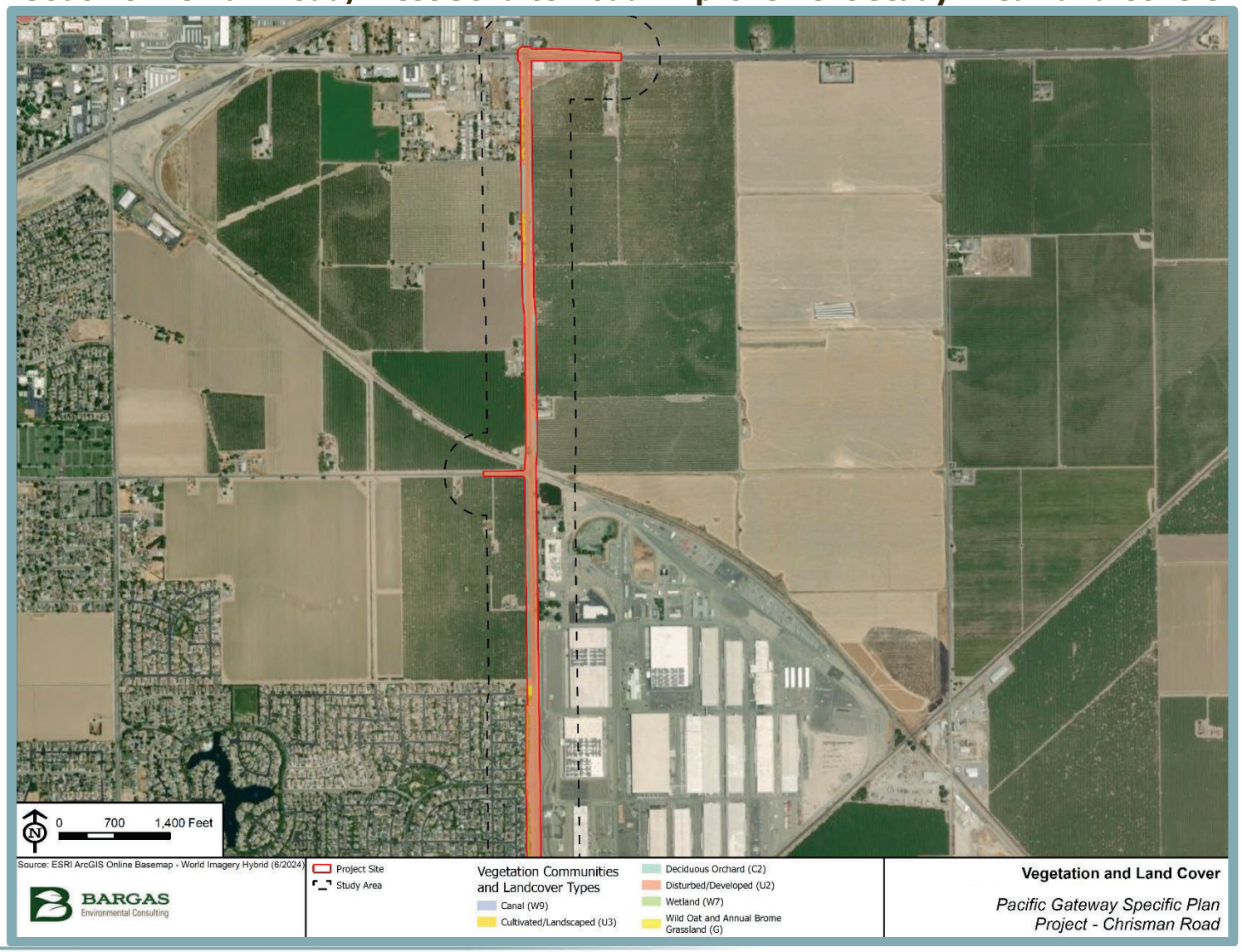


*Figure not OCR compatible.

Figure 4.4-5
South Chrisman Road/West Linne Road Improvement Study Area Land Covers

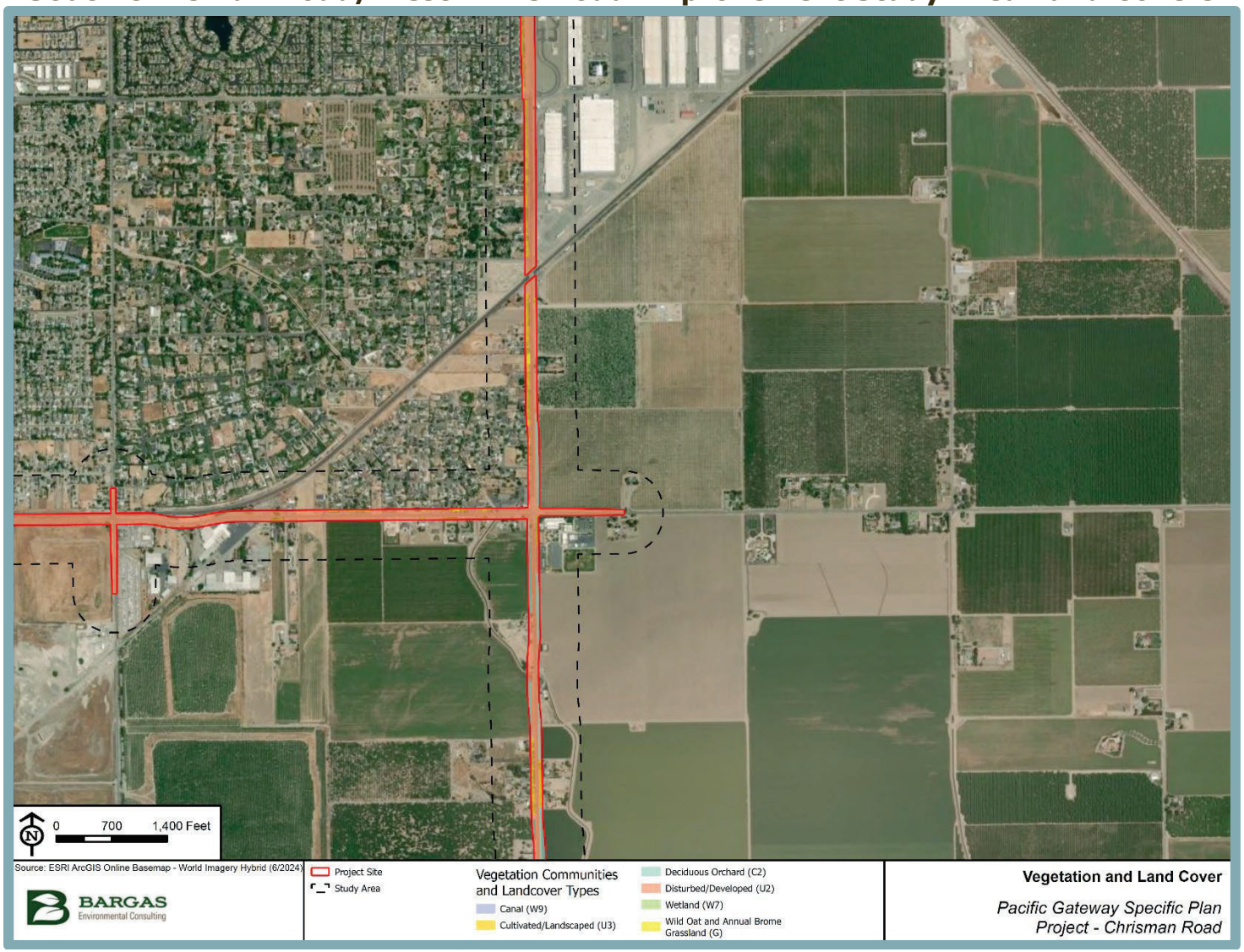


*Figure not OCR compatible.

Figure 4.4-6
Linne Road Intersection Improvement Study Areas Land Covers

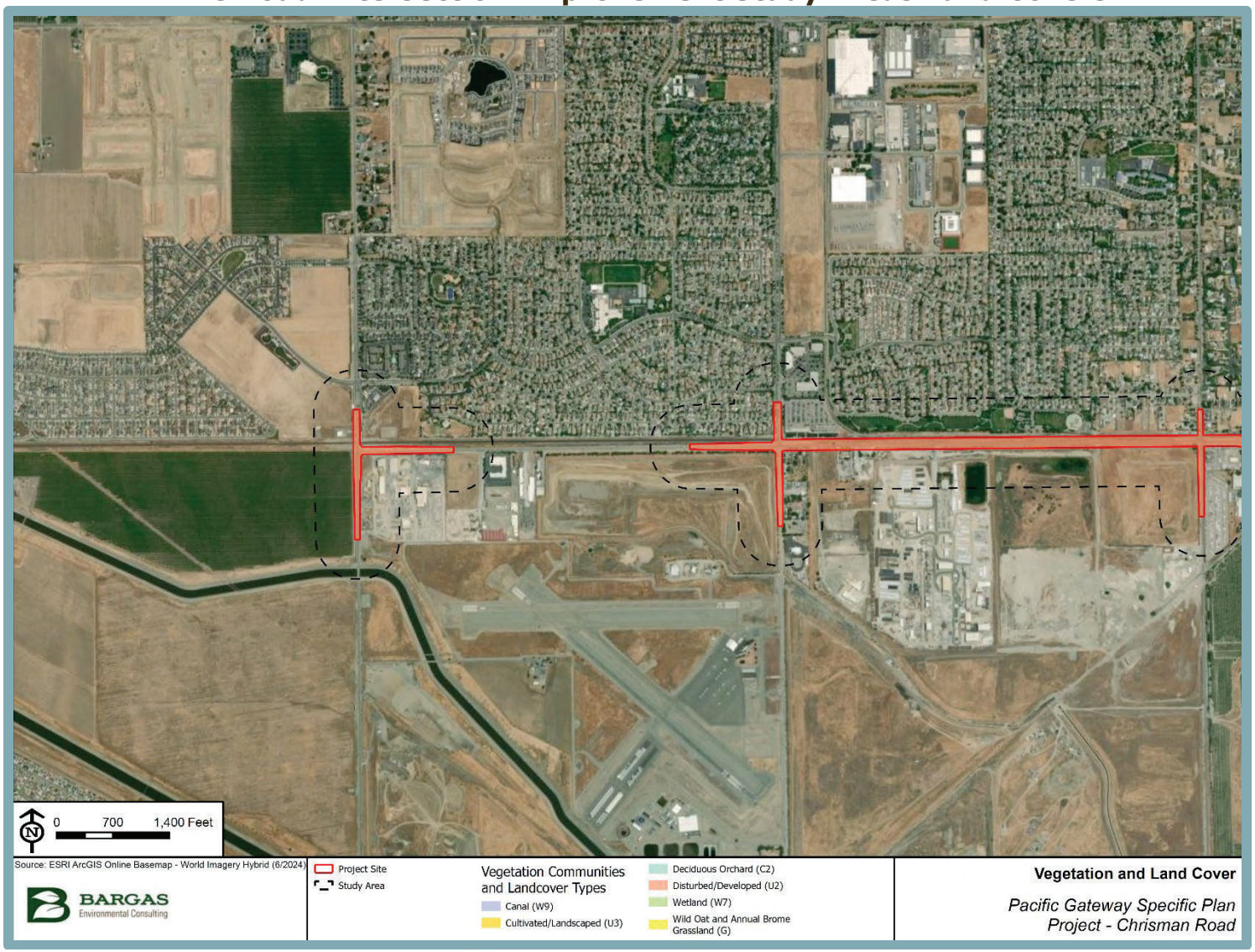


*Figure not OCR compatible.

Figure 4.4-7
South Chrisman Road Improvement Study Area Land Covers

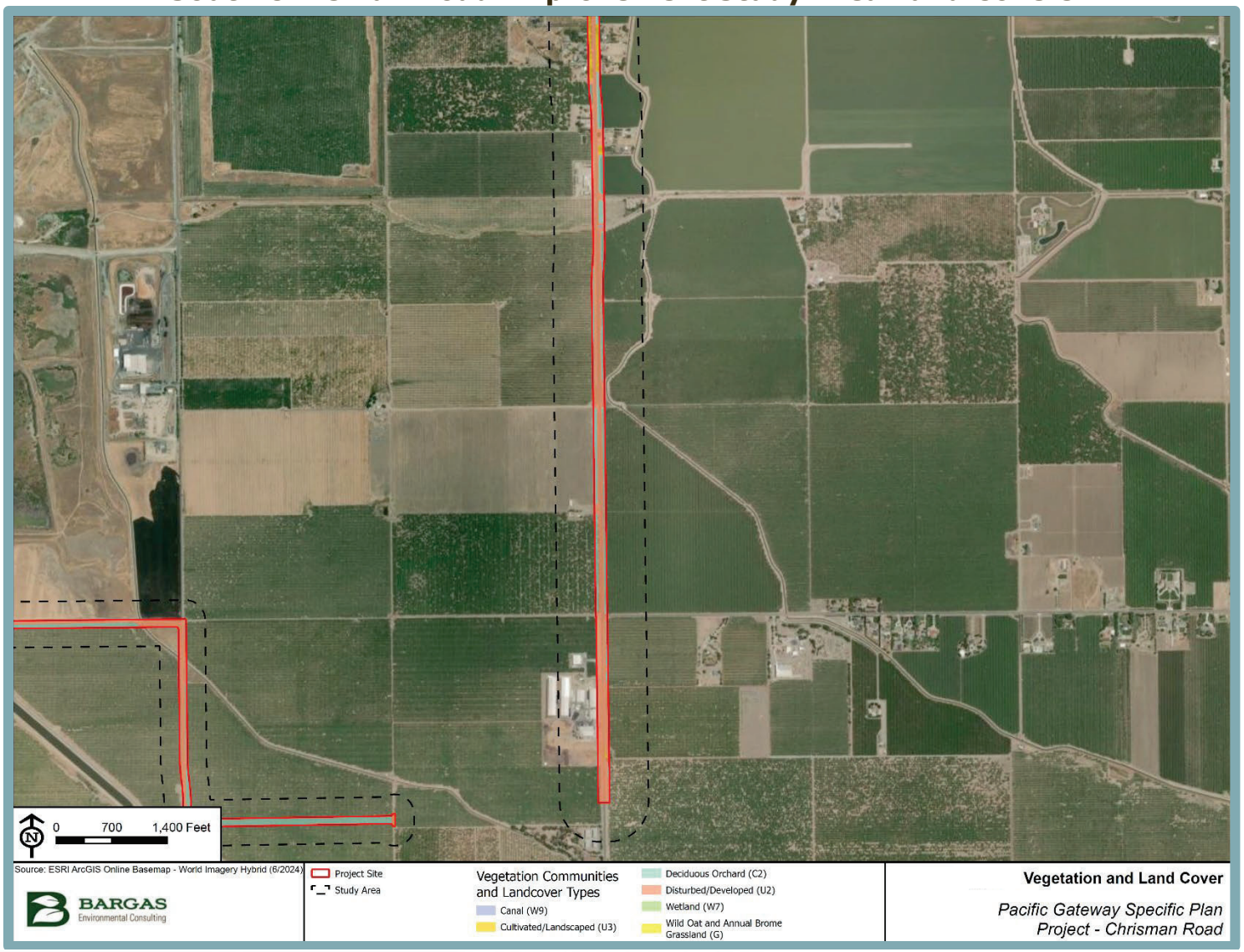


*Figure not OCR compatible.

Figure 4.4-8
State Route 132 Ramp Improvement Study Areas Land Covers

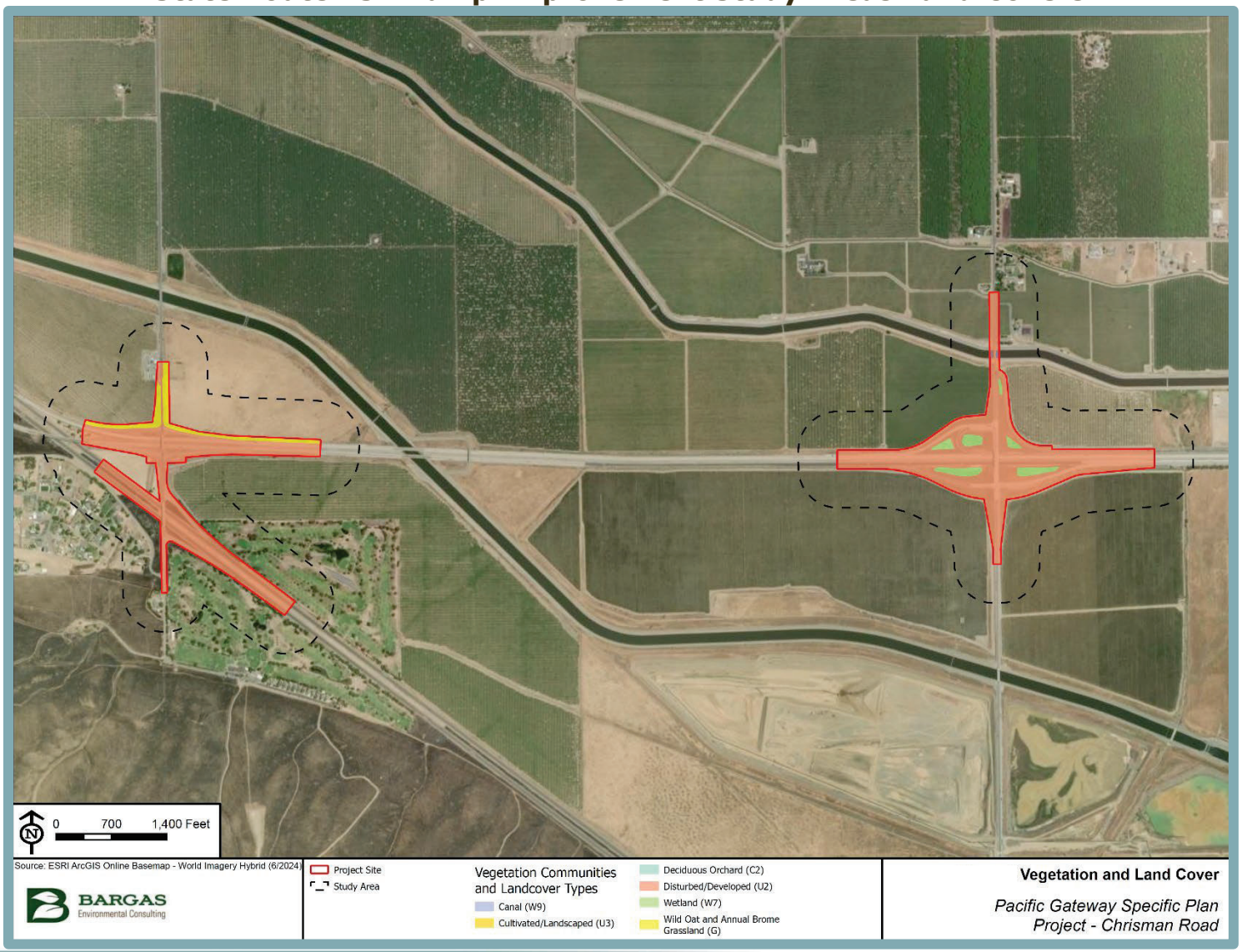


*Figure not OCR compatible.

Figure 4.4-9
South MacArthur Drive Improvement Study Area Land Covers

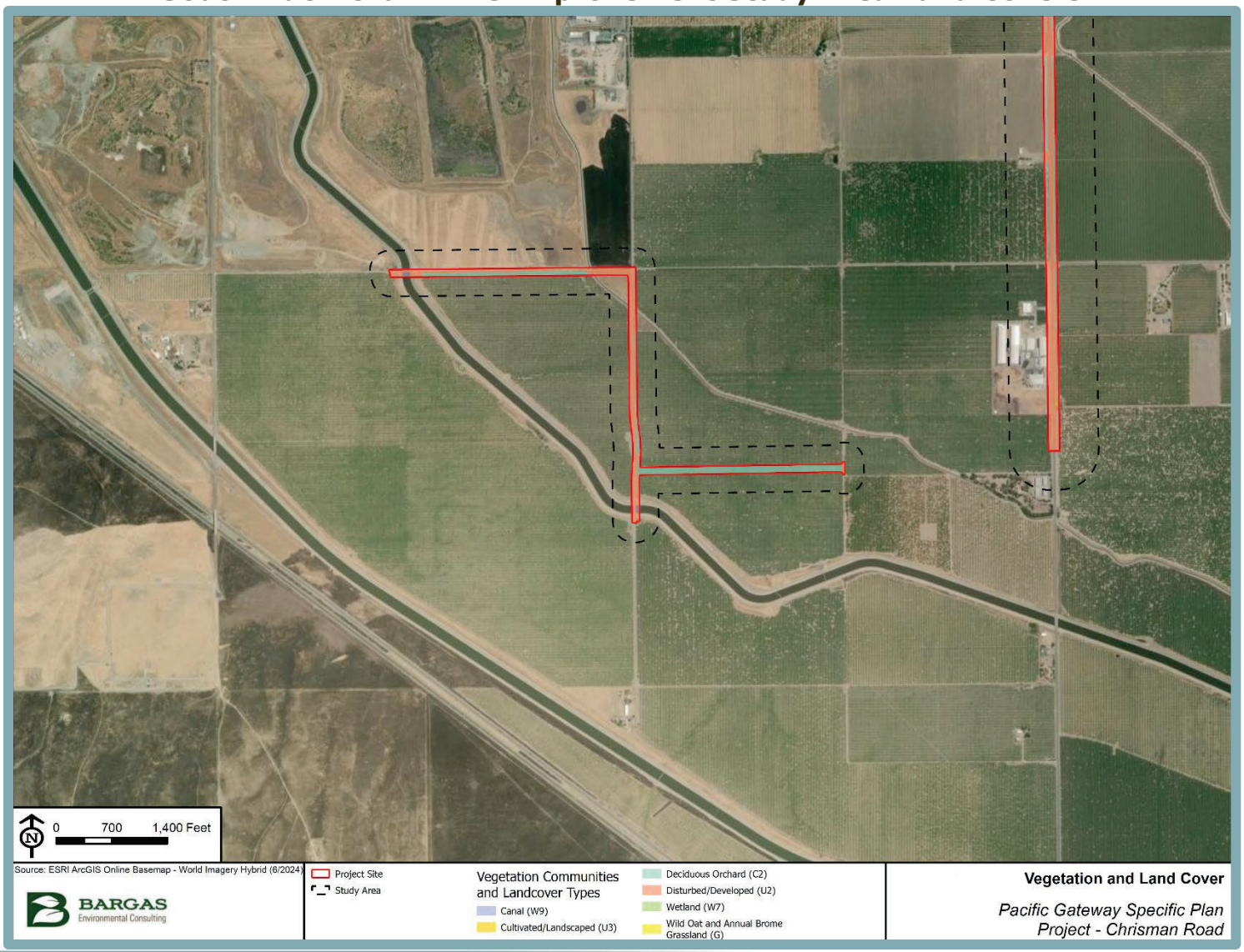


*Figure not OCR compatible.

Annual Grassland

An open, non-cultivated, roadside field immediately north of SR 132 near the intersection of South Chrisman Road is comprised of the Valley Grassland vegetation community and is consistent with the *Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance. This vegetation community is classified as "Valley Grassland (G)" in the SJMSCP. The Valley Grassland vegetation community is also found in two areas west of South Chrisman Road where the off-site improvement study areas overlap open fields containing non-native annual grasses.

Wetlands

The off-site roadway improvements study areas contain freshwater emergent wetlands (W7) where Corral Hollow Creek bisects South Chrisman Road, as well as at the Vernalis Road/South Bird Road intersection. According to the biological resources report prepared for the off-site improvements study areas, the wetland features lack vegetation and are significantly disturbed.

Sensitive Vegetation Communities

As part of the inquiry of the California Department of Fish and Wildlife (CDFW) and California Native Plant Society (CNPS), sensitive vegetation communities were not mapped within the project site or off-site roadway improvements study areas. In addition, special-status plant species were not encountered on-site or within the off-site roadway improvements study areas during the field visits conducted as part of the BRA.

Aquatic Resources

The aquatic resources identified within the project site and off-site improvement study areas are discussed in further detail below.

Project Site

Pursuant to the BRA, a total of 6.10 acres of aquatic resources have been identified within the project site, comprised of 3.58 acres within the Initial Phase and an additional 2.52 acres within the other on-site Development Areas. The project site features two types of aquatic resources: marshes and agricultural water basins (see Figure 4.4-10). The two types of aquatic resources are fairly similar; however, the marshes and water basins were mapped differently due to the presence of aquatic plant species within the marshes while the water basins primarily supported upland weedy herbaceous plants. According to the BRA, 13 on-site aquatic features are considered potentially jurisdictional waters of the State, including wetland and non-wetland features. More specifically, the wetland features consist of 10 freshwater marshes and one artificial agricultural water basin (Water Basin 2 [WO2]). The two non-wetland features consist of Water Basins 1 and 3, as the basins are isolated, do not host aquatic species or vegetation, and only receive water through artificial pumping. Table 4.4-2 below provides a summary of the aquatic resource located within the project site.

The on-site features shown in Figure 4.4-10 are isolated features and are neither connected to Traditionally Navigable Waters (TNWs) nor have hydrologic surface connection to other U.S. Army Corps of Engineers (USACE) waters/wetlands; therefore, it is reasonably anticipated that the features would not be regulated by USACE per current regulatory guidance. However, only USACE can make the final determination on their jurisdictional authority.

Figure 4.4-10
Project Site Aquatic Resources

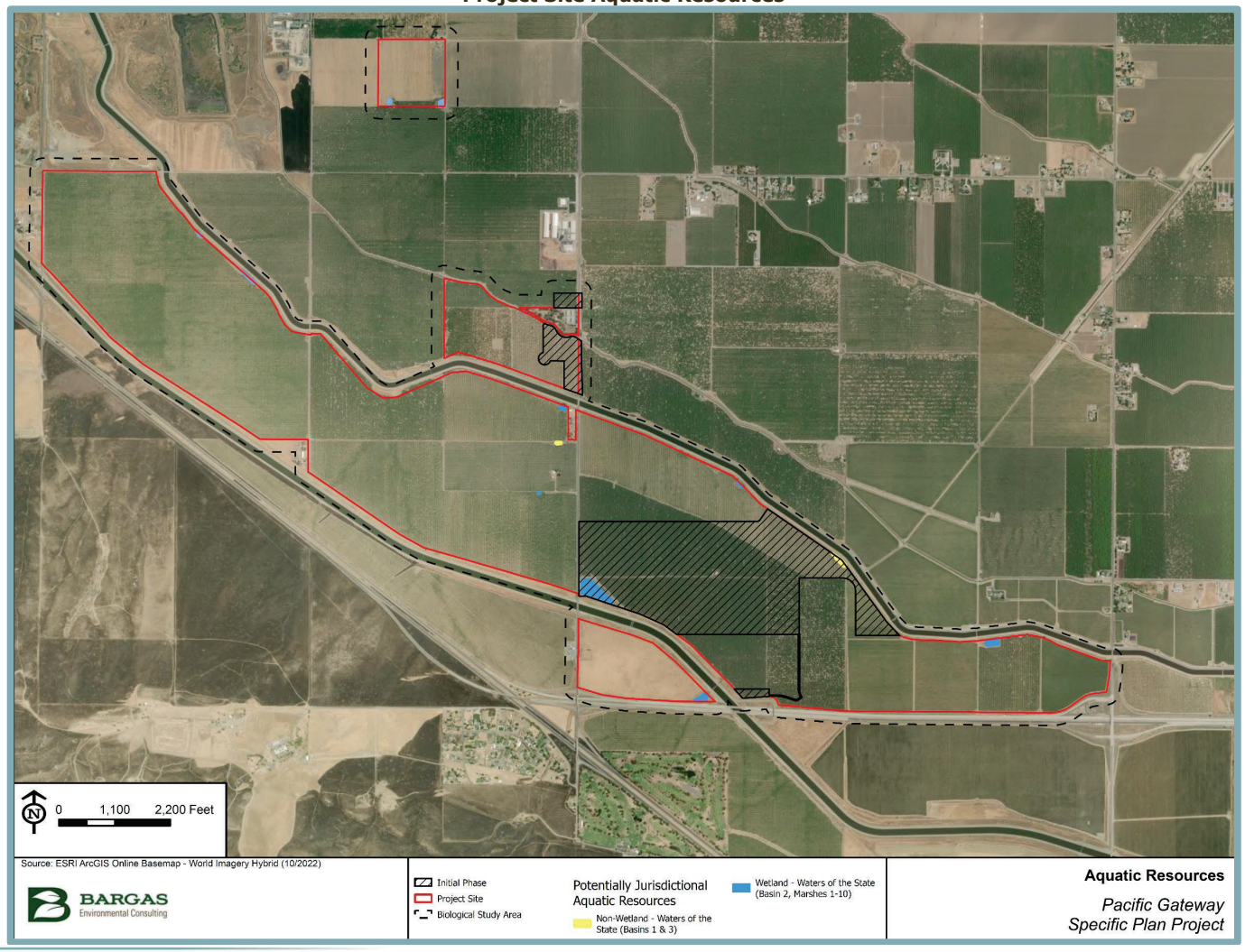


*Figure not OCR compatible.

Table 4.4-2
Aquatic Resources Within the Project Site

Resource Type	Acreage	Length (linear feet)
Initial Phase		
Potential Wetland Waters of the State	3.27	831
Non-Wetland Waters of the State	0.31	349
Total	**3.58**	**1,180**
Specific Plan Buildout		
Potential Wetland Waters of the State	5.72	2,515
Non-Wetland Waters of the State	0.38	454
Total	**6.10**	**2,969**

Source: Bargas Environmental Consulting, 2025.

Given the isolated position of the on-site features in the landscape and the similarity to other aquatic features that met wetland criteria, the identified areas could be under the jurisdiction of the Regional Water Quality Control Board (RWQCB) pursuant to the Porter-Cologne Water Quality Act. The isolated features also lack bed, bank, and associated riparian habitat; therefore, it is reasonably anticipated that the features would not be regulated by CDFW. However, only CDFW can make the final determination on their jurisdictional authority.

Off-Site Improvements Study Area

With regard to the off-site improvements study areas, multiple concrete-lined irrigation canal segments intersect the study areas at South Chrisman Road, West Linne Road, South Bird Road, South MacArthur Drive, and an unnamed, unpaved farm road (see Figure 4.4-11 through Figure 4.4-17). The canal segments are components of the Delta-Mendota Canal, the Lateral Five East Canal, and an unnamed concrete-lined canal. Corral Hollow Creek, a freshwater tributary of the San Joaquin River, also intersects the study area at South Chrisman Road, beyond the project site's northern boundary. Corral Hollow Creek and the Delta-Mendota Canal are identified by the USACE Sacramento District as a TNW; thus, the features are potentially subject to the jurisdiction of the USACE.

The Lateral Five East Canal and the unnamed concrete-lined canal were not presumed to have a hydrologic connection to any TNWs; as a result, these features are not subject to regulation by USACE under Section 404 of the Clean Water Act (CWA).

Further, the Delta-Mendota Canal, the Lateral Five East Canal, Corral Hollow Creek, and the unnamed concrete-lined canal may also be considered waters of the State regulated by the Central Valley Regional Water Quality Control Board (CVRWQCB). Additionally, because the features contain a bed and bank, they could be subject to potential regulation by CDFW under Section 1600 of CDFW California Fish and Game Code (CFGC).

Other aquatic resources found within the off-site study improvements study areas include freshwater emergent wetlands. Although a formal jurisdictional delineation was not performed for the areas, due to the conditions observed on-site, the biological resources report assumed that the wetlands had similar soils, hydrology, and vegetation to Water Basin 2 (WO2), which was determined to be a potential water of the State due to the presence of hydric soils and hydrology within the basin during a jurisdictional delineation performed by Bargas for the Specific Plan area.

Figure 4.4-11
Kasson Road/Grant Line Road/11th Street Improvement Study Area Aquatic Resources

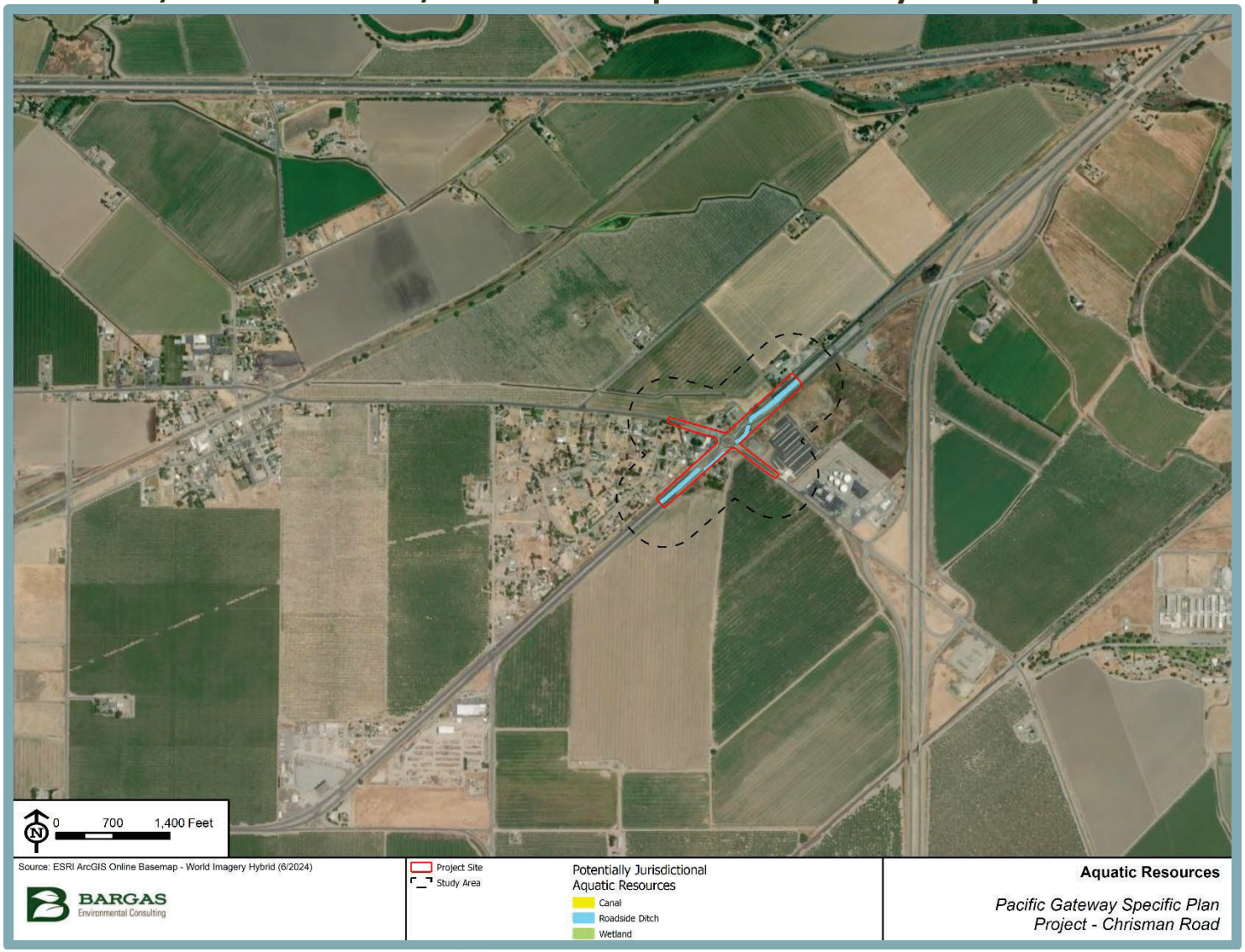


*Figure not OCR compatible.

Figure 4.4-12
South Chrisman Road/West Schulte Road Improvement Study Area Aquatic Resources

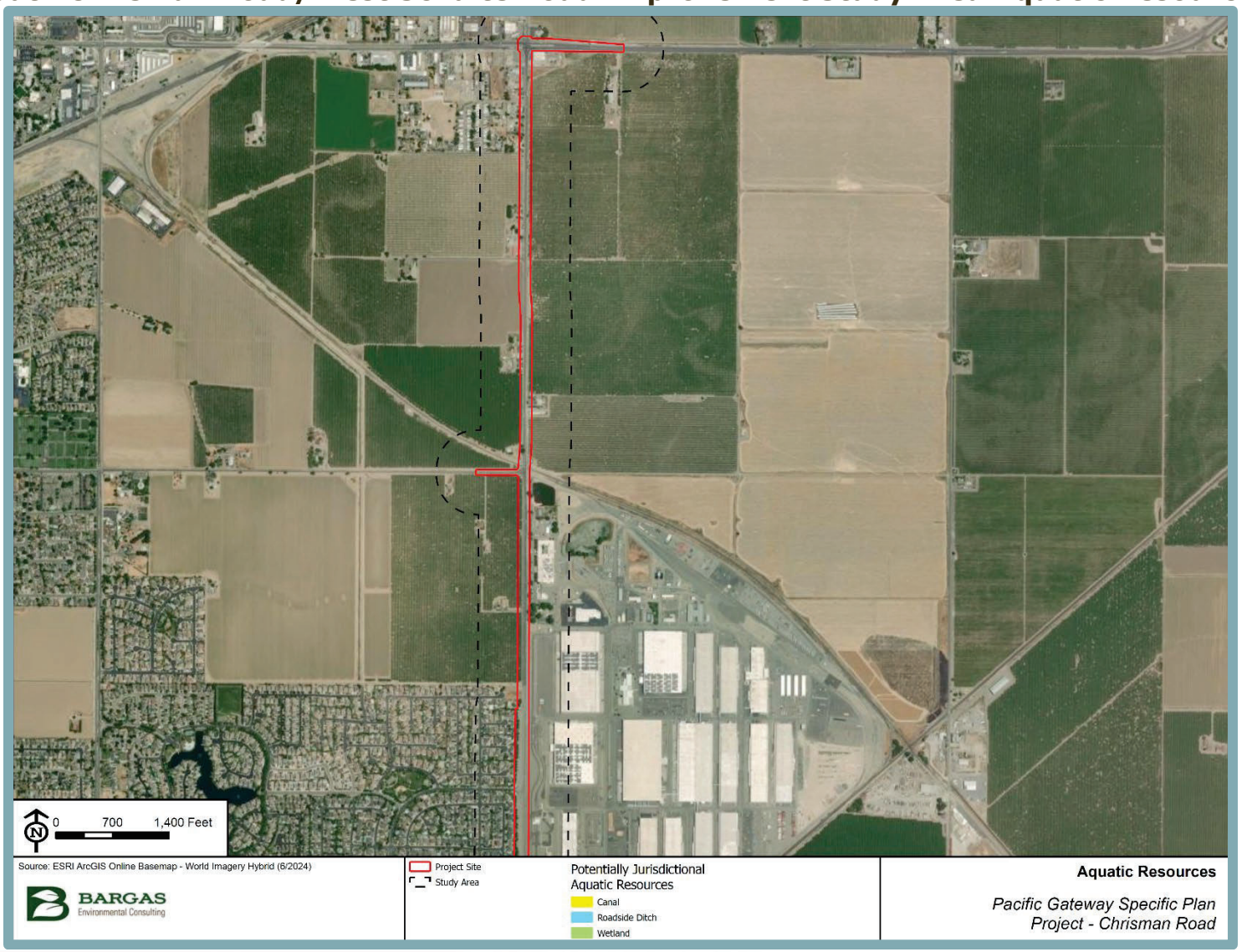


*Figure not OCR compatible.

Figure 4.4-13
South Chrisman Road/West Linne Road Improvement Study Area Aquatic Resources

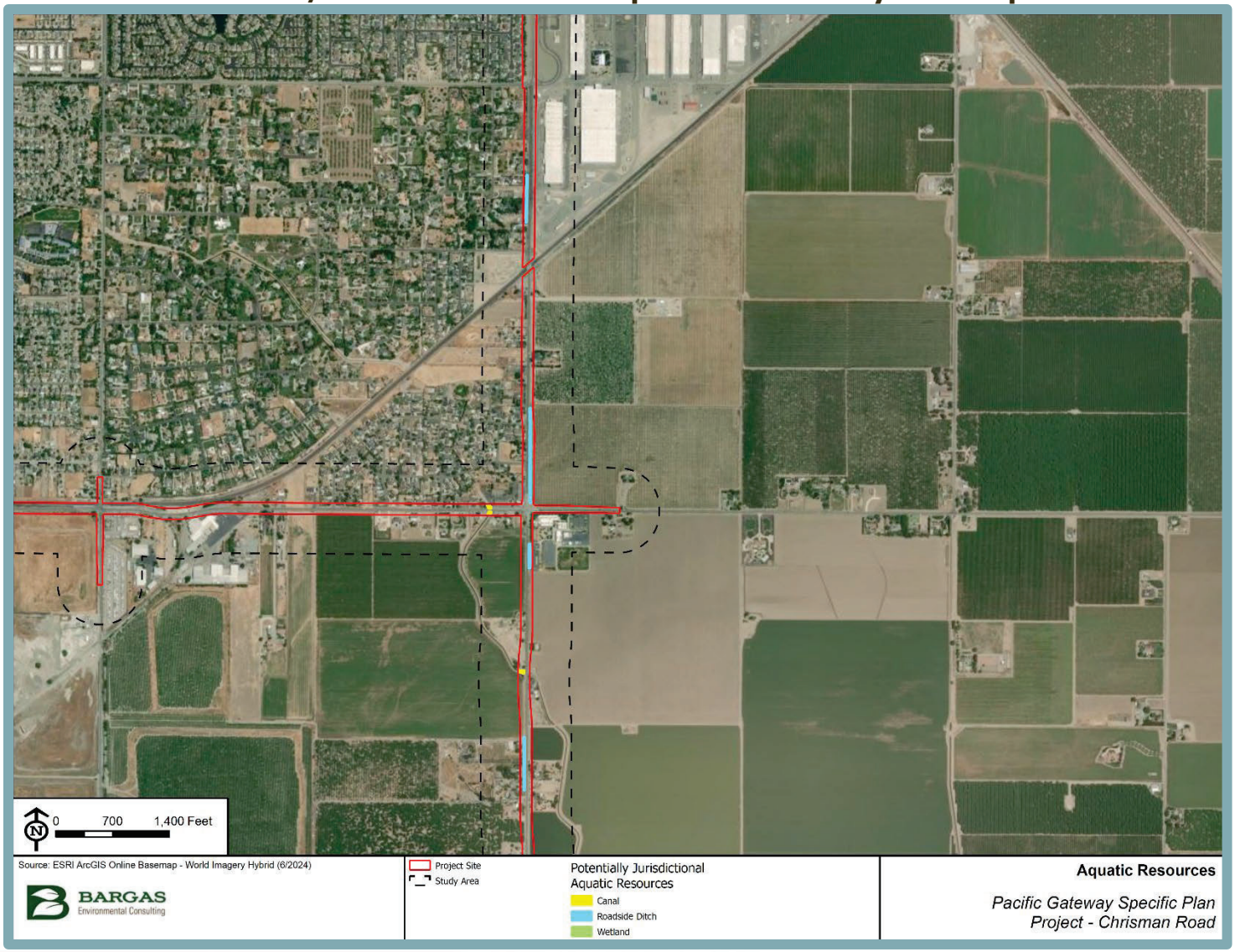


*Figure not OCR compatible.

Figure 4.4-14
Linne Road Intersection Improvement Study Areas Aquatic Resources

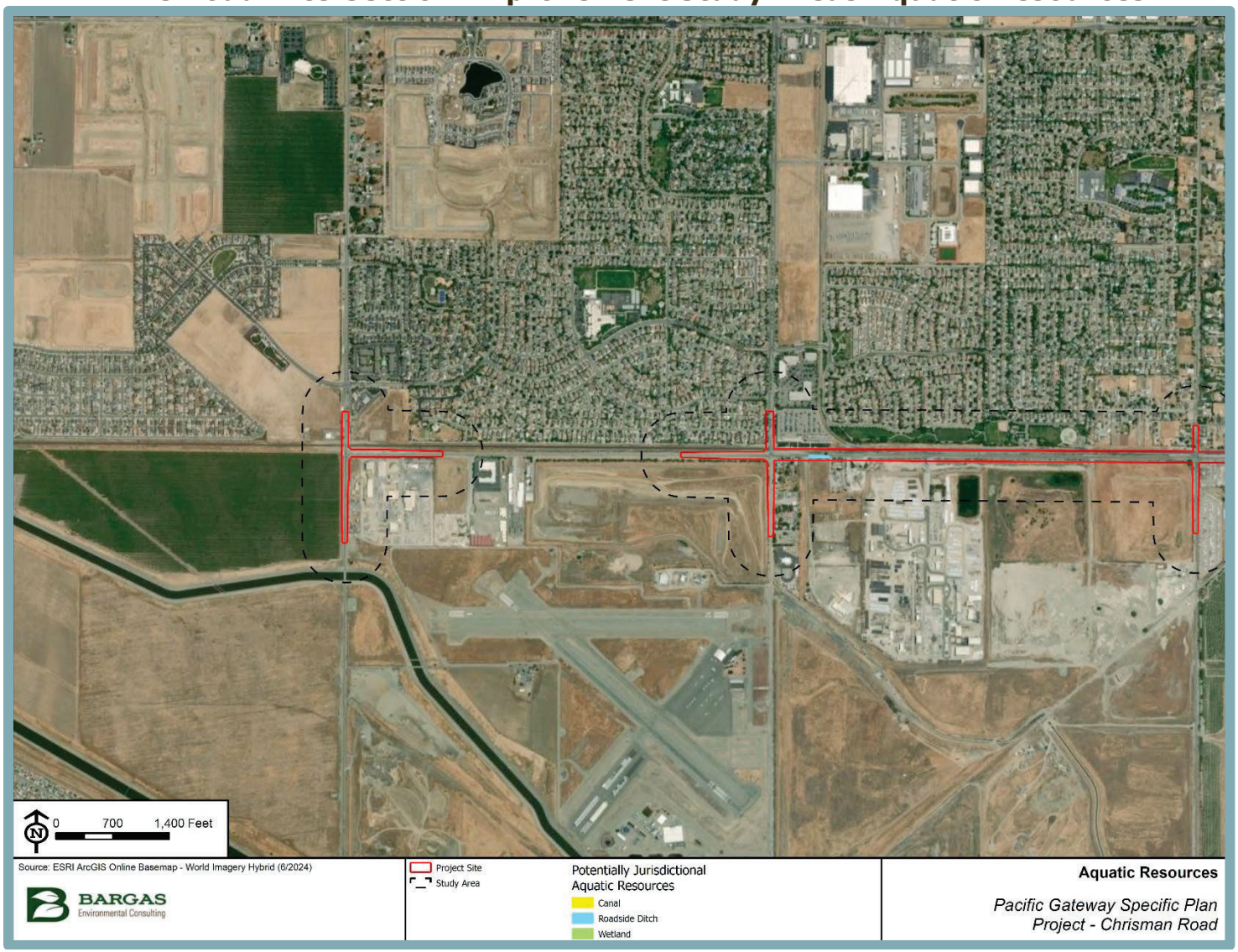


*Figure not OCR compatible.

Figure 4.4-15
South Chrisman Road Improvement Study Area Aquatic Resources

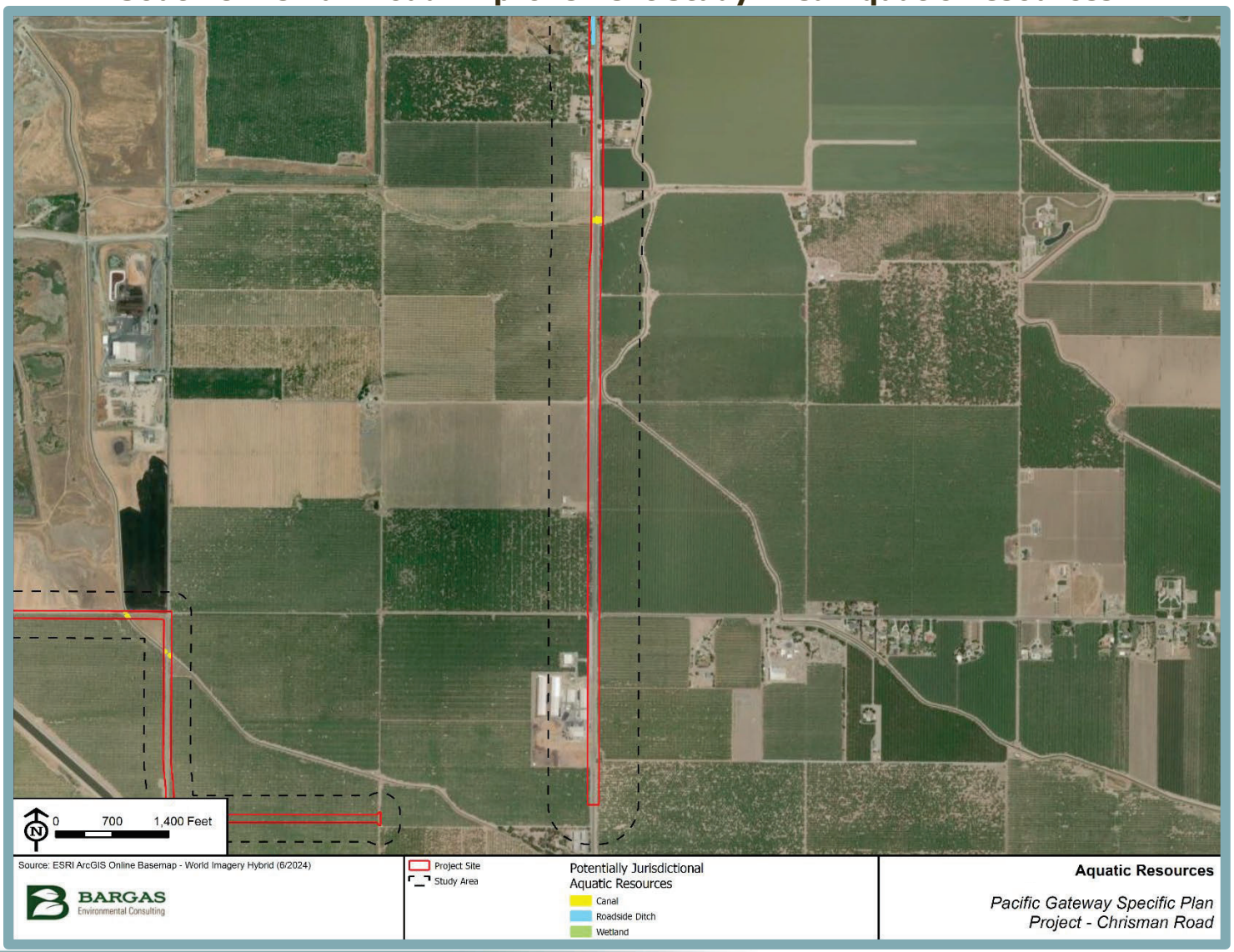


*Figure not OCR compatible.

Figure 4.4-16
State Route 132 Ramp Improvement Study Areas Aquatic Resources

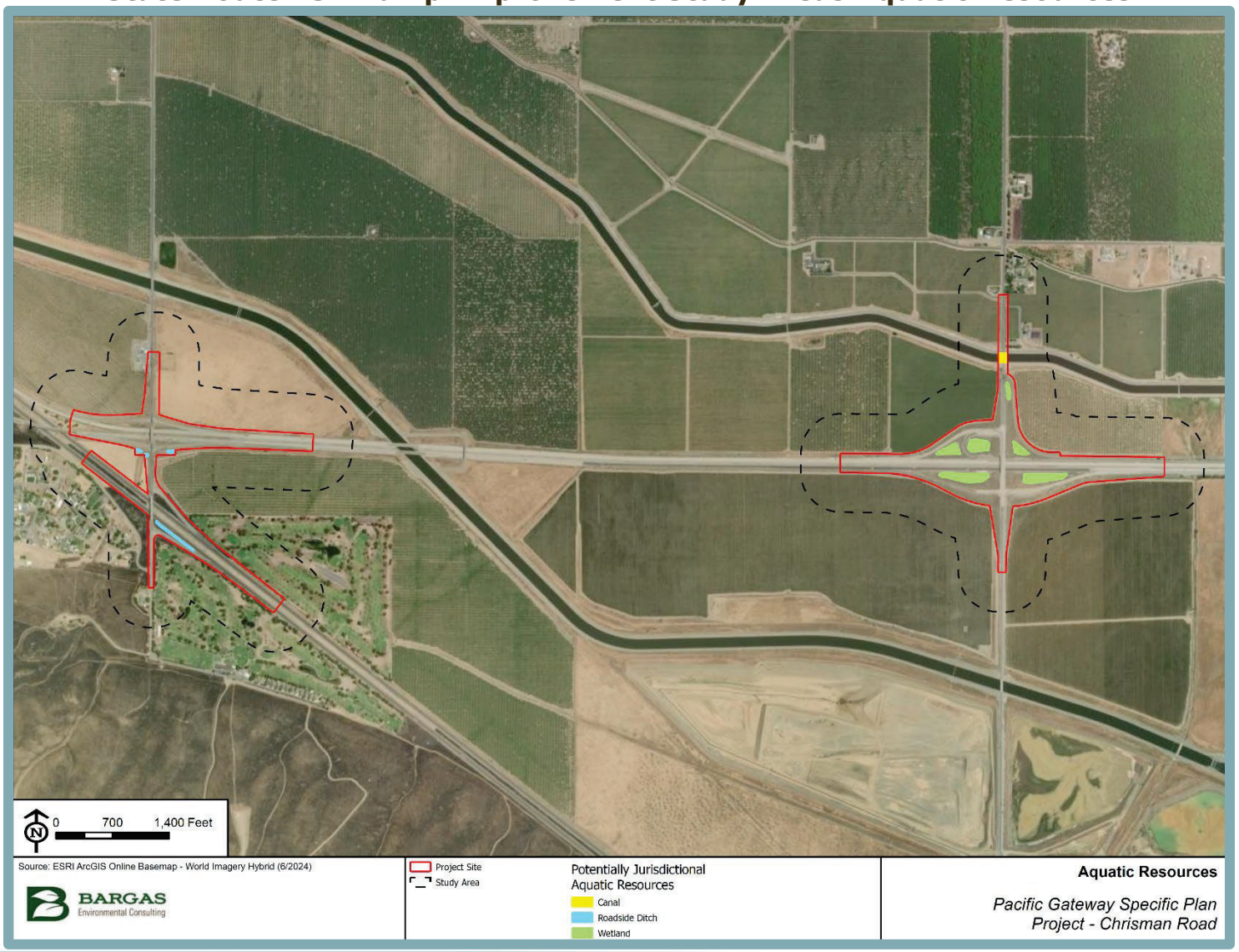


*Figure not OCR compatible.

Figure 4.4-17
South MacArthur Drive Improvement Study Area Aquatic Resources

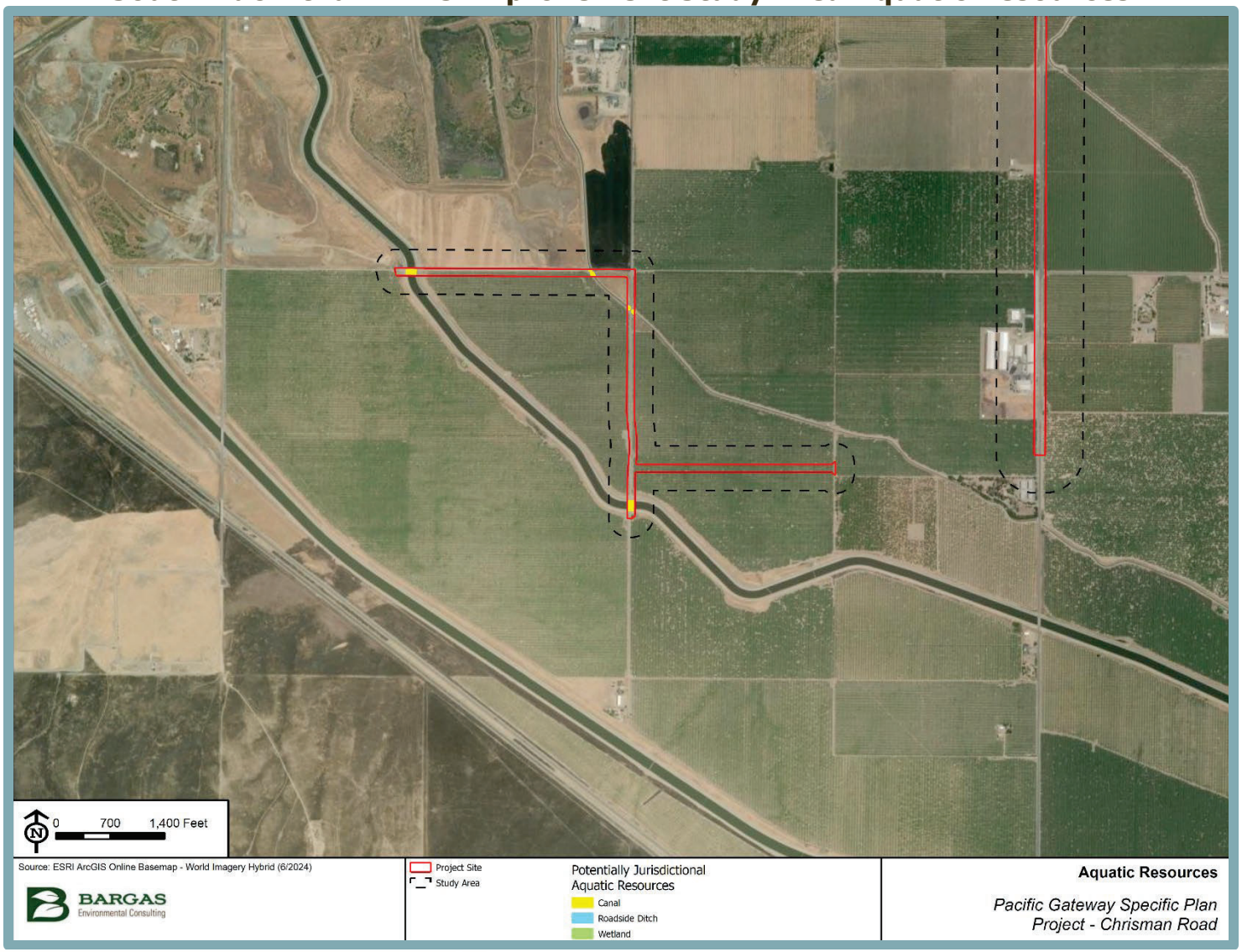


*Figure not OCR compatible.

Located alongside SR 132, the substantially disturbed emergent wetlands serve as roadside detention basins, which are isolated (i.e., not connected) to other aquatic features and serve to collect stormwater runoff from the adjacent roadways. Trash and other debris were observed within and around the basins.

Given their isolated position in the landscape and the similarity to other aquatic features, such as WO2, that met wetland criteria, the areas are considered potentially jurisdictional by the CVRWQCB pursuant to the Porter-Cologne Water Quality Act. Because the features do not contain a bed or bank, they would not be subject to potential regulation under Section 1600 of the CFGC by CDFW.

In addition, eight isolated roadside ditches are located throughout the off-site improvements study areas. Four roadside ditches are interspersed on the east and west sides of South Chrisman Road, and one runs along the south side of West Linne Road, east of the South Tracy Boulevard intersection. Another roadside ditch flows between the northwest- and southeast-bound West 11th Street, passing through three culverts and under Kasson Road.

Finally, where South Chrisman Road intersects Vernalis Road and Interstate 580 (I-580), two additional roadside drainages occur, connected by culverts. Additionally, a swale feature is located on the east side of South Chrisman Road, south of the intersection with West Linne Road, in the Jefferson School parking lot. The swale was classified as roadside ditch by the biological resources report for mapping purposes. All roadside ditches observed within the off-site improvement study areas, as well as the swale feature, were considered isolated due to the lack of hydrologic surface connectivity to nearby or downstream aquatic features, such as the canal/creeks or wetlands features discussed above. Therefore, the features are potentially subject to CVRWQCB jurisdiction pursuant to the Porter-Cologne Water Quality Act. Because these ditch features do contain a bed and bank, they would be subject to potential CDFW jurisdiction and regulation under Section 1600 of the CFGC.

Special-Status Species

Special-status species are species that have been listed as threatened or endangered under the federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or are of special concern to federal resource agencies, the State, or private conservation organizations. A species may be considered to have special status due to declining populations, vulnerability to habitat change, or restricted distributions. A general description of the criteria and laws pertaining to special-status classifications is described below.

Special-status plant and wildlife species may meet one or more of the following criteria:

- Listed as threatened or endangered, or proposed or candidates for listing by the U.S. Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS);
- Listed as threatened or endangered and candidates for listing by CDFW;
- Identified as Fully Protected species or Species of Special Concern by CDFW;
- Plant species considered to be rare, threatened, or endangered in California by the CNPS and CDFW (California Rare Plant Rank [CRPR] 1, 2, and 3):
    - CRPR 1A: Plants presumed extinct.
    - CRPR 1B: Plants rare, threatened, or endangered in California and elsewhere.
    - CRPR 2A: Plants extirpated in California, but common elsewhere.

- CRPR 2B: Plants rare, threatened, or endangered in California, but more common elsewhere.
- CRPR 3: Plants about which the CNPS needs more information.

Occurrence Potential

Based on the desktop review, field surveys, and habitat analyses, Bargas generated a list of special-status species for evaluation and assessed the potential for each special-status species to occur within the Study Area. The Study Area consists of the project site and a surrounding 250-foot buffer for a total of approximately 1,990.93 acres. Biological conditions (i.e., vegetation communities, wildlife habitats, disturbances, etc.) and the habitat and life cycle requirements of special-status species identified for analysis in the records search were considered. Additionally, the BRA defined "recent" occurrences as species observed within the past 30 years.

Based on such considerations, species were assigned to the following categories:

- Present: Species was detected during biological surveys conducted as part of the BRA;
- High: Species with recorded occurrences within or near the Study Area and suitable habitat (e.g., elevation, hydrology, soils, cover, habitat type, food resources, etc.) occur within the Study Area, but the species was not observed during biological surveys;
- Moderate: Species without known recorded occurrences within or near the Study Area and the species was not observed during the biological surveys; however, habitat within the Study Area is suitable to support the species;
- Not Expected: Species without known recorded occurrence within or near the Study Area and habitat is located on-site, but the on-site habitat is substantially disturbed, fragmented, or small in extent to be unlikely to support the species;
- Presumed Absent: Records of the species occurring within or near the Study Area do not exist, the Study Area is not located within the known geographic range for the species, and/or suitable habitat was not found during the surveys. Focused surveys were conducted for the species and the species was not detected.

Listed and Special-Status Plant Species

The following discussions provide further details of the special-status plant species with potential to occur within the Study Area.

Initial Phase, Specific Plan Buildout

According to the records search conducted as part of the BRA, seven special-status plant species have the potential to occur in the project region: big tarplant (*Blepharizonia plumosa*); diamond-petaled California poppy (*Eschsholzia rhombipetala*); slough thistle (*Cirsium crassicaule*); Mt. Hamilton coreopsis (*Leptosyne hamiltonii*); showy golden madia (*Madia radiata*); large-flowered fiddleneck (*Amsinckia grandiflora*); and Lemmon's jewelflower (*Caulanthus lemmonii*). Big tarplant and diamond-petaled California poppy were identified as Not Expected, and the remaining five species were identified as Presumed Absent. Further details on all identified special-status plant species are provided within Appendix B of the BRA (see Appendix G of this EIR). For informational purposes, the Not Expected species are described here.

Big Tarplant

Big tarplant is a CRPR 1B annual herb that blooms from July to October in clay soils located within valley and foothill grassland at elevations ranging between 100 to 1,655 feet amsl. The nearest CNDDB records include a record 2.84 miles from the project site

and 0.5-mile to the west of an off-site improvements study area. The species is not covered by the SJMSCP.

According to the BRA, the project site contains a small section of annual grassland with clay soils in the southern portion of the site. However, the clay soil portion of the site is isolated among orchards and lacks the hillside slopes preferred by the species. In addition, the off-site improvements study areas at South Chrisman Road and Vernalis Road contain annual grassland with clay soils, but the area is heavily disturbed and the species may be outcompeted for space by non-native grassland species.

Diamond-Petaled California Poppy

Diamond-petaled California poppy is a CRPR 1B annual herb that blooms between March and April in clay and alkaline soils located within valley and foothill grassland at elevations ranging between zero to 3,200 feet amsl. The nearest CNDDB records include a record more than five miles from the project site. CNDDB records near the off-site improvements study areas do not occur. The species is not covered by the SJMSCP.

As previously discussed, the project site contains a small section of annual grassland with clay soils in the south portion of the site, and similar conditions occur at South Chrisman Road and Vernalis Road. However, the on-site grassland area is isolated among orchards and the off-site grassland area is significantly disturbed; therefore, the species may be outcompeted for space by non-native grassland species.

Off-Site Improvements Study Area

With respect to the off-site improvements study areas, five special-status plant species were identified as Not Expected, including Delta button celery (*Eryngium racemosum*), diamond-petaled California poppy, caper-fruited tropidocarpum (*Tropidocarpum capparideum*), big tarplant, and showy golden madia. In addition, four special-status plant species were identified as Presumed Absent from the off-site improvement study areas, including slough thistle, Mt. Hamilton coreopsis, large-flowered fiddleneck, and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*).

For informational purposes, the Not Expected species for the off-site improvement study areas are described here, with the exception of big tarplant and diamond-petaled poppy because they have already been described above.

Delta Button Celery

Delta button celery is a CRPR 1B species, is protected under CESA, and is also covered by the SJMSCP. The annual herb blooms between June and October in freshwater wetlands and vernally mesic clay depressions. The species is often associated with riparian scrub at elevations ranging from 10 to 100 feet amsl. According to the biological resources report prepared for the off-site improvements study areas, CNDDB records for Delta button celery near the off-site improvements study areas do not occur.

The off-site improvements study areas, specifically SR 132, contains wetland areas that could potentially support Delta button celery; however, the wetlands are considered poor habitat due to substantial disturbance associated with the close proximity to SR 132. In addition, the species was not observed during either field survey, one of which was conducted within the blooming period for Delta button celery.

Caper-Fruited Tropidocarpum

Caper-fruited tropidocarpum is a CRPR 1B annual herb that blooms in March and April within valley and foothill grasslands at elevations ranging from five to 1,495 feet amsl. According to the biological resources report prepared for the off-site improvements study areas, the closest CNDDB record for caper-fruited tropidocarpum is located 0.51-mile to the west. The species is not covered by the SJMSCP.

The off-site improvements study area along South Chrisman Road and Vernalis Road near SR 132 contains annual grassland. However, the habitat is minimal and heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Additionally, recent records of the species do not occur within five miles of the off-site improvement study areas.

Showy Golden Madia

Showy golden madia is a CRPR 1B annual herb that blooms from March to May within cismontane woodlands, valleys, and foothill grasslands at elevations ranging from 80 to 3,985 feet amsl. According to the biological resources report prepared for the off-site improvements study areas, the closest CNDDB record for showy golden madia is located 3.95 miles to the west. The species is not covered by the SJMSCP.

Oak woodlands are not present within the off-site improvements study areas to support the species. Although the off-site improvement study areas contain annual grassland with clay soils along South Chrisman Road and Vernalis Road, the grassland area is minimal, heavily disturbed, and the species may be outcompeted for space by non-native grassland species.

Listed and Special-Status Wildlife Species

According to the records search conducted as part of the BRA, 43 special-status wildlife species have the potential to occur in the project region. Based on field observations and literature review (detailed further in this chapter under the Method of Analysis subsection), three species were confirmed Present within the project site, two species have a Moderate potential to occur on-site, 14 species were Not Expected to occur, and the remaining 24 species were Presumed Absent. Further details on all identified 43 wildlife species are provided within Appendix B of the BRA (see Appendix G of this EIR).

The special-status species Present within the project site include Swainson's hawk (*Buteo swiansoni*), white-tailed kite (*Elanus leucurus*), and song sparrow (Modesto population) (*Melospiza melodia*). The species with a Moderate potential to occur on-site are the northern harrier (*Circus hudsonius*) and Crotch's bumble bee (*Bombus crotchii*). The 14 species identified as Not Expected to occur on-site include the following: monarch butterfly (California overwintering population) (*Danaus plexippus* pop. 1); California glossy snake (*Arizona elegans occidentalis*); San Joaquin coachwhip (*Coluber flagellum ruddocki*); sharp-shinned hawk (*Accipiter striatus*); Cooper's hawk (*Accipiter cooperii*); great blue heron (*Ardea herodias*); great egret (Ardea alba); tricolored blackbird (*Agelaius tricolor*); yellow-breasted chat (*Icteria virens*); burrowing owl (*Athene cunicularia*); San Joaquin kit fox (*Vulpes macrotis mutica*); American badger (*Taxidea taxus*); western mastiff bat (*Eumops perotis*); pallid bat (*Antrozous pallidus*); and Townsend's big-eared bat (*Corynorhinus townsendii*).

For the off-site improvements study area, additional special-status species were not identified as Present or identified as having Moderate Potential. Several species were identified as Not Expected, as indicated below.

For informational purposes, the Present, Moderate, and Not Expected species are described here.

Swainson's Hawk

Present within project site: Swainson's hawk is a raptor species is listed as Threatened under the CESA by CDFW and is covered by the SJMSCP. The species forages in adjacent grasslands, suitable grain or alfalfa fields, or livestock pastures and breeds in stands with few trees in juniper-sage flats, riparian areas, and oak savannah within the Central Valley. The decline in population has resulted, in part, from the loss of nesting habitat.

Swainson's hawk was observed during field surveys flying over and perching on an electric pole within the project site. According to the BRA, medium-quality foraging habitat occurs within the on-site annual grassland habitat (north of SR 132 and south of the California Aqueduct), as well as within the agricultural fields adjacent to the project site. Tall trees to support nesting are limited in the project site, as the project site is largely comprised of orchards; thus, the BRA concluded that on-site nesting is unlikely and not expected.

White-Tailed Kite

Present within project site: White-tailed kite is a CDFW Fully Protected species and is also covered by the SJMSCP. The species is a year-long resident in coastal and valley lowlands and is rarely found away from agricultural areas. White-tailed kites typically inhabit herbaceous and open areas, mostly in cismontane California. The species has extended its range and increased in numbers over the recent decades.

White-tailed kite was observed flying over and perching within the project site during the field survey conducted as part of the BRA. As discussed therein, medium-quality foraging habitat occurs within the on-site annual grassland habitat (north of SR 132 and south of the California Aqueduct), as well as within the agricultural fields adjacent to the project site. Tall trees to support nesting are limited in the project site, as the project site is largely comprised of orchards; thus, the BRA concluded that on-site nesting activity is unlikely and not expected.

Song Sparrow (Modesto Population)

Present within project site: Song sparrow (Modesto population) is a CDFW Fully Protected species and is not covered by the SJMSCP. The species is a common resident throughout most of California, but avoids densely wooded habitats and higher mountains, preferring southern deserts, riparian areas, fresh or saline emergent wetland, and wet meadow habitats. Song sparrows breed in riparian thickets of willows, other shrubs, vines, tall herbs, and emergent vegetation, as well as the damp thickets and coastal scrub of northern California and Channel Islands. In winter, the species may be found in much of northern California in open habitats with thickets of shrubs or tall herbs.

Song sparrows from the Modesto population were observed during the field survey flying over and perching within the project site. According to the BRA, medium-quality foraging habitat occurs within the on-site annual grassland habitat (north of SR 132 and south of the California Aqueduct),

as well as within the agricultural fields adjacent to the project site. Nesting habitat is limited to the small grassland area at the southern portion of the project site.

Northern Harrier

Moderate Potential within project site: The northern harrier is a CDFW Species of Special Concern and is covered by the SJMSCP. The species frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands. Northern harriers are a permanent resident of the northeastern plateau and coastal areas and are less common in the Central Valley. The California population has decreased in recent decades but can be locally abundant where suitable habitat remains free of disturbance, especially from intensive agriculture. The destruction of wetland habitat, native grassland, and moist meadows, as well as the burning and plowing of nesting areas during early stages of breeding cycle, are major reasons for the decline.

The project site contains medium-quality foraging habitat in the form of on-site grasslands. In addition, the adjacent agricultural fields could support northern harrier foraging activity. Nesting habitat is located around the isolated marshes and grasslands, but these habitats are only marginally suitable within the project site due to the small size and extensive human disturbance in the areas. CNDDB records of the species are not located within five miles of the project site.

Crotch's Bumble Bee

Moderate Potential within project site: Crotch's bumble bee is a candidate species for listing under CESA and is a CDFW Species of Special Concern, but is not covered by the SJMSCP. The species is a short-tongued bumble bee that inhabits open grasslands and scrub habitats. Bumble bee colonies consist of a queen, workers, and reproductive (males and new queens). The queen hibernates over winter and starts foraging in spring, seeking a nest site. Nests are often underground or in abandoned animal burrows. Initially, the queen handles foraging and care until workers emerge. Bumble bees forage from diverse plants and are known to sonicate the flowers to vibrate the pollen loose.

The project site contains sufficient flowering plants within the orchards and vineyards to support foraging (i.e., nectar collection) for the species. The closest CNDDB record is located 3.61 miles north of the project site. On-site nesting habitat is limited to the open grassland site located north of SR 132 and south of the California Aqueduct. Therefore, Crotch's bumble bee could be present as a transient species foraging within the orchards and vineyards during the flowering period.

Monarch Butterfly

Not Expected within project site/Presumed Absent for Off-Site Improvements Study Areas: The monarch butterfly is a candidate for listing under FESA and is not covered by the SJMSCP. The species is known for long-distance annual migrations, as well as their reliance on milkweed as a larval host plant. Two subpopulations of Monarchs exist in North America: the eastern population overwinters in Mexico and breeds in the midwestern states, while the western population overwinters in coastal California and spreads across the west from Arizona to Idaho. Both North American migratory populations have declined over the past 20 years due various factors, including habitat loss in breeding and overwintering sites, habitat degradation, disease, pesticide exposure, and climate change. Recently, the western population has experienced dramatic swings from a low of less than 2,000 in 2020 to 2021, to over 200,000 in 2021 and 2022. While insect populations commonly fluctuate from year to year, more research is needed to determine how best to regain a stable population of monarch butterflies closer to the historic averages in the 1980s (estimated to range between one and four million).

As a migratory species with flight capability, monarch butterflies have the potential to occur anywhere during movements. The project site and off-site improvement study areas are not located in roosting habitat for the species. The nearest CNDDB record is located greater than five miles from the project site and off-site improvement study areas.

California Glossy Snake

Not Expected: The California glossy snake is designated as a Species of Special Concern by CDFW and is not covered by the SJMSCP. The snake is common throughout southern California, especially in desert regions from below sea level to 6,000 feet amsl, and is less common to the north. The species occurs in the interior Coast Ranges, as far as Mount Diablo in Contra Costa County. While the California glossy snakes is most common in desert habitats, the species can also occur in chaparral, sagebrush, valley foothill hardwood, pine-juniper, and annual grass.

The project site lacks the typical desert environments preferred by this snake. A small area of on-site annual grassland is located north of SR 132 and south of the California Aqueduct that may contain limited and marginally suitable habitat for this species. However, the preferred prey for this species is typically limited to mostly desert lizard species; thus, the project site is unlikely to provide suitable food source. The closest CNDDB record is 2.12 miles west of the project site.

The off-site improvement study areas lack the desert environments preferred by the species. Annual grassland habitat does occur along South Chrisman Road and Vernalis Road, but the area is marginal and heavily disturbed. Preferred foraging is typically limited to mostly desert lizard species and, thus, the off-site improvement study areas are unlikely to provide suitable foraging opportunities. The closest CNDDB record is 2.53 miles southwest of the off-site improvement study areas.

San Joaquin Coachwhip

Not Expected: San Joaquin coachwhip snakes are diurnal animals designated as a Species of Special Concern by CDFW and is covered by the SJMSCP. Because the species prefers warm temperatures, individuals emerge from small mammal burrows late in the season (April through May) and prefer dry, open, treeless habitats such as valley grassland and salt scrub. The species is known to avoid dense vegetation that restricts movement, such as mixed oak chaparral woodland.

The project site supports a relatively small area of annual grassland located north of SR 132 and south of the California Aqueduct. However, the area is densely populated with non-native grasses and orchards, and does not contain the preferred open, treeless habitat. The closest CNDDB record of the species is 2.17 miles west of the project site.

Generally, the off-site improvement study areas are primarily comprised of disturbed roadways and lacks natural open habitat preferred by this species. Annual grassland does occur along South Chrisman Road and Vernalis Road, but the grassland area is marginal, heavily disturbed, and does not contain the preferred open habitat to support the species. The closest CNDDB record of the species is 2.12 miles west of the off-site improvements study areas.

Sharp-Shinned Hawk

Not Expected: The sharp-shinned hawk is covered by the SJMSCP that prefers riparian habitats with north-facing slopes and perches. According to the BRA, the species is a fairly common migrant and winter resident throughout California, except in areas with deep snow. Sharp-shinned

hawks breed in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats.

The species prefers wooded areas but may forage within agricultural fields, including the fields located adjacent to the project site and South Chrisman Road. Tall, densely populated trees located within woodlands are required for nesting and are not present within the project site, which is largely comprised of orchards, nor the off-site improvement study areas; therefore, the BRA concluded that on- or off-site nesting is unlikely. Additionally, the nearest CNDDB record is located more than five miles from the project site and off-site improvement study areas. Therefore, sharp-shinned hawk is not expected to occur.

Cooper's Hawk

Not Expected: Cooper's hawk is covered by the SJMSCP and is a resident throughout most of the wooded portion of the State up to 9,000 feet amsl. The species breeds in the southern Sierra Nevada foothills, New York Mountains, Owens Valley, and other areas in southern California. Most frequently, the species is located in dense stands of live oak, riparian deciduous, or other forest habitats near water.

The species prefers wooded areas but may also forage within open fields, such as the on-site open grassland field located north of SR 132 and south of the California Aqueduct. Tall, densely populated trees within woodlands are required for nesting and are not present within the project site, which is largely comprised of orchards, nor the off-site improvement study areas; thus, nesting is unlikely. Additionally, the nearest CNDDB record is located greater than five miles from the project site and off-site improvement study areas.

Great Blue Heron and Great Egret

Not Expected: The great blue heron is covered by the SJMSCP and is fairly common all year throughout most of California in shallow estuaries and emergent wetlands, as well as in salt ponds where fish are numerous. The species is found less commonly along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. Nesting habitat for the species includes isolated islands, channel markers, or artificial nest structures.

The great egret is also covered by the SJMSCP and is a common yearlong resident throughout California, except for high mountains and deserts. The species feeds and rests in emergent wetlands; along the margins of estuaries, lakes, and slow-moving streams; on mudflats and salt ponds; and in irrigated croplands and pastures. Nesting and roosting occur in large trees. The species is fairly common in coastal lowlands from September to April and is rare in the summer.

The project site contains small, marginal marshes that could be used for foraging on insects, reptiles, and small mammals. Most of the marshes were dry during the on-site surveys, which limits the amount of foraging habitat. Nesting habitat is not present within the project site; thus, nesting is unlikely. Additionally, the nearest CNDDB records for both species are greater than five miles from the site.

The off-site improvement study areas at the intersection of Vernalis Road and South Bird Road contain small, heavily disturbed wetland areas unlikely to support the insects, reptiles, and small mammals predated upon by the great blue heron and the great egret. The wetlands are fed from stormwater runoff from the surrounding roadways, resulting in insufficient water quality. In addition, the areas were dry during the field survey, further limiting the potential for foraging.

Nesting habitat is not present within the off-site improvement study areas and, thus, nesting is unlikely. Additionally, the nearest CNDDB records are greater than five miles from the off-site improvement study areas.

Tricolored Blackbird

Not Expected within project site/Presumed Absent for Off-Site Improvements Study Areas: The tricolored blackbird is considered Threatened under CESA and is covered by the SJMSCP. The species is common throughout the Central Valley and in coastal districts from Sonoma County south. In winter, the species becomes more widespread along central coast and San Francisco Bay area and is found in portions of the Colorado Desert. Tricolored blackbird breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, as well as in thickets of willow, blackberry, wild rose, and tall herbs. Foraging occurs in grassland and cropland habitats.

The project site contains small, marginal marshes potentially suitable to support the species. However, the area is significantly disturbed through vegetation trimming and grading. Therefore, tall, undisturbed cattails or tules do not occur on-site and the BRA concluded that tricolored blackbird are not expected to occur. Additionally, most on-site marshes were dry during the field surveys and are unlikely to support this species. The closest CNDDB record of tricolored blackbird is located 1.93 miles south of the project site.

Yellow-Breasted Chat

Not Expected within project site/Presumed Absent for Off-Site Improvements Study Areas: The yellow-breasted chat is covered by the SJMSCP. An uncommon summer resident and migrant in coastal California and the foothills of the Sierra Nevada, the species is found up to approximately 4,800 feet amsl in valley foothill riparian habitats and up to 6,500 feet amsl east of the Sierra Nevada in desert riparian habitats. In southern California, the species breeds both on the coast and inland. During migration, yellow-breasted chat may be found in lower elevations of mountains in riparian habitat.

The project site does not contain valley foothill or desert riparian habitat to support yellow-breasted chat. The on-site marshes do not contain adequate vegetation to support the species and the nearest CNDDB record is located greater than five miles from the project site.

Burrowing Owl

Not Expected: Burrowing owl is a Candidate for listing under CESA and is a Covered Species under the SJMSCP. The species is common throughout the open, dry grassland and desert habitats, as well as grass, forb and open shrub stages of Pinyon-Juniper and Ponderosa Pine habitats of the State.

The project site contains annual grassland north of SR 132 and south of the California Aqueduct, but vegetation in the area is tall and densely populated by non-native grasses, which likely precludes use by burrowing owl, as the species prefers more open, treeless habitats. The closest CNDDB record to the project site is located 2.66 miles to the north.

With respect to the off-site improvement study areas, suitable habitat occurs at the corner of SR 132 and South Chrisman Road in grasslands where small mammal burrows are present. The potential habitat is a small (approximately 100-foot wide) disturbed strip of grassland along the paved roadway. While burrowing owls are known to occupy small areas surrounded by development, there are several other open undisturbed grasslands outside of the off-site

improvement study areas. Regarding the nearest CNDDB record, one adult owl was observed using a previous ground squirrel burrow approximately 0.3-mile from a study area, adjacent to agricultural fields.

San Joaquin Kit Fox

Not Expected: The San Joaquin kit fox is listed as Endangered under FESA, Threatened under CESA, and is covered by the SJMSCP. The species is the smallest fox in North America, with an average body length of 20 inches and weight of approximately five pounds. The species lives in areas with loose soil and open grassland with sparse shrubs and grasses, if any. In the fall, female kit foxes begin to clean and enlarge their pupping dens for mating, which occurs between December and March. Females give birth to two to six pups in February or March. The kit fox's range in the San Joaquin Valley extends from southern Kern County north to the Contra Costa, Alameda, and San Joaquin counties on the western side of the valley; and to the La Grange area of Stanislaus County on the eastern side. The kit fox's range also includes the Panoche and Cuyama valleys and the Carrizo Plain in San Luis Obispo County. Threats to the species include habitat modification and destruction, energy development, drought, disease or pathogens, rodenticides, and predation.

The project site includes limited and marginal grassland habitat located north of SR 132 and south of the California Aqueduct. However, the grassland area is densely populated with grasses, which is not the open grassland with low, sparse vegetation preferred by San Joaquin kit foxes. Sign of on-site San Joaquin kit foxes, including scat or potential dens, was not observed during the field surveys. Nonetheless, the Corral-Lower San Joaquin Wildlife Corridor is located approximately 0.65-mile northwest of the project site; therefore, the species may occur as a transient through the project site.

With respect to the off-site improvement study areas, suitable habitat occurs at the corner of SR 132 and South Chrisman Road in a disturbed grassland area where small mammal burrows are present. However, the off-site improvement study area lacks the habitat to support foraging by the species and sign of the species was not observed during the field visits.

American Badger

Not Expected within project site/Presumed Absent for Off-Site Improvements Study Areas: The American badger is designated as a Species of Special Concern by CDFW and is a Covered Species under the SJMSCP. The species is an uncommon permanent resident found throughout most of the State, except in the northern North Coast area. Within its range, the species is most abundant in drier open stages of shrub, forest, and herbaceous habitats with friable soils. American badgers prefer open habitat with loamy or sandy soils for digging and feed on a variety of prey, including ground burrowing mammals, lizards, earthworms, eggs, and birds.

The nearest CNDDB record for American badger is located 1.59 miles west of the project site. The project site is located approximately 0.65-mile southeast of the Corral-Lower San Joaquin Wildlife Corridor, which could be used as a wildlife corridor by the American badger. Therefore, the species may occur as a transient through the project site. However, the paved roads and high level of human activity between the corridor and the project site are likely to prevent the species from occurring on-site. In addition, soils within the on-site grassland area are not suitable for digging, thereby preventing foraging and den activities from occurring within the project site. Burrows, scat, or other signs were not observed during the on-site field surveys.

Western Mastiff Bat

Not Expected within project site/Presumed Absent for Off-Site Improvements Study Areas: The western mastiff bat is designated as a Species of Special Concern by CDFW and is covered by the SJMSCP. The species is an uncommon resident in southeastern San Joaquin Valley and Coastal Ranges from Monterey County southward through southern California, from the coast eastward to the Colorado Desert. The species occurs in open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, palm oases, chaparral, desert scrub, and urban. Large water bodies, such as lakes and rivers, are required for foraging.

The project site contains marginal annual grassland habitat north of SR 132 and south of the California Aqueduct. However, the on-site grassland area lacks cliffs, rocky hillsides, and the urban development required to support roosting. Water bodies required for foraging are marginal throughout the project site. Additionally, the nearest CNDDB record is 3.49 miles west of the project site.

Pallid Bat and Townsend's Big-Eared Bat

Not Expected within project site/Presumed Absent for Off-Site Improvements Study Area: The pallid bat is designated as a Species of Special Concern by the CDFW and is not covered by the SJMSCP. The species occurs commonly in low elevations throughout California, except for the high Sierra Nevada from Shasta to Kern counties, and the northwestern corner of the State from Del Norte and western Siskiyou counties to northern Mendocino County. Pallid bats occupy a wide variety of habitats, including grasslands, shrublands, woodlands, and forests, although the species is most common in open, dry habitats. Foraging often occurs in open forest and woodland habits. Day roosting habitat includes crevices in rocky outcrops and cliffs, caves, mines, hollows and cavities, the exfoliating bark of trees, and crevices within human structures such as bridges, barns, porches, and buildings.

Townsend's big-eared bat is designated as a Species of Special Concern by the CDFW and is covered by the SJMSCP. found throughout California, but a detailed distribution of the species is not yet well known. The species is generally found in all but subalpine and alpine habitats in any season, but is most abundant in mesic habitats. Once considered common, Townsend's big-eared bat now is considered uncommon in California.

On-site annual grassland is present north of SR 132 and south of the California Aqueduct, which could provide marginal foraging habitat for both species. However, the area is limited in size and also lacks undisturbed roosting habitat. The project site does not contain the open forest and woodland habitats preferred by bat species for foraging, and evidence of bats was not observed during the surveys.

Trees

As discussed above, the project site is comprised mostly of orchards and is planted primarily with commercial fruit- and nut-bearing trees, including almond and cherry. Additionally, tree tobacco (*Nicotiana glauca*) were observed within the project site. The removal of a native oak, heritage oak tree, or historical tree requires an approved improvement plan application (Chapter 9-1505.3), which requires replacement of the tree subject to requirements described in Chapter 9-1505.4. Such provisions do not apply to horticultural or orchard trees proposed for removal. Therefore, the on-site tree species are not protected.

4.4.3 REGULATORY CONTEXT

A number of federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the vicinity of the project site.

Federal Regulations

The following are the federal environmental laws and policies relevant to biological resources.

Federal Endangered Species Act

The U.S. Congress passed the FESA in 1973 to protect species that are endangered or threatened with extinction. FESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. FESA prohibits the "take" of endangered or threatened wildlife species. "Take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species or any attempt to engage in such conduct (FESA Section 3 [3], [19]). Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns (50 Code of Federal Regulations [CFR] Section 17.3). Harass is defined as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns (50 CFR Section 17.3). Actions that result in take can result in civil or criminal penalties.

Section 10 requires the issuance of an "incidental take" permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of a Habitat Conservation Plan (HCP) that would offset the take of individuals that may occur, incidental to implementation of a proposed project, by providing for the protection of the affected species.

Pursuant to the requirements of FESA, a federal agency reviewing a project within the jurisdiction of the agency must determine whether any federally listed threatened or endangered species may be present on-site and whether the proposed project will have a potentially significant impact on such species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 U.S. Code [USC], Section 1536[3], [4]).

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of State and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior.

Clean Water Act

USACE, CDFW, and RWQCB have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. The USACE's jurisdiction is established through the provisions of Section 404 of the CWA, which prohibits the discharge of dredged or fill material into waters of the U.S. without a permit, including certain wetlands and unvegetated "other waters of the U.S." The jurisdictional authority of the RWQCB is established pursuant to Section 401 of the CWA, which typically requires a water quality certification when an individual or nationwide permit

is issued by the USACE. The RWQCB also has jurisdiction over waters of the State under the Porter-Cologne Water Quality Control Act when waters/wetlands are isolated.

The USACE regulates discharge of dredged or fill material into waters of the U.S. under Section 404 of the CWA. "Discharge of fill material" is defined as the addition of fill material into waters of the U.S., including but not limited to, the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for the construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 CFR Section 328.2[f]). In addition, Section 401 of the CWA (33 USC, Section 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments, such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR Section 328.3[b]). Certain waters of the U.S. are considered "special aquatic sites" because they are generally recognized as having ecological value; such sites include sanctuaries and refuges, wetlands, mudflats, vegetated shallows, and riffle and pool complexes (40 CFR Section 230). Special aquatic sites are defined by the U.S. Environmental Protection Agency (USEPA) and may be afforded additional consideration. USACE also regulates navigable waters under Section 10 of the Rivers and Harbors Act of 1899. Navigable waters are defined as "… those waters of the U.S. that… are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce" (33 CFE Section 322.2).

USACE now interprets "waters of the U.S." consistent with the Supreme Court's May 25, 2023, decision in *Sackett v. Environmental Protection Agency*, which ruled that the CWA extends only to "wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right," so that they are "indistinguishable" from such waters. Furthermore, jurisdictional waters of the U.S. can be defined by exhibiting a defined bed and bank and ordinary high-water mark (OHWM). The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

State Regulations

The following are the State environmental laws and policies relevant to biological resources.

California Department of Fish and Wildlife

CDFW administers a number of laws and programs designed to protect fish and wildlife resources under the CFGC, such as CESA (CFGC Section 2050, et seq.), Fully Protected Species (CFGC Section 3511) and the Lake or Streambed Alteration Agreement (LSAA) Program (CFGC Sections 1600 to 1616). Such regulations are summarized in the following sections.

California Endangered Species Act

The State of California enacted CESA in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. Candidate species under the CESA are defined as native plant or animal species being considered for addition to the State's endangered or threatened species list. CESA requires State agencies to consult with CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that "overriding considerations" exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

As with FESA, for covered projects that may impact State-listed species under CESA that are also covered species under the SJMSCP, direct consultation with CDFW for State-listed take authorization is not required as long as the covered project complies with SJMSCP requirements. For projects that may result in take of State-listed species that are not covered species, CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (CFGC Section 2081).

California Fish and Game Codes

A number of species have been designated "fully protected" species under Sections 5515, 5050, 3511, and 4700 of the CFGC, but are not listed as endangered (Section 2062) or threatened (Section 2067) species under CESA. Except for take related to scientific research, all take of fully protected species is prohibited. The CFGC defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill."

Birds of prey are protected in California under provisions of the CFGC Section 3503.5 (1992), which states, "it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by CDFW.

Lake or Streambed Alteration Program

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the CFGC Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, State or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or

- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, the CDFW will require that the parties enter into an LSAA.

CDFW Species of Special Concern

In addition to formal listings under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may be considered for review are included on a list of "Species of Special Concern" developed by CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. Currently, 64 species, subspecies, and varieties of plants are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations, emergencies, and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the federal CWA. Although the CWA is a federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and RWQCBs are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE's permits for fill and dredge discharges within waters of the U.S., and also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan. The Procedures consist of four major elements: (1) a wetland definition; (2) a framework for determining if a feature that meets the wetland definition is a water of the State; (3) wetland delineation procedures; and (4) procedures for the submittal, review, and approval of applications for WQCs and Waste Discharge Requirements (WDR) for dredge or fill activities. The State Office of Administrative Law (OAL) approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code Section 13050[e]), "waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." Unless excluded by the Procedures, any activity that could result in

discharge of dredged or fill material to waters of the State, which includes waters of the U.S. and non-federal waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (CFGC Sections 1900 through 1913) affords the CDFW Commission the authority to designate native plants as endangered or rare and protect them from "take." CNPS maintains a list of sensitive plant species native to California and assigns each a rank in the CRPR system defined below:

- List 1A: Plants presumed extirpated in California and either rare or extinct elsewhere;
- List 1B: Plants are rare, threatened, or endangered in California and elsewhere;
- List 2A: Plants presumed extirpated in California, but more common elsewhere;
- List 2B: Plant are rare, threatened, or endangered in California, but more common elsewhere;
- List 3: Plants about which more information is needed (on a review list);
- List 4: Plants of limited distribution (on a watch list).

In addition, the list of sensitive plant species is further assigned a threat level as follows:

- 0.1: Seriously threatened in California, meaning there is a high degree (over 80 percent of occurrences) and immediacy of threat;
- 0.2: Moderately threatened in California, meaning there is a moderate degree (between 20 to 80 percent of occurrences) and immediacy of threat;
- 0.3: Not very threatened in California, meaning there is a low degree (less than 20 percent of occurrences) and immediacy of threat.

All plants on Lists 1 and 2 meet the standards for state listing under the CEQA Guidelines (14 California Code of Regulations [CCR] Section 15380). CNPS recommends that plants on Lists 3 and 4 also be evaluated for consideration under CEQA.

Local Regulations

The following are the local environmental laws and policies relevant to biological resources.

San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

An HCP is a planning document required as part of an application for an Incidental Take Permit (ITP) under Section 10(a)(1)(B) of FESA. Such permits are issued by the USFWS when take is

not the intention of, and is incidental to, otherwise legal activities. An application for an ITP under Section 10 of FESA must be accompanied by an HCP. HCPs describe the impacts of the proposed action that may result in take of federally listed species; how those impacts would be minimized or mitigated; and how the HCP is to be funded. HCPs can apply to both listed and non-listed species, including species that are candidates or have been proposed for listing. Conserving species before they are in danger of extinction, or are likely to become so, can also provide early benefits and prevent the need for listing.

The proposed project is located within the boundaries of the SJMSCP, which encompasses San Joaquin County's 1,400+ square miles and 900,000+ acres. The SJMSCP is the County's strategy for balancing conservation with the needs of development while safeguarding agriculture; protecting land-owner rights; providing and maintaining multi-use open spaces; and managing biological resources, especially special-status species under State and federal regulation. The SJMSCP includes numerous goals, policies, and strategies to protect and/or preserve biological resources. The SJMSCP covers 97 special-status plant, fish, and wildlife species in 52 vegetative communities scattered throughout San Joaquin County.

San Joaquin County General Plan

The San Joaquin County General Plan biological resource policies that are applicable to the proposed project are presented below:

Natural and Cultural Resources Element

Goal NCR-1 To conserve and enhance the County's open space resources.

Policy NCR-1.1 **Preserve Natural Areas.** The County shall protect, preserve, and enhance important natural resource habitat, biological diversity, and the ecological integrity of natural systems in the County.

Policy NCR-1.3 **Open Space Opportunities.** The County shall support efforts to create opportunities for the public to experience and appreciate open space resources.

Goal NCR-2 To preserve and protect wildlife habitat areas for the maintenance and enhancement of biological diversity and ecological integrity.

Policy NCR-2.1 **Protect Significant Biological and Ecological Resources.** The County shall protect significant biological and ecological resources including: wetlands; riparian areas; vernal pools; significant oak woodlands and heritage trees; and rare, threatened, and endangered species and their habitats.

Policy NCR-2.2 **Collaboration for Species Protection.** The County shall collaborate with the California Department of Fish and Wildlife during the review of new development proposals to identify methods to protect listed species.

Policy NCR-2.3 **San Joaquin County Multi-Species Habitat Conservation and Open Space Plan.** The County shall continue to implement

the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan to mitigate biological impacts resulting from open space land conversion.

Policy NCR-2.5 **No Net Loss of Wetlands.** The County shall not allow development to result in a net loss of riparian or wetland habitat.

Policy NCR-2.6 **Criteria for Development Impacts to Wetlands.** The County shall not approve new development projects that have the potential to fill wetlands, unless:

- no suitable alternative site exists for the land use, and the use is considered necessary to the public;
- there is no degradation of the habitat or numbers of any rare, threatened, or endangered plant or animal species as a result of the project; and
- habitat of greater quantity and superior or comparable quality will be created or restored to compensate for the loss.

Policy NCR-2.7 **Protect Waterfowl Habitat.** The County shall strive to preserve, protect, and enhance feeding areas and winter habitat for migratory waterfowl.

Policy NCR-2.8 **Natural Open Space Buffer.** The County shall require a natural open space buffer to be maintained along any natural waterway to provide nesting and foraging habitat and to protect waterway quality.

Policy NCR-2.9 **Protect Fisheries.** The County shall encourage and support efforts to protect fisheries, including:

- reducing the level of pesticides and fertilizers and other harmful substances in agricultural and urban runoff;
- designing and timing waterway projects to protect fish populations; and
- operating water projects to provide adequate flows for spawning of anadromous fish.

Policy NCR-2.12 **Encourage Native Landscaping.** The County shall encourage the use of native plants for landscaping to provide suitable habitat for native wildlife.

Policy NCR-8.7 **Protect Resources.** The County shall strive to protect the diverse resources upon which recreation is based, such as waterways, marsh lands, wildlife habitats, unique land and scenic features, and historical and cultural sites.

Policy NCR-8.13 **Preserve Natural Features.** The County shall encourage natural features to be preserved in recreation areas to increase opportunities for users to experience natural settings.

San Joaquin County Municipal Code

The applicable ordinances within the San Joaquin County Municipal Code associated with biological resources are discussed in further detail below.

Chapter 9-707, Natural Resources

Within the San Joaquin County Municipal Code, Chapter 9-707 establishes regulations for the protection, conservation, and/or use of specified natural resources, including riparian habitat within Section 9-707.030. The foregoing section requires preparation of a Riparian Habitat Mitigation Plan if a development has the potential to destroy or degrade riparian habitats and includes requirements related to natural bank buffers, mitigation sites, off-site habitat, replacement vegetation, maintenance, and conservation easements.

Section 9-400.080, Trees on Private Property

Section 9-400.080 of the San Joaquin County Municipal Code regulates the preservation of the County's trees by requiring a permit for tree removal, as well as the replacement of protected trees where removal is allowed. The requirements apply to all development projects requiring discretionary approval that have native oak trees, heritage oak trees, or historical trees, unless otherwise exempt.

4.4.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to biological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the County's General Plan, and professional judgment, a significant impact would occur if the proposed project would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS (see Chapter 5, Effects Not Found to be Significant);
- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (see Chapter 5, Effects Not Found to be Significant); or

- Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan.

As noted above, issues related to whether the proposed project would result in any of the following impacts are discussed in Chapter 5, Effects Not Found to be Significant, of this EIR:

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS; and/or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Method of Analysis

The information presented in this chapter is primarily based on the BRA and biological resources report prepared by Bargas, as well as compliance with the SJMSCP. Each is discussed further below.

Biological Resource Assessment and Report

The analyses within the BRA prepared for the project site and the biological resources report prepared for the off-site improvement study areas are based on literature and database reviews and field surveys, which are detailed further below.

Literature and Database Review

In order to determine the biological setting of the Study Area, the following resources were reviewed as part of the BRA:

a) U.S. Geological Survey's (USGS) National Hydrography Dataset to determine if hydrological features have been mapped on or adjacent to the project site;
b) U.S. Department of Agriculture (USDA) National Resource Conservation Service (NRCS) Web Soil Survey to map and describe soils within the project site; and
c) Historical aerial images to determine how on-site habitat has changed over time.

In order to determine the biological setting of the off-site improvement study areas, the following resources were reviewed as part of the biological resources report:

a) The USFWS National Wetlands Inventory (NWI) to determine if surface waters and wetlands have been mapped on or adjacent to the off-site improvement study areas;
b) USGS National Hydrography Dataset;
c) San Francisco Estuary Institute (SFEI) California Aquatic Resources Inventory (CARI) to determine if hydrological features have been mapped on or adjacent to the off-site improvement study areas;
d) USDA NRCS Web Soil Survey; and
e) Historical aerial images.

A list of special-status plant and wildlife species with potential to occur within the Study Area was developed as part of the BRA through queries of the following databases:

a) USFWS Information for Planning and Conservation (IPaC) query for federally listed species and designated critical habitats in San Joaquin County;

b) CNDDB query of the project site and all areas within the region;
c) CNPS Inventory of Rare and Endangered Plants query of the "Tracy, California" USGS topographic quadrangle; and
d) SJMSCP list of sensitive habitats and covered wildlife and plant species within the Central-Southwest Transition Zone, where the project site is located.

A list of special-status plant and wildlife species with potential to occur within the off-site improvement study areas was developed as part of the biological resources report through queries of the following databases:

a) SJMSCP list of sensitive habitats and covered wildlife and plant species within the Central Zone, the Central-Southwest Transition Zone, and the Southwest Zone;
b) USFWS IPaC query for federally listed species and designated critical habitats in San Joaquin County;
c) CNDDB query of the project site and all areas within the region; and
d) CNPS Inventory of Rare and Endangered Plants query of the "Tracy, California" USGS topographic quadrangle.

Field Surveys

The methodology used to conduct the field surveys included in the biological resource reports prepared for the project site and off-site improvement study area is detailed further below.

Specific Plan

As part of the BRA prepared for the project site, Bargas conducted three site surveys: a reconnaissance-level field survey for biological resources on June 13 and 14, 2023; an aquatic resources delineation on July 25, 2023; and an additional reconnaissance-level field survey on November 20, 2024, to verify on-site conditions remained consistent with prior observations and refine mapping efforts as appropriate. The pedestrian surveys conducted for the BRA and the biological resources report consisted of walking transects throughout the project site and scanning adjacent areas with binoculars. The entirety of the project site, off-site improvement study areas, and some adjacent areas were accessible through public rights-of-way. The project site and off-site improvement study areas were evaluated for the presence of habitat components that could support special-status wildlife and plant species identified during the literature and database reviews described above. Habitats that were determined to be potential habitat for a special-status species were further assessed for suitability.

The vegetation mapping and classification generally followed the MCV where applicable. The MCV provides standard classifications based on community composition and inclusion based on dominant species cover thresholds. Additionally, the BRA identified on-site vegetation community according to the classifications outlined in Section 2.2.1 of the SJMSCP. The June and July 2023 surveys were conducted during nesting bird season (February 15 – August 31) and within the blooming period of three of the plant species identified in the Literature and Database Review.

The on-site aquatic resources delineation conducted in July 2023 followed the USACE protocol for the Arid West and did not include a formal jurisdictional delineation. Bargas reviewed the jurisdictional aquatic resources previously mapped in 2023 to update the mapping and include potentially jurisdictionally aquatic resources located within the project site. Aquatic resource boundaries were mapped using an Eos Positioning Systems Arrow GNSS Global Positioning System (GPS) receiver paired with ESRI Field Maps application.

Off-Site Improvements Study Area

As discussed in Chapter 1, Introduction, of this EIR, the Off-Site Improvements Study Area is evaluated programmatically throughout this EIR. Access authorization was not obtained for the various study roadway improvements study areas and, thus, programmatic review was conducted by desktop analysis and surveys from publicly accessible areas. More specifically, as part of the biological resources report prepared for the off-site improvement study areas, Bargas conducted two reconnaissance-level biological surveys on September 28 and October 2, 2023. On January 21, 2025, Bargas conducted an additional reconnaissance-level biological survey to survey additional areas that had not been previously surveyed in 2023. The surveys primarily consisted of walking meandering transects throughout publicly accessible areas and visually inspecting other areas outside the roadway right-of-way (ROW) through the windshield/windows of the surveyor vehicle. Binoculars were used to assist in the surveys, as applicable. The biological resources mapping was also updated and refined as appropriate. It should be noted that a relatively small portion of a segment of South MacArthur Drive and two unnamed dirt roads were not included within the surveys; rather, biological resources mapping of this area was completed using aerial imagery, as well as comparing other mapped and surveyed areas.

A list of all plant and wildlife species observed during the field surveys is included as Appendix A to the BRA and the biological resources report (see Appendices G and H of this EIR).

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to biological resources is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

The Environmental Setting section of this chapter identifies and describes the special-status species that are Not Expected to occur within the on- and off-site Study Areas. As previously explained, Not Expected is defined in this analysis as:

- ***Not Expected:*** *Species with known recorded occurrence(s) within or near the Study Area and habitat is within the Project, but habitat on-site is substantially disturbed, fragmented, or is small in extent that is unlikely to support the species. This species is not expected to occur.*

The BRA and this EIR include substantial evidence that the proposed project would not result in any adverse effects to special-status species identified as Not Expected. Thus, the following impact analysis is not required to evaluate the proposed project's effects on these species. Notwithstanding, several of the special-status species identified as Not Expected are covered by the SJMSCP, and thus, for the project to receive coverage under the SJMSCP, the project applicant would be required to conduct preconstruction surveys, and if necessary, implement take minimization measures for covered species. As a result, only the SJMSCP-covered species identified as Not Expected in this chapter are discussed further in the following impacts section. Specifically, please refer to Impact 4.4-9, regarding HCP compliance.

4.4-1 Have a substantial adverse effect, either directly or through substantial habitat modifications, on any plant species identified as a candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Based on the analysis below, the impact is *less than significant*.

The project site currently consists primarily of orchards. Paved and dirt roads buffer the orchards, as well as along the California Aqueduct and the Delta-Mendota Canal. Due to the similarity between the project site and off-site improvements study areas with respect to the lack of suitable habitat for special-status plants, the following discussion addresses the Initial Phase, Specific Plan Buildout, and off-site improvements study areas.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

Figure 4.4-1 includes the specific acreages and vegetation communities that could be impacted by buildout of the Initial Phase. As discussed above, the special-status plant species with any potential to occur within the project site include big tarplant and diamond-petaled California poppy.

In addition, the roadside field immediately north of SR 132 and two areas west of South Chrisman Road could also support Delta button celery, caper-fruited tropidocarpum, and showy golden madia. While environmental conditions within the project site and off-site improvements study areas could be considered suitable for the aforementioned species to occur, the potential habitat is significantly disturbed and populated by existing plant species that would likely out-compete the aforementioned special-status plant species.

Based on the above, the BRA and biological resources report concluded that buildout of the proposed project and the prospective roadway improvements would not adversely affect protected plant species. Therefore, development of the proposed project would not result in impacts to special-status plant species, either directly or through substantial habitat modifications, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.4-2 Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk and white-tailed kite. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Swainson's hawk is a Covered Species under the SJMSCP and is listed as Threatened under CESA by CDFW. White-tailed kite is a Covered Species under the SJMSCP and Fully Protected by CDFW. As the footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar habitats, the potential for impacts to the

species from developing either project component would be similar. Thus, the following discussion applies to the potential for both project components to impact Swainson's hawk. Because development of the proposed off-site roadway improvements would occur either in existing roadway ROWs or in other previously disturbed areas, construction of the off-site improvements would not result in a substantial adverse effect to Swainson's hawk, either directly or through substantial habitat modifications.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

Swainson's hawk and white-tailed kite were observed within the project site during the November 2024 survey. Tall, scattered trees for nesting habitat are limited on-site; thus, the BRA concluded that on-site nesting by Swainson's hawk and white-tailed kite is unlikely. Although nesting activity was not detected during the survey, the BRA found that medium-quality foraging habitat occurs on-site within the Gateway Center Development Area, which would be converted as part of Specific Plan buildout. As such, development of the Initial Phase would not impact foraging habitat for the species, but full project buildout would result in potential impacts related to the loss of Swainson's hawk and white-tailed kite foraging habitat. As is the case with other Covered Species, the SJMSCP is the regional strategy intended to offset loss of Covered Species' habitat through the establishment of preserves. The proposed project would participate in the SJMSCP and pay applicable fees.

Based on the above, development of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a wildlife species (Swainson's hawk and white-tailed kite) identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.4-2(a) requires consultation with a qualified biologist to identify and protect known or potential nesting trees for Swainson's hawk during the nesting season. Mitigation Measure 4.4-2(b) requires preconstruction surveys and established buffer areas around any identified nests prior to any ground-disturbing activities during the nesting season of the white-tailed kite. These mitigation measures reduce the potential for disturbance of nesting birds and their young. implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout

4.4-2(a) *Swainson's hawk. Pursuant to subsection 5.2.4.11 of the SJMSCP, the project applicant shall consult with a qualified biologist prior to any vegetation activities or ground-disturbing work associated with each phase of the proposed project to determine if any known or potential nesting trees are located within the project site boundaries. Known or potential nesting trees can be either retained or removed from the project site. If identified nesting trees are retained and occupied during construction activities, then a buffer of twice the dripline of the tree shall be established until the nest is no longer occupied. However, nesting trees may also be removed while*

trees are not occupied from September 1 to February 15. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.

4.4-2(b) *<u>White-tailed kite.</u> Pursuant to subsection 5.2.4.19 of the SJMSCP, prior to any vegetation clearing or ground-disturbing activities associated with each phase of the proposed project that would occur during the nesting season (February 15 to September 15), a nesting preconstruction survey shall be conducted within and adjacent (as feasible) to the project to determine the presence of nesting white-tailed kites. If an active nest is identified as part of the preconstruction survey, a 100-foot non-disturbance buffer from the nesting area shall be established and maintained until the nest has been deemed inactive by the qualified biologist. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.*

Off-Site Improvements Study Area
None required.

4.4-3 Have a substantial adverse effect, either directly or through habitat modifications, on song sparrow (Modesto population). Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Song sparrow (Modesto population) is a CDFW Fully Protected species and is not covered by the SJMSCP. Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar habitats, the potential for impacts to the species from developing either project component would be similar. Thus, the following discussion applies to the potential for both project components to impact song sparrow (Modesto population). Because development of the proposed off-site roadway improvements would occur either in existing roadway ROWs or in other previously disturbed areas, construction of the off-site improvements would not result in a substantial adverse effect to song sparrow, either directly or through substantial habitat modifications.

<u>Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area</u>

Song sparrow was observed flying over and perching within the project site during the November 2024 survey. Nesting habitat within the project site is limited to the small on-site grassland area within the southern portion of the site and the scattered residences; thus, the BRA concluded that song sparrow nesting is unlikely to occur. The on-site grassland habitat is located within the proposed Gateway Center Development Area, and thus, would not be impacted during the Initial Phase of development. However, the limited habitat within on-site residential areas could be impacted during the Initial Phase. The BRA identified that medium-quality foraging habitat occurs within the on-site annual grassland habitat located north of SR 132 and south of the California Aqueduct, as well as within the agricultural fields adjacent to the project site. Such foraging habitat would be converted as part of the proposed project. As such, the project would result in potential impacts related to the loss of

song sparrow foraging habitat. While the song sparrow is not a Covered Species under the SJMSCP, establishment of preserve areas for other Covered Species with similar foraging habitat requirements (e.g., annual grassland) would help offset loss of song sparrow foraging habitat. The proposed project would participate in the SJMSCP and pay applicable fees.

Based on the above, development of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a wildlife species (song sparrow [Modesto population]) identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.4-3 requires nesting bird surveys and established buffer areas around any identified nests prior to construction activities during the nesting season. This mitigation measure reduces the potential for disturbance of nesting birds and their young. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout

4.4-3 Prior to commencement of construction activities that occur during the nesting season (February 15 to August 31) for each phase of the proposed project, a qualified biologist shall conduct a nesting bird survey to determine if any nests or nesting activity is present within or adjacent to (as feasible) the project site. Pursuant to the Migratory Bird Treaty Act (MBTA), birds or their nests may not be harmed or disturbed if observed within the project site. If nests are observed, then a minimum 100-foot buffer shall be established by the biologist that shall remain in effect until the nest becomes inactive. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.

Off-Site Improvements Study Area

None required.

4.4-4 Have a substantial adverse effect, either directly or through habitat modifications, on northern harrier. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Northern harrier is a Covered Species under the SJMSCP and is a CDFW Species of Special Concern. As the footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar habitats, the following discussion applies to the potential for both project components to impact northern harrier. Because development of the proposed off-site roadway improvements would occur either in existing roadway ROWs or in other previously disturbed areas, construction of the off-site improvements would not result in a substantial adverse effect to northern harrier, either directly or through substantial habitat modifications.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

Nesting habitat is located around the isolated on-site marshes and grasslands, but the habitats are only marginally suitable due to the small size and extensive human disturbance in the areas. Thus, the BRA concluded that on-site nesting by northern harrier is unlikely. Although nesting activity was not detected during the survey, the BRA found that medium-quality foraging habitat occurs on-site in the form of the annual grassland within the proposed Gateway Center Development Area. The on-site grassland habitat within the proposed Gateway Center Development would not be impacted during the Initial Phase of development. Thus, any possibility for the proposed project to significantly impact northern harrier would occur subsequent to the Initial Phase. As such, the project would result in potential impacts related to the loss of northern harrier foraging habitat at such time the construction of the Gateway Center Development Area proceeds.

Based on the above, development of the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a wildlife species (northern harrier) identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.4-4 requires a nesting bird survey and established buffer areas around any identified nests prior to construction activities during the nesting season of the northern harrier. This mitigation measure reduces the potential for disturbance of nesting birds and their young. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase

None required.

Specific Plan Buildout

4.4-4 *Pursuant to subsection 5.2.4.17 of the SJMSCP, prior to any vegetation activities or ground-disturbing activities that occur within the proposed Gateway Center Development Area, a nesting survey shall be conducted by a qualified biologist consistent to determine if any northern harrier nests or nesting activity is present within the project site and a surrounding 500-foot radius, as feasible. If nesting is observed, then a 500-foot buffer shall be applied during all vegetation activities or ground-disturbing activities that occur during the nesting season (February 15 – August 31). Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.*

Off-Site Improvements Study Area

None required.

4.4-5 Have a substantial adverse effect, either directly or through habitat modifications, on Crotch's bumble bee. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Crotch's bumble bee is a candidate species for listing under CESA and is a CDFW Species of Special Concern, but is not covered by the SJMSCP. The footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar habitats. The species was not identified by the biological resources report prepared for the off-site improvement study areas and, thus, the off-site improvement study areas are not discussed further. Rather, the following discussion applies to the potential for on-site development to impact Crotch's bumble bee.

Initial Phase, Specific Plan Buildout

As previously discussed, the project site contains sufficient flowering plants to support foraging for the species and potential on-site nesting habitat within the open grassland located north of SR 132 and south of the California Aqueduct. The on-site grassland habitat is within the proposed Gateway Center Development, and thus, would not be impacted during the Initial Phase of development. Thus, any possibility for the proposed project to adversely affect Crotch's bumble bee nesting habitat would occur subsequent to the Initial Phase.

With respect to foraging habitat, the BRA concluded that Crotch's bumble bee could be present as a transient species foraging within the orchards and vineyards, and the potential for the species to occur on-site is moderate.

Based on the above, if Crotch's bumble bee is present at the time of grading, incidental mortality could occur. Therefore, without completion of protocol-level preconstruction surveys of areas that would be disturbed to confirm the presence/absence of Crotch's bumble bee, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on special-status wildlife species and a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.4-5 requires focused surveys prior to construction activities within the Gateway Center Development during the colony active period. If Crotch's bumble bees or their nests are identified, follow-up consultation with CDFW and potentially an incidental take permit may be required. This mitigation measure would reduce the potential for disturbing or otherwise negatively affecting the Crotch's bumble bee. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase

None required.

Specific Plan Buildout

4.4-5 Prior to any ground-disturbing activities that occur within the proposed Gateway Center Development during the colony active period (April

through August) and when floral resources are present, focused surveys shall be performed within both foraging and nesting habitats by a qualified biologist pursuant to the CDFW Survey Considerations for CESA Candidate Bumble Bee Species protocols (June 6, 2023). If Crotch's bumble bees or their nests are not observed on-site, further mitigation shall not be required. If Crotch's bumble bees or their nests are observed, then the project applicant shall consult with CDFW. Such consultation may require an Incidental Take Permit (ITP) if any bees are expected to be harmed during project construction. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.

Off-Site Improvements Study Area
None required.

4.4-6 Have a substantial adverse effect, either directly or through habitat modifications, on nesting songbirds and other raptors protected under the MBTA and CFGC. Based on the analysis below and with implementation of mitigation, the impact is ***less than significant*.**

The following discussion includes an analysis of potential impacts related to special-status bird species identified by the BRA and biological resources report, other nesting birds, and other raptors protected under the MBTA and CFGC associated with the development of the proposed project. The footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar habitats; as such, the potential for impacts to the species from developing either project component would be similar. Thus, the following discussion applies to the potential for both project components to impact special-status bird species.

Initial Phase, Specific Plan Buildout

Native bird species protected by the MBTA and CFGC have the potential to nest in nearly any environment, including those heavily altered by human activity. In addition to the special-status bird and raptor species listed above, other bird species protected by the MBTA and CFGC have the potential to be present and nest within the project site and off-site improvement study areas. For example, the orchards that dominate the project site could contain vegetation or open areas capable of supporting bird species, such as the rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), and house finch (*Haemorhous mexicanus*). According to the BRA, the project site has limited tall trees but does contain artificial structures, such as utility poles, that could provide potentially suitable nesting habitat for raptors or other large birds. In addition, the areas surrounding the on-site aquatic features could provide marginal nesting habitat for blackbirds, including the red-winged blackbird (*Agelaius phoeniceus*) observed during the field visits.

Off-Site Improvement Study Area

The off-site improvement study areas provide suitable locations for potential avian nesting, including shrubs, grassland, and artificial structures (such as utility poles),

although the areas lack sufficiently tall trees to support raptors. The aquatic features present within the off-site improvement study areas are heavily disturbed and are unlikely to support nesting, as the areas surrounding the aquatic features do not contain riparian vegetation and do not support the mature canopies suitable for larger wetland birds to nest, such as the great blue heron or great egret. Active nests or nesting behavior was not observed during the windshield surveys; however, the surveys were conducted outside of nesting bird season (February 15 through August 30). Therefore, without the completion of a nesting bird survey prior to construction activities, the absence of such species cannot be guaranteed.

Conclusion

If nesting songbird or raptor species are actively nesting within trees, shrubs, or ground cover planned for removal during construction of the proposed project or off-site improvements, incidental mortality of individuals could occur. Furthermore, construction activities adjacent to nesting birds could result in nest abandonment.

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on nesting songbirds and raptor species protected under the MBTA and CFGC. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.4-6 requires a nesting bird survey and established buffer areas around any identified nests prior to construction activities during the nesting season. This mitigation measure reduces the potential for disturbance of nesting birds and their young. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

4.4-6 *Consistent with the MBTA and CFGC, the following measures shall be implemented prior to site disturbance to avoid impacts to nesting raptors and other birds on-site or within off-site improvement study areas. All survey results shall be provided to the San Joaquin County Community Development Department.*

- *Prior to commencing construction activities for each phase of the proposed project and if such activities would begin during the typical nesting season (between February 1 and August 31), a nesting bird survey shall be conducted by a qualified biologist within the project site and any off-site improvements study areas for raptor and non-raptor species.*
- *If nesting birds are identified during the preconstruction survey, the qualified biologist shall determine an appropriate disturbance-free avoidance buffer between 100 and 500 feet, depending on the species and as described in Subsections 5.2.4.16 through 5.2.4.22 of the SJMSCP. Buffer zones shall be clearly demarcated in the field for avoidance by construction activities.*

The size of an established buffer may be altered if the qualified biologist conducts behavioral observations and determines the nesting birds are well acclimated to disturbance. If this occurs, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting birds. If the buffer is reduced, the qualified biologist shall remain on-site to monitor the behavior of the nesting birds during construction to ensure that the reduced buffer does not result in take of eggs or nestlings.

- *Construction or earth-moving activities shall not occur within the established nest avoidance buffer until the qualified biologist determines that the young have fledged and have attained sufficient flight skills to avoid project construction zones. If a qualified biologist is not hired by the project applicant or the contractor to monitor the active nesting birds/raptors, then the full buffer(s) shall be maintained in place from February 1 to August 31. The buffer may be removed and work may proceed as otherwise planned within the buffer on September 1.*

4.4-7 Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions.

The following discussions include an analysis of potential impacts related to State- or federally protected wetlands associated with development of the proposed project.

Initial Phase

Aquatic resources located within the Initial Phase area consist of 3.58 acres of isolated wetland and non-wetland waters of the State, including Marsh 7, Marsh 8, and Water Basin 3 (see Figure 4.4-18). Table 4.4-3 presents the potential jurisdictional aquatic resources within the proposed boundaries of the Initial Phase that would be impacted.

According to the BRA, the foregoing aquatic resources are presumed to be isolated features and are neither connected to TNWs nor to other USACE waters/wetlands. In addition, the BRA notes that the aquatic resources lack a bed, bank, and/or associated riparian habitat. Therefore, the BRA concluded that the aquatic resources within the Initial Phase area would not be regulated by USACE or CDFW. However, only USACE and CDFW can make the final determinations on their respective jurisdictional authorities.

Figure 4.4-18
On-Site Impacts to Existing Aquatic Resources

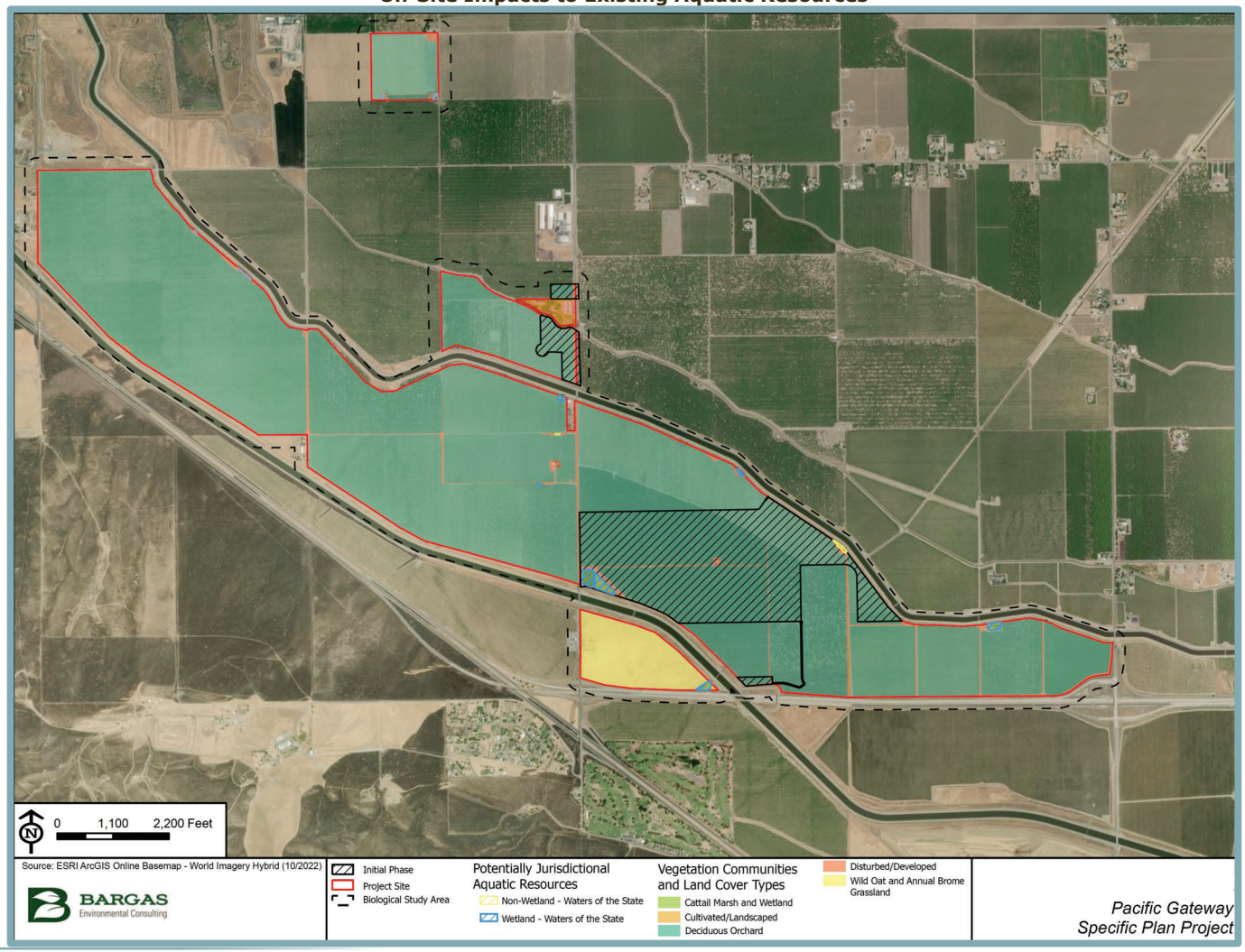


*Figure not OCR compatible.

Table 4.4-3
Potentially Impacted Aquatic Resources (Initial Phase)

Resource Type	Area (acres)	Length (linear feet)
Potential Wetland Water of the State (Marsh 7)	1.60	362
Potential Wetland Water of the State (Marsh 8)	1.67	469
Non-Wetland Water of the State (Water Basin 3)	0.31	349
Total	**3.58**	**1,180**

Source: Bargas Environmental Consulting, 2025.

Although the Initial Phase area does not include federally protected wetlands as defined by Section 404 of the CWA, the on-site isolated wetlands could potentially be subject to RWQCB jurisdiction pursuant to the Porter-Cologne Act. The wetlands and water basins would be filled as part of the proposed grading for the site development; therefore, the Initial Phase of the proposed project would have direct impacts to the 3.58 acres of aquatic resources located within the development area.

Specific Plan Buildout

Aquatic resources found on-site consist of 13 wetland and non-wetland features comprised of 10 freshwater marshes, one agricultural water basin, and two non-wetland water basins (including the marshes and water basin located within the Initial Phase area). According to the BRA, all on-site aquatic resources are presumed to be isolated features and lack a bed, bank, and/or associated riparian habitat. Therefore, the BRA concluded that the on-site aquatic resources would not be regulated by USACE or CDFW. However, only USACE and CDFW can make the final determinations on their respective jurisdictional authorities.

Although the project site does not include federally protected wetlands as defined by Section 404 of the CWA, the on-site isolated wetlands could potentially be subject to RWQCB jurisdiction. The wetlands and water basins would be filled as part of the proposed grading for the site development. Therefore, additional impacts to on-site aquatic resources would likely result from full project buildout; however, the quantities and locations have not yet been defined due to the programmatic analysis included in the EIR. According to the BRA, approximately 2.52 acres of aquatic resources are present within the project site boundaries outside of the Initial Phase development.

Although none of the on-site aquatic features were found to be under USACE jurisdiction, an Approved Jurisdictional Determination may be requested from the USACE to ask for concurrence that aquatic features within the project site do not meet the definitions of waters of the U.S. If, however, it is determined that the aquatic resources within the project site fall under the jurisdiction of USACE, CVRWQCB, or CDFW, appropriate compensation must be provided to achieve “no net loss” for permanent impacts to aquatic resources associated with project implementation. Wetland restoration, enhancement, and/or replacement shall be at a location and by methods acceptable to the USACE, CDFW, and CVRWQCB, as determined during the Section 404, Section 1600, and Section 401 permitting processes.

Off-Site Improvements Study Area

Corral Hollow Creek, a freshwater tributary of the San Joaquin River, and the Delta-Mendota Canal, are identified by the USACE Sacramento District as a TNW; thus, the portions that intersect with the off-site improvement study areas are potentially subject to the jurisdiction of the USACE. According to the biological resources report prepared for the off-site improvement study areas, the segments of the Lateral Five East Canal and the unnamed concrete-lined canal were not presumed to have a hydrologic connection to any TNWs and, thus, the features would not be subject to regulation by USACE.

The Delta-Mendota Canal, California Aqueduct, Lateral Five East Canal, Corral Hollow Creek, and the unnamed concrete-lined canal may also be considered waters of the State, regulated by the CVRWQCB. Additionally, because the foregoing features contain a bed and bank, they could be subject to potential regulation by CDFW under Section 1600 of the CFGC.

Other aquatic resources found within the off-site improvement study areas include freshwater emergent wetlands located alongside SR 132. The emergent wetlands are substantially disturbed and function as roadside detention basins, collecting stormwater runoff from the adjacent roadways. In addition, the wetlands are isolated from other aquatic features. Although a formal jurisdictional delineation was not performed for the off-site improvements study areas, the biological resources report concluded that the aquatic resources could be a potential water of the State due to the presence of hydric soils and hydrology within the basin. Based on the isolated position in the landscape and the similarity to other aquatic features that met wetland criteria, such as WO2, the emergent wetlands are also considered potentially jurisdictional by the CVRWQCB. Finally, because the freshwater emergent wetlands located alongside SR 132 do not contain a bed or bank, the features would not be subject to regulation under Section 1600 of the CFGC by CDFW.

In addition to the wetland features found near SR 132, eight roadside ditch features were also identified during the surveys. All roadside ditches, as well as the swale feature in the Jefferson School parking lot, were considered isolated by the biological resources report prepared for the off-site improvement study areas due to the lack of hydrologic surface connectivity to nearby or downstream aquatic features, such as the canal/creeks or wetlands features discussed above. Therefore, the roadside ditches are potentially subject to CVRWQCB jurisdiction pursuant to the Porter-Cologne Water Quality Act. Because these ditch features do contain a bed and bank, they would be subject to potential CDFW jurisdiction and regulation under Section 1600 of the CFGC.

Conclusion

Based on the above, development of the Initial Phase could impact up to 3.27 acres of wetlands and 0.31-acre of non-wetland waters of the U.S. and full project buildout could impact 2.52 additional acres of potentially jurisdictional waters. Therefore, development of the proposed project could have a substantial adverse effect on State or federally protected wetlands through direct removal, filling, hydrological interruption, or other means, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level. If it is determined that the aquatic resources within the project site or off-site improvements study areas fall under the jurisdiction of USACE, CVRWQCB or CDFW, the project applicant would be required to provide appropriate compensation to achieve "no net loss" for permanent impacts to aquatic resources associated with project implementation. Wetland restoration, enhancement, and/or replacement shall be at a location and by methods acceptable to the USACE, CDFW, and CVRWQCB, as determined during the Section 404, Section 1600, and Section 401 permitting processes.

For regulatory compliance with the Porter-Cologne Water Quality Control Act and CWA, the project applicant would be required to apply for an individual Waste Discharge Permit with the RWQCB, as well as consult with the CVRWQCB through a Section 401 Certification.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

4.4-7(a) *Prior to initiation of any ground disturbance activities within each phase of development, including off-site improvements study areas, containing aquatic features identified in Figure 4.4-10 through Figure 4.4-17 of the EIR, the project applicant shall submit to the Central Valley Regional Water Quality Control Board (CVRWQCB) an application for Clean Water Act Section 401 Water Quality Certification and/or Waste Discharge Requirements for Projects Involving Discharge of Dredged and/or Fill Material to Waters of the State. The project proponent shall be responsible for conducting all project activities in accordance with the permit provisions outlined in the applicable CVRWQCB permit. Written verification of the 401 Water Quality Certification; or if a 401 Water Quality Certification is not required, written correspondence from CVRWQCB to this effect, shall be provided to the San Joaquin County Community Development Department, prior to issuance of a building and/or grading permit.*

4.4-7(b) *The CDFW maintains jurisdiction over the bed and bank of the bed, channel, and banks of any river, stream, or lake (Fish and Game Code Section 1602) and impacts to these areas may require a Lake or Streambed Alteration Agreement. Prior to initiating construction activities within each phase of development, including off-site improvements study areas, containing aquatic features identified in Figure 4.4-10 through Figure 4.4-17 of the EIR, the project shall notify CDFW of the intentions of the project to determine if a Lake or Streambed Alteration Agreement (LSAA) is required. If required, mitigation may include restoration or enhancement of resources on-site. Written verification of the Section 1600 LSAA; or if a LSAA is not required, written correspondence from CDFW to this effect, shall be provided to the San Joaquin County Community Development Department, prior to issuance of a building and/or grading permit.*

4.4-8 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. Based on the analysis below, the impact is *less than significant*.

Wildlife corridors link areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. Fragmentation also occurs when a portion of one or more habitats is converted into another habitat, such as when woodland or scrub habitat is altered or converted into grasslands after a disturbance, such as fire, mudslide, or grading activities. Wildlife corridors mitigate the effects of fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thereby reducing the risk of catastrophic events (such as fire or disease) on population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs.

The footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar habitats. As such, the potential for impacts related to migratory wildlife corridors and wildlife nursery sites that could occur from developing either project component would be similar. Thus, the following discussion includes both a project-level and program-level analysis of potential impacts that could occur as a result of developing the Initial Phase and Specific Plan Buildout.

Initial Phase, Specific Plan Buildout

The project site and off-site improvements study areas lie within the Central/Southwest Transition Zone of the SJMSCP. The establishment of the Transition Zone recognized that the species largely confined to the Southwest Zone may use portions of the surrounding zones for foraging or transit, particularly San Joaquin kit fox. Known wildlife movement corridors do not overlap the project site. However, a known wildlife movement corridor lies about 0.65-mile northwest of the northwest corner of the project site (see Figure 4.4-19). Therefore, given the proximity of the project site to a known wildlife movement corridor, it is possible wildlife may use the project site for transit.

The proposed project would include passive outdoor open spaces including a network of pedestrian and bicycle trails, a university campus, and a public park. Such open spaces would facilitate the use of the project site as a wildlife transit corridor for San Joaquin kit fox and other ambulatory species, though such movement through the site is not anticipated. Pursuant to section 5.5.3(C) of the SJMSCP, stepping stone refugia for San Joaquin kit foxes would be provided for projects located between the Delta-Mendota Canal and the California Aqueduct, so that kit foxes may traverse between the northern Corral-Lower San Joaquin Wildlife Corridor within the Southwest/Central transition zone to the southern Corral-Lower San Joaquin Wildlife Corridor within the Southwest zone (where the Southwest Zone Preserve area is located). The SJMSCP explains that “stepping stone” refugia should be two to five acres at approximately 0.5-mile intervals west of the Delta-Mendota Canal. To implement this SJMSCP

requirement, the project would retain native grassland and shrubland habitat along the southern and northeastern edges of the project site adjacent to the California Aqueduct and Delta-Mendota Canal, respectively, that could support San Joaquin kit foxes in coordination with SJCOG. The project land use and zoning plan (see Figure 3-4 within Chapter 3, Project Description, of this EIR) designates the foregoing areas as open space.

Based on the above, the proposed project is not anticipated to impede wildlife movement.

Off-Site Improvements Study Area

Although some of the off-site improvement study areas intersect with the Corral-Lower San Joaquin Wildlife Corridor, the off-site improvements study areas are located at existing roadways and/or intersections virtually identical to surrounding areas (see Figure 4.4-19). Such conditions are largely conducive to wildlife movement and would not be impacted by development of the prospective off-site roadway improvements.

Conclusion

Based on the above, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.4-9 Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The footprints of the Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area are all subject to the provisions of the SJMSCP and feature similar habitats. As such, the potential for impacts related to conflicts with an adopted HCP from developing any project component would be similar. Thus, the following discussion includes analyses of potential impacts that could occur as a result of developing the Initial Phase, Specific Plan Buildout, and off-site improvements.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

The project site is located within the Central/Southwest Transition Zone of the SJMSCP. Consistent with SJMSCP guidance, the proposed project would be required to pay associated land conversion fees for the on-site vegetation community and aquatic resources impacts, including the Conversion of Multi-Purpose Open Space fee ($750 per acre).

Figure 4.4-19
Existing Wildlife Corridor

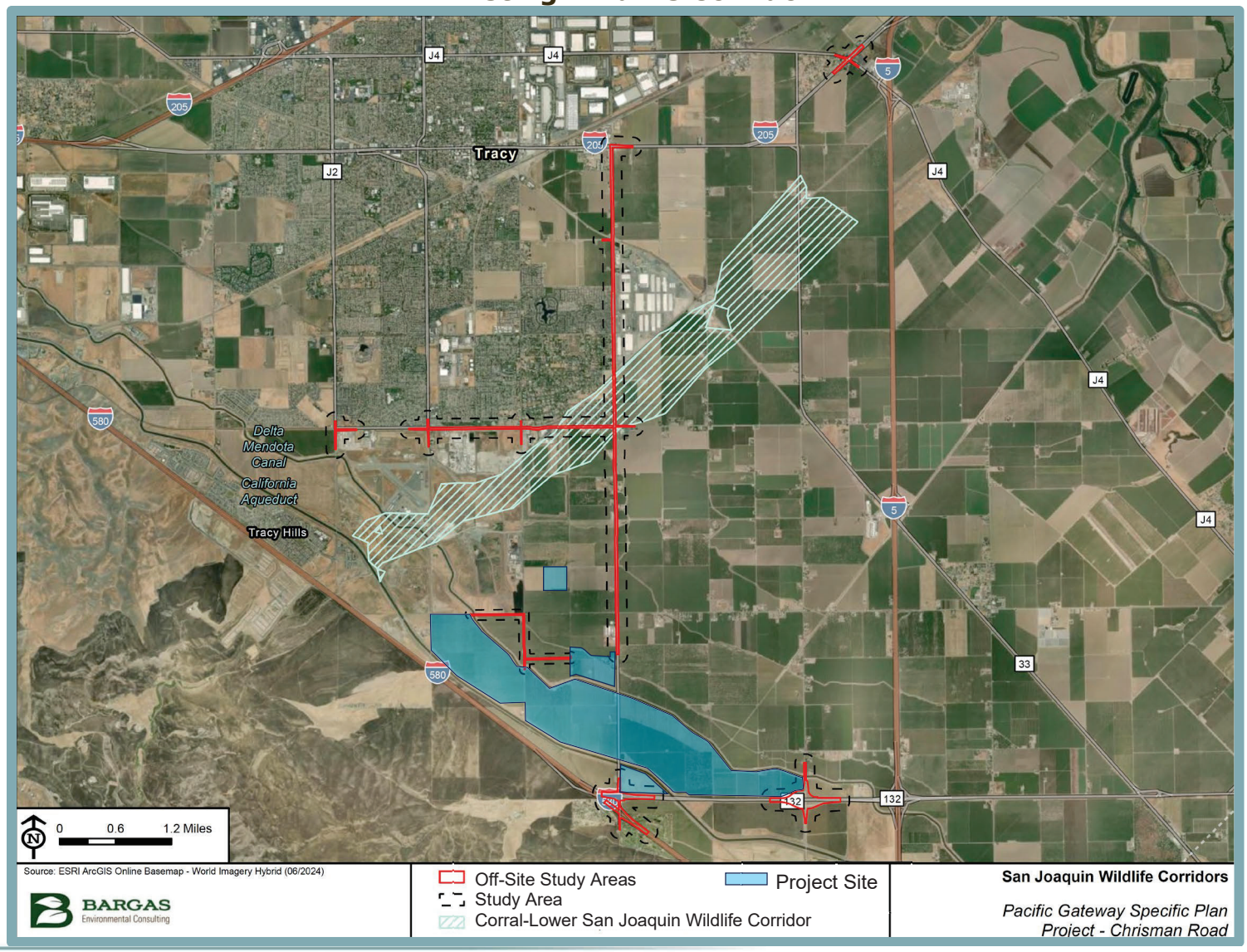


*Figure not OCR compatible.

The SJMSCP Conservation Strategy also requires complete avoidance of SJMSCP Covered Species where possible through implementation of mitigation measures established in Section 5.5.9 of the SJMSCP. Incidental Take Minimization Measures, set forth in Chapter 5 of the SJMSCP, are prescribed for projects where total avoidance is not possible to ensure that adverse effects on Covered Species and natural communities are avoided and minimized. Mitigation for unavoidable impacts to SJMSP Covered Species is achieved through a habitat-based approach, emphasizing compensation for habitat losses through the establishment, enhancement, and management of preserves. Conservation would include measures to avoid, minimize and/or reduce resource impacts during project implementation and would be developed in consultation with local, State, and federal regulatory agencies.

In order to ensure complete compliance with the SJMSCP, the project applicant would be required to conduct preconstruction surveys for each phase of the proposed project to determine if SJMSCP Covered Species are present on-site, even those SJMSCP Covered Species identified in this EIR as Not Expected, including burrowing owl, tricolored blackbird, sharp-shinned hawk, Cooper's hawk, great blue heron, great egret, yellow-breasted chat, San Joaquin kit fox, and American badger. While this EIR provides substantial evidence that the foregoing Covered Species are not expected to occur within the project site and off-site improvements study areas, the applicant would nevertheless be required to comply with the SJMSCP survey requirements and, if necessary, implement take avoidance measures, for the species. Such actions would ensure that Covered Species are not adversely affected by the proposed project.

Additional discussion is provided in the following sections for San Joaquin kit fox and burrowing owl given the public comments received on the Notice of Preparation (NOP) for the proposed project.

The Corral-Lower San Joaquin Wildlife Corridor crosses the off-site improvement study areas and is located within approximately 0.65-mile of the project site. As a result, San Joaquin kit fox may occur as a transient therein. In addition, limited and marginal quality grassland habitat that could support the species is located on-site within the proposed Gateway Center Development Area, north of SR 132 and south of the California Aqueduct. Grassland habitat is not located within the Initial Phase area; therefore, development of the Initial Phase would not be expected to impact burrowing owl or San Joaquin kit fox.

With respect to burrowing owl, the project site contains annual grassland north of SR 132 and south of the California Aqueduct, within the proposed Gateway Center Development Area, but vegetation in the area is tall and densely populated by non-native grasses, which likely precludes use by burrowing owl, as the species prefers more open, treeless habitats. The closest CNDDB record to the project site is located 2.66 miles to the north.

With respect to the Off-Site Improvement Study Areas, suitable habitat occurs at the corner of SR 132 and South Chrisman Road in grasslands where small mammal burrows are present. The potential habitat is a small (approximately 100-foot wide) disturbed strip of grassland along the paved roadway. While burrowing owls are known to occupy small areas surrounded by development, there are several other open undisturbed grasslands outside of the off-site improvement study areas. Regarding

the nearest CNDDB record, one adult owl was observed using a previous ground squirrel burrow approximately 0.3-mile from a study area, adjacent to agricultural fields.

Therefore, if burrowing owls are present, development could directly impact the species through destruction of burrows containing overwintering or nesting individuals.

Conclusion

Based on the above, without compliance with all applicable provisions set forth the SJMSCP, the proposed project could conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan and a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.4-9(a) requires the project applicant obtain and implement incidental take minimization measures from SJCOG, which are site-specific avoidance measures for covered species. Mitigation Measure 4.4-9(b) requires a preconstruction clearance survey for burrowing owl and established buffer areas around any identified burrows prior to construction activities during the breeding season. This mitigation measure reduces the potential for disturbance of nesting birds and their young. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

4.4-9(a) *Prior to commencement of any ground-disturbing activities for each phase of the proposed project, the project applicant shall participate in the SJMSCP and obtain Incidental Take Minimization Measures (ITMMs) from the San Joaquin Council of Governments (SJCOG). The project applicant shall sign the ITMMs prior to any ground disturbance within six months from receipt of the ITMMs. If ITMMs are not signed within six months, the applicant shall reapply for SJMSCP coverage.*

Upon receipt of signed ITMMs from project applicant, SJCOG staff shall sign the ITMMs, creating the effective date of the ITMMs.

1. *Ground disturbance shall not occur without compliance and satisfaction of the ITMMs.*
2. *Upon issuance of fully executed ITMMs and prior to any ground disturbance, the project applicant shall:*

    a. *Post a bond for payment of the applicable SJMSCP fee covering the entirety of the project acreage being covered (the bond shall be valid for a maximum of a six-month period); or*
    b. *Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or*
    c. *Dedicate land in-lieu of fees, either as conservation easements or fee title; or*

d. Purchase approved mitigation bank credits.

3. Within six months from the effective date of the ITMMs or issuance of a building permit, whichever occurs first, the project applicant shall:

a. Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or
b. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
c. Purchase approved mitigation bank credits.

Failure to satisfy the obligations of the mitigation fee shall subject the bond to be called.

Specific Plan Buildout, Off-Site Improvements Study Area

4.4-9(b) *<u>Burrowing Owl.</u> Within 14 days prior to the commencement of any grading activities associated with the proposed project subsequent to Initial Phase development, a preconstruction clearance survey for burrowing owl shall be conducted within the work area and a 300-foot buffer, as accessible, to confirm absence or presence of burrowing owl. The survey shall be conducted by a qualified biologist with experience in surveying for and identifying burrowing owl signs and burrowing owl individuals. If construction pauses for more than 14 days after grading is complete, an additional preconstruction clearance survey shall be conducted. Furthermore, the project shall comply with Subsection 5.2.4.15 of the SJMSCP, which provides guidelines for avoiding impacts and protecting burrowing owls. The guidelines state that burrowing owls may be discouraged from entering a potential construction site by preventing ground squirrels from creating these burrows through planting or maintaining vegetation covering the site at a height of approximately 36 inches above the ground, discing or plowing the project site to destroy any burrows, and removing ground squirrels. Pursuant to the current guidance from CDFW regarding how to proceed if active burrows are located within and around 150 meters of the work area (CDFW 2024), project activities conducted during the breeding (February 1 through August 31) and non-breeding seasons should delineate a 150-meter protective buffer with high-visibility material around occupied burrows and burrow complexes until the completion of the project when delineation material can be removed. Furthermore, any burrowing owl observed within the project site or within 150 meters adjacent to the site shall be allowed to leave on their own and any project activities that could result in harm shall cease until the owl has left the work area. The designated biologist shall locate the burrow or burrow complex and delineate using high-visibility material, as previously described, until work in the area has ceased. A designated biologist shall be present during all project activities if active burrowing owl complexes are observed within 150 meters of the work area to conduct biological monitoring as prescribed by CDFW (CDFW*

2024) and determine if burrowing owl behavior is affected during construction activities. The designated biologist shall have the authority to cease construction activities if burrowing owl are being negatively affected by the work and shall consult with CDFW to determine proper protocols before work activities may recommence. All active burrowing owl complexes shall be avoided unless the burrow location or ground disturbing work pose a risk to individual burrowing owls. However, if burrowing owl complexes are located within an area of temporary disturbance and are not active at the time of work (as determined by the designated biologist), CDFW shall be consulted and an approved exclusion object may be inserted into the entrance of the burrow to ensure burrowing owls do not occupy potential burrows within the project site. If burrowing owls are found present on-site or within 150 meters of project activities, and such activities would result in direct impacts to occupied habitat or burrowing owl individuals (as determined by the designated project biologist), CDFW shall be notified immediately to discuss whether an Incidental Take Permit (ITP) would be required prior to work. Any measures or recommendations prescribed by CDFW to avoid and minimize impacts to burrowing owl shall be required. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.

4.4-9(c) *San Joaquin kit fox. In accordance with Section 5.2.4.25 of the SJMSCP, a qualified biologist shall conduct preconstruction surveys at least two calendar weeks and at maximum 30 calendar days prior to the commencement of ground-disturbing activities associated with the proposed project subsequent to Initial Phase development. If individual kit foxes are observed during the survey, then an additional protocol level survey shall be conducted consistent with the USFWS Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance protocol (January 2011).*

Additionally, if dens with openings four inches in diameter that open within two feet inside of the den are observed on-site, then a qualified biologist shall dust the opening of the den for tracks and monitor the den for three calendar days to determine if the den is occupied. If the den is occupied by a single adult kit fox, then the den may be destroyed when the fox either moves or leaves the den. If the den is discovered to be a natal den, a 250-foot non-disturbance buffer shall be maintained around the den until the qualified biologist determines the den has been vacated. Proof of compliance with this measure shall be provided to the San Joaquin County Community Development Department.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single

project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. The geographic scope for the cumulative biological resources analysis generally includes buildout of the proposed project in conjunction with future buildout within San Joaquin County. For more details on the cumulative setting, refer to Chapter 6, Statutorily Required Sections, of this EIR.

4.4-10 Cumulative loss of habitat for special-status species. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

The County's General Plan policy area encompasses a 1,425-square-mile area. As detailed in the General Plan EIR, although the majority of the policy area is developed with agricultural uses, valuable natural habitat still exists within the County. Common habitat types present within the County include annual grasslands, blue oak, scrub, freshwater marsh, mixed riparian, valley oak, vernal pools, Delta/flooded agriculture.

The General Plan EIR evaluated the potential for development facilitated by buildout of the General Plan policy area to contribute to regional loss of special-status species or their habitat under Impact 4.F-1. Implementation of the 2035 General Plan would involve some land use designation changes with impacts to biological resources, including the conversion of approximately 635 acres of previously designated open space/resource conservation lands into industrial use. Such areas are located outside of the cities of Tracy, Stockton, and Lodi, and are primarily situated at the edges of current urban development. Although the majority of these areas are located in field crops, orchard, or barren habitat types, which provide very little biological value, other habitats with potential to support wildlife, would also be impacted. Approximately 44 acres of grain/pasture and 49 acres of grassland/ruderal habitat would be lost due to the land conversion. Open grassland and farmed grain provide habitat for a variety of grassland species, including important foraging habitat for Swainson's hawk and other raptor species, including northern harrier and burrowing owl. However, the General Plan EIR concluded that, with implementation of applicable General Plan policies and participation in the existing SJMSCP, a less-than-significant impact would occur.

Additionally, this chapter provides a wide range of mitigation to minimize all potential adverse effects to habitat for special-status species that could occur as part of the proposed project. With respect to potential impacts to special-status plant and wildlife species, mitigation measures would require implementation of applicable SJMSCP minimization measures to address potential impacts that could occur as a result of project construction. Compliance with the aforementioned minimization measures would reduce potential impacts to protected plant species, nesting birds and raptors, burrowing owl, California glossy snake, San Joaquin coachwhip, San Joaquin kit fox, and American badger to a less-than-significant level. In addition, potential impacts to protected wetlands are addressed through compliance with Sections 404 and 401 of the CWA. Overall, with incorporation of the mitigation measures set forth herein, potential impacts to biological resources would be reduced to a less-than-significant level and the proposed project would not result in substantial adverse effects to biological resources protected under CEQA.

With respect to potential impacts to biological resources as part of development of buildout of the General Plan policy area or areas within San Joaquin County, such as development of the Westside Specific Plan, Cordes Ranch Specific Plan, or the West Parkway Village Multi-Tenant Building, such areas would be subject to applicable policies, regulations, and standards set forth at the federal, State, and local level, including preconstruction surveys and compliance with CFGC Section 1600 and CWA Sections 404 and 401. Therefore, all potential impacts associated with development in the cumulative setting would be reduced through applicable requirements.

The project site is considered 1,576.70 acres of Multi-Purpose Open Space land by the SJMSCP, which the SJMSCP defines as primarily barren lands or orchards and vineyards. The SJMSCP anticipates the conversion of 37,465 acres of Multi-Purpose Open Space lands between 2001 and 2051. The SJMSCP Preserve System, which compensates for impacts to Covered Species, is 100,841 acres. While the Preserve System was not designed to compensate for the conversion of Multi-Purpose Open Space lands, the system does include compensation for other lands more important in supporting Covered Species. Although regional habitat loss would occur from development of the various projects discussed in Chapter 6, Statutorily Required Sections, and listed in Appendix Q of this EIR, such projects would also be required to participate in the SJMSCP.

The above discussion provides substantial evidence that, while the combined effects on biological resources resulting from approved/planned development throughout the cumulative setting would be considered significant, the proposed project's incremental contribution to the significant cumulative effect would be reduced with implementation of the project-specific mitigation measures required in this EIR.

Based on the above, although cumulative buildout would result in a significant cumulative impact related to the loss of special-status species habitat, the proposed project's contribution to the significant impact, through incorporation of the mitigation measures set forth herein, would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

4.5 Cultural and Tribal Cultural Resources

4.5 CULTURAL AND TRIBAL CULTURAL RESOURCES

4.5.1 INTRODUCTION

The Cultural and Tribal Cultural Resources chapter of the EIR addresses known historic and precontact-era cultural resources, including tribal cultural resources, in the vicinity of the project area, including the off-site improvement study areas. Precontact-era resources are those sites and artifacts associated with indigenous, non-Euroamerican populations, generally prior to contact with people of European descent. Historic resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region. The chapter summarizes the existing setting with respect to cultural and tribal cultural resources, identifies thresholds of significance, evaluates project impacts to such resources, and sets forth mitigation measures as necessary. Information presented in the chapter is primarily drawn from the Cultural Resources Study prepared by Eileen Barrow and Associates for the proposed project[1] and the Archival Research and Windshield Survey prepared by Tom Origer and Associates,[2] as well as the San Joaquin General Plan[3] and associated General Plan EIR.[4]

4.5.2 EXISTING ENVIRONMENTAL SETTING

The following sections provide further details regarding the precontact overview, ethnographic overview, and historic overview of the project area, as well as project site history and current uses. In addition, a description of any identified cultural resources associated with the project site and off-site improvements study area is provided below.

Precontact Overview

The concept of precontact refers to the period of time before events were recorded in writing and varies worldwide. Because a written record does not exist, the understanding of California precontact relies on archaeological materials and oral histories passed down through generations. Modern historians generally accept that humans traveled to North America from Siberia and began the peopling of the American continents. Evidence has shown that the migrants took two routes into North America: one into present-day central Canada and the central part of the U.S., and the second along the Pacific coastline. The first theory of migration through Canada and the central U.S. is the older of the two theories; evidence for the route was from “Clovis sites,” archaeological sites that contain projectile points termed “Clovis points.” Clovis sites tend to date between 10,500 to 11,000 BC, after the ice sheets melted sufficiently to allow passage from Siberia.

However, when the antiquity of Monte Verde (approximately 12,600 BC) was rigorously verified, a flood of study into sites dating to the Terminal Pleistocene and Early Holocene began, as

1 Eileen Barrow and Associates. *Cultural Resources Study for the Pacific Gateway Environmental Impact Report, Tracy, San Joaquin County, California*. January 22, 2025.
2 Tom Origer and Associates. *Archival Research and Windshield Survey of the Pacific Gateway Specific Plan Traffic and Intersection Study Area, San Joaquin County, California*. January 24, 2025.
3 San Joaquin County. *San Joaquin County General Plan.* Adopted December 2016.
4 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report.* Certified October 2014.

evidence showed that migration through the Alaskan and Canadian corridor would not have been possible due to the presence of ice sheets. While Alaska has received a great amount of study on this subject, California is home to an increasing number of identified Paleo-Indian sites (11,500 through 9,000 BC) that have been investigated. The very oldest sites in California tend to be near the coastline, or along old lakes and marshes. Due to several meters of sea level rise since the beginning of the Holocene Epoch, thousands of archaeological sites dating to the Transitional Pleistocene/Early Holocene are likely now submerged.

The first archaeological work in the central part of the Central Valley is attributed to J. A. Barr and H. C. Meredith, who pot hunted dozens of mounds in the Stockton area in the late 19th and early 20th centuries. Meredith published information about the artifacts he and Barr found, as did H. C. Holmes from the Smithsonian Institute.

In 1912, Elmer Dawson began excavating sites in a systematic manner and taking notes on the provenience, association, and observations he made during the excavations. Eventually, Dawson showed his work to W. E. Schenk at the University of California, and the two men developed a foundation of an overview of northern San Joaquin Valley archaeology together.

The Sacramento Junior College and the University of California (UC) Berkeley worked together in 1931 to develop central California cultural chronologies that remain the most influential today. The sites investigated by the two colleges and the subsequent publications revealed the complexity of central California cultures through time. The cultural sequence that was developed became known as the Central California Taxonomic System (CCTS), which identified three culture periods termed the Early, Middle, and Late Horizons. Refinement of the CCTS became a chief concern of archaeologists as the century progressed, as the original CCTS showed changes through time but did not have date ranges.

In 1973, David Fredrickson combined prior work with his own research to develop a chronology still used today, albeit modified for locality-specific circumstances. Fredrickson's scheme shows that native peoples have occupied Central California for over 12,000 years and, during that time, shifts took place in their social, political, and ideological regimes. In addition, Fredrickson defined cultural patterns pertinent to the Central Valley: the Windmiller, Berkeley, and Augustine patterns.

In 1960, the first study of obsidian hydration as a dating tool for archaeologists was published. The study showed that the chemical composition of the obsidian and ambient temperature affect the hydration process. In the 1980s, research into the obsidian hydration dating method was conducted for the Northern San Francisco Bay Area which had four major obsidian sources. In 1987, Thomas Origer devised a hydration rate chronology for two of the major sources: the Annadel and Napa Valley obsidian sources.

Later, comparison constants were developed among the four primary obsidian sources in the northern Bay Area. The concept of comparison constants allows for the calculation of dates from hydration band measurements taken from obsidian specimens from sources with unknown hydration rates. The development of obsidian hydration rates for central California obsidian sources has provided archaeologists the ability to obtain dates from sites that could not previously be dated due to the lack of diagnostic artifacts or organic material suitable for radiocarbon dating.

Precontact archaeological site indicators include, but are not limited to, obsidian and chert flakes and chipped stone tools; grinding and mashing implements such as slabs and hand-stones, and mortars and pestles; and locally darkened midden soils containing some of the previously listed



items plus fragments of bone, shellfish, and fire-affected stones. Archaeological sites within the Delta are typically found on high spots on the landscape that would be unaffected by the seasonal flooding that was prevalent throughout the region prior to land reclamation efforts.

Ethnographic Overview

Linguists and ethnographers tracing the evolution of languages have found that most of the indigenous languages of the California region belong to one of five widespread North American language families: the Hokan and Penutian phyla, and the Uto-Aztecan, Algic, and Athabaskan.

In the early part of the Holocene Epoch, groups who spoke languages descended from the Hokan phylum were found throughout the majority of California. Pre-Hokan speakers occupied nearly all of California, including the project site but excepting the northwestern and parts of north-central California (down to the mouth of San Francisco Bay and eastward just past the Sacramento River). By 4000 BC, nearly the entirety of California was occupied by Hokan speakers.

One of the few exceptions to the Hokan majority is a pocket of Penutian speakers within the Sacramento-San Joaquin Delta area, which may represent the beginning of Utian speakers in the area. Interestingly, the minority group of Penutian speakers also corresponds with the advent of the Windmiller pattern. Over the next 2,000 years, the pocket of Utian speakers expanded in all directions, including the San Francisco Bay Area, much of the San Joaquin Valley, and the lower part of the Sacramento Valley. By the time California tribes came in contact with Spanish explorers, nearly the entirety of the Central Valley and all of the San Francisco Bay Area were occupied by Penutian-speaking groups.

At the time of European contact, the project site and surrounding area were occupied by the Northern Valley Yokuts. The Yokuts territory extended from near the northern end of the San Joaquin River to the community of Mendota to the south, with the eastern and western boundaries as the Sierra Nevada and North Coast Ranges, respectively.

The Yokuts were divided into tribelets with a main village sitting atop low mounds on or near the banks of large watercourses surrounded by several satellite villages. Due to abundant resources, the Yokuts could live a relatively sedentary life; only flood events would cause village abandonment or transplantation. Seasonal rounds were also made to harvest certain products. Like many tribes in California, acorns were a food staple for the Yokuts, but the vast grasslands comprising their territory provided access to numerous seeds. Access to the San Joaquin River or other large creeks were also important for fish and waterfowl.

With the arrival of Europeans to California, disease was the first blow to the Yokuts way of life. Many Yokuts were forced into Spanish missions, which caused further degradation to the Yokuts culture, but it was the discovery of gold in California that had the most devastating impact to the Yokut culture.

Historic Overview

The project site is located within southwestern San Joaquin County. Spanish and Mexican explorers had little need to travel into the Central Valley, as plenty of resources were found along coastal lands. Not until employees of the Hudson Bay Company were seeking new hunting grounds in the 1830s did Europeans first settle in San Joaquin County, in the community now known as French Camp. At the time, French Camp was largely a seasonal camp used solely by trappers.

Charles Weber, a member of the Bidwell-Bartleson party, visited French Camp in 1841 and considered the area a rich and fertile land perfect for farming. Weber traveled to the City of San Jose to form a partnership with William Gulnac, a blacksmith and Mexican citizen. After a few years of working together in merchandising, manufacturing, and ranching in the San Jose area, Gulnac petitioned the Mexican government for the land in the French Camp area. In 1844, Gulnac received land that included both French Camp and Stockton. Weber and Gulnac decided to gather a party together to form the first permanent colony in the County.

The area surrounding the City of Tracy was settled much more slowly than other parts of the County, likely because the City is not located on a major watercourse. The City of Tracy area has historically been characterized as "of little value" by historians. Yet maps show that much of the land had been purchased by 1870. The construction of the Western Pacific Railroad from the City of Stockton to the City of Livermore prompted small settlements, including two locations that flanked the modern-day location of the City. The area was not settled until 1878, when the modern City became a railroad stop along three rail lines and an important agricultural hub. A lack of year-round water prohibited extensive or varied agricultural pursuits, but farmers still grew grain crops and railroad companies attempted to advertise the City's attributes regardless. The West Side Irrigation District was the first to bring water to the farmers in the area through the construction of canals that were completed in 1918. By 1921, farmers south of the City of Tracy began organizing the Banta-Carbona Irrigation District, which would quickly grow to serve more than 14,000 acres by 1926. Aerial photos show that agricultural operations in the area remained focused on grain or hay at least until the late 1960s, when portions of the area were planted with orchards.

Historic period site indicators generally include fragments of glass, ceramic, and metal objects; milled and split lumber; and structure and feature remains, such as building foundations and discrete trash deposits like wells, privy pits, and dumps.

Project Site History and Current Uses

The approximately 1,567.7-acre project site is generally bound by South Bird Road to the east; the Delta-Mendota Canal to the north; Tracy Boulevard to the west; and the southern boundary is formed by the California Aqueduct, west of South Chrisman Road, and State Route (SR) 132, east of South Chrisman Road. Prior to European and American development, the project site would have consisted of open grassland, but is currently mostly comprised of almond and cherry orchards. The surrounding region has remained relatively rural and is used primarily for agricultural purposes.

Review of Historical Maps

A review of 19th- and 20th-century maps and aerial photographs was conducted for the project site. According to the Cultural Resources Study, the project site contains five locations where buildings and structures are shown on such maps, beginning in 1916. Not all of the buildings still exist within the project site. Figure 4.5-1 shows the locations of the mapped building sites, which are discussed below in further detail.

Map #1

The Map #1 location is at the northernmost end of the study area. A building first appears in this area in 1916, and two buildings are shown at the location in 1937, as well as on the U.S. Army Corps of Engineers (USACE) 1942 map. By 1950, one of the buildings was demolished and the 1952 U.S. Geological Survey (USGS) map did not show any buildings at the location.

Figure 4.5-1
Locations of Buildings and Structures Shown on Historical Maps and Aerial Photos

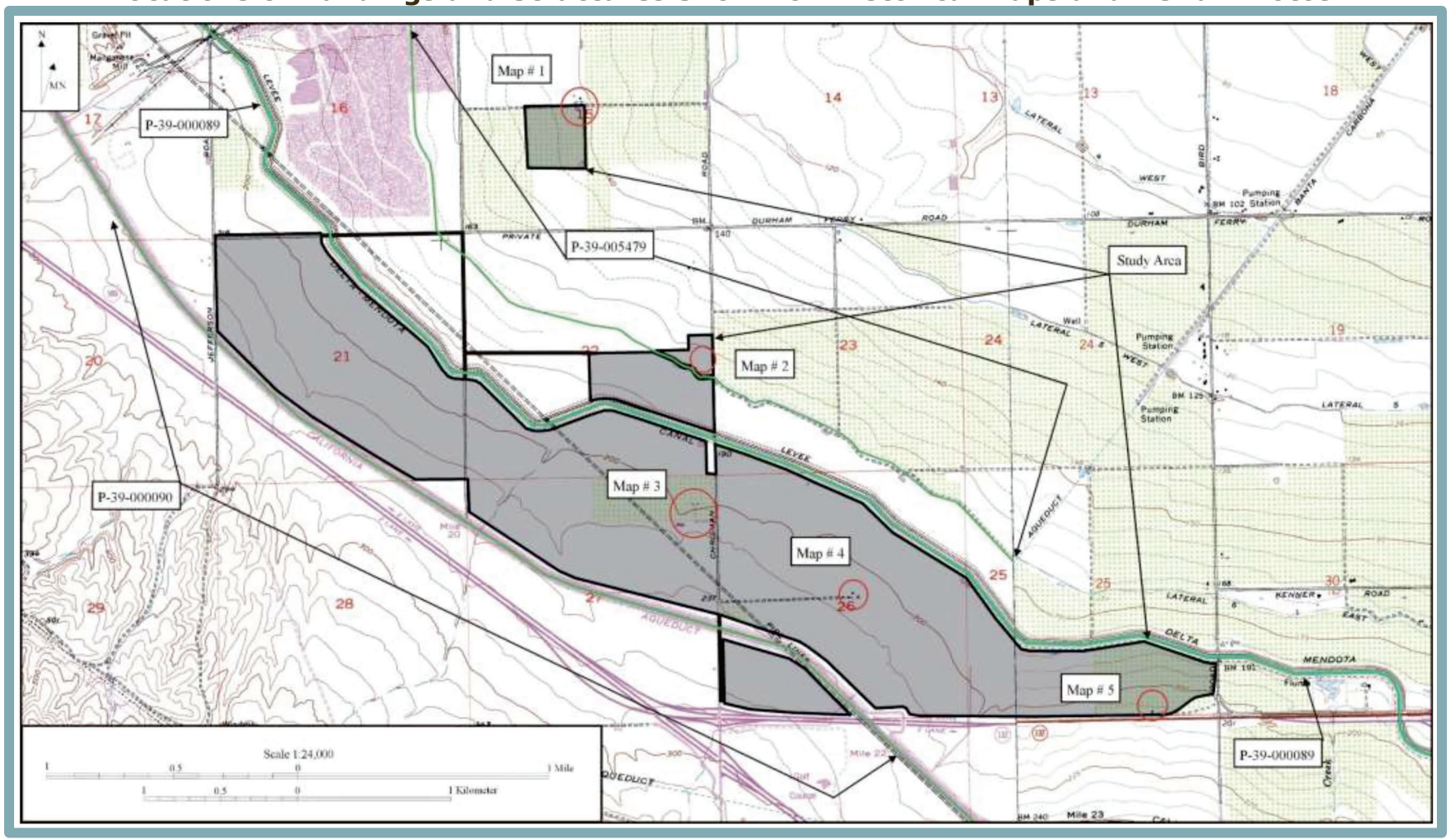


*Figure not OCR compatible.

A 1967 aerial photo reviewed as part of the Cultural Resources Study shows two new buildings within the Map #1 site. Current photos show that the westernmost building has subsequently been demolished while the easternmost building remains.

The Map #1 location was visited in 2023 during a previous survey. At that time, only one building constructed between 1957 and 1967 was confirmed to be within the Map #1 site. According to the 2023 evaluation, the building is a simple shed, the construction of which is common in the region. The 2023 evaluation noted that, while agriculture is an important part of the area's history, the complex of buildings in which the shed is found is a combination of being too recently constructed and lacking enough integrity of buildings that date to the same time period to adequately illustrate the importance of that theme. Therefore, according to the Cultural Resources Study, the previous evaluation of the shed concluded that the building would not meet criteria for inclusion on the California Register of Historical Resources (CRHR).

Map #2

The Map #2 location is toward the north-central portion of the project site on the west side of South Chrisman Road. Map #2 includes a house constructed in 1988 and four large rectangular sheds currently being used by a fabrication business. Aerial photos show that the sheds were constructed between 2017 and 2020. According to the Cultural Resources Study prepared for the proposed project, the location was visited in 2023 during a previous survey which noted that the buildings were modern.

Map #3

The Map #3 location is towards the south-central area of the project site just west of South Chrisman Road. Three buildings are shown at this location on the USGS 1968 map, including a house built in 1965 and two shop buildings. The location was visited in 2023 during a previous survey, which noted that the large building depicted on the 1968 map was no longer present. The previous survey also concluded that one of the shop buildings was contemporaneous with the house and the other was a modern building. Therefore, the previous study cited by the Cultural Resources Study prepared for the proposed project determined that the remaining on-site buildings would not meet criteria for inclusion on the CRHR.

Map #4

The Map #4 location is towards the south-central area of the project site, approximately 0.5-mile east of South Chrisman Road. One building is shown at the location on a 1916 map and a complex of buildings is shown on maps and aerial photos for subsequent years. By 1933, however, the complex was not present.

Map #5

Map #5 is located toward the southeastern portion of the project site, just west of the intersection of South Bird Road and SR 132. One building is shown within Map #5 on the 1969 map. Review of maps and aerial photos shows that the building was demolished prior to 2003.

Off-Site Improvements Study Area

The off-site improvements study areas consist of a 7.3-mile-long segment of South Chrisman Road, a two-mile-long section of West Linne Road, and 14 intersections, six of which are located along South Chrisman Road. The majority of the road segments and intersections are located in rural or semi-rural settings.

A review of archaeological site base maps, records, and survey reports at the Central California Information Center (CCIC), as well as a review of historic aerial photographs, was conducted for the off-site improvements study areas. The earliest map reviewed as part of the Archival Research and Windshield Survey report shows a few trails meandering throughout that did not develop into any of the roads that are currently present. By 1870, an unnamed road (modern-day West 11th Street) is present at the intersection of West 11th Street and South Chrisman Road. Another unnamed road, now Grant Line Road, is present within the study area at the West Kasson Road/Grant Line Road/West 11th Street intersection, although West 11th Street did not extend to the intersection at the time. By 1879, the various roads comprising all intersections and South Chrisman Road were present.

Three railroads intersect with parts of the off-site improvements study areas: the Western Pacific, the Western Pacific-Tesla Branch, and the Southern Pacific-San Francisco and New Orleans Line. The Western Pacific-Tesla Branch was constructed in 1895, known at the time as the Alameda and San Joaquin Railroad. The line originally ran from the Tesla Coal Mine in the hills southeast of the City of Tracy to the City of Stockton. Eventually, the line was purchased by the Western Pacific, and a section between the Carbona station and the Tesla Coal Mine became a small branch while the main line traversed between the cities of Stockton and San Francisco. When the Tesla Coal Mine ran out of coal in 1916, the branch was abandoned. The Southern Pacific rail line located within the off-site improvements study area, now the San Joaquin Valley Railroad, was originally constructed in 1891.

The Banta-Carbona Irrigation District was constructed and functional by 1926. Several canals owned by the district cross through the off-site improvements study area, including portions of Laterals 4, 5, and 6.

Known Cultural Resources

The following includes a discussion of the known cultural resources located within the project site and off-site improvements study areas.

Project Site

As part of the Cultural Resources Study prepared for the proposed project, a records search request was conducted for the project site at the CCIC at California State University, Stanislaus. The CCIC completed the records search on September 27, 2023. The Cultural Resources Study also included archival records and historical maps review, and a field survey of the project site was completed as part of the Cultural Resources Study between October 28 and November 1, 2024. The field survey paid particular attention to on-site buildings identified during archival research. Archaeological site indicators were not identified within the project site. Further details on the record search and field survey are provided in the Method of Analysis section below.

According to the CCIC records search, the majority of the project site has been subject to previous cultural resources studies. Specifically, 10 previous studies ranging from 1976 to 2024 have been conducted that include portions of the project site. The studies resulted in the documentation of three resources within the project site, including the Banta-Carbona Lateral 6 West Canal (P-39-005479), the Delta-Mendota Canal (P-39-000089), and the California Aqueduct (P-39-000090). Each of the identified resources is discussed further below. In addition, 14 cultural resource studies have been conducted within 0.25-mile of the project site. Based on the results of the record search, the CCIC identified two previously recorded resources within 0.25-mile the project site. According to the Cultural Resources Study, both off-site resources are historic-era buildings or structures that do not extend on-site.

P-39-005479: Banta-Carbona Lateral 6 West Canal

The Banta-Carbona Lateral 6 West Canal crosses the project site at two points: under South McArthur Road and under an unnamed farm road at the north end of the project site (see Figure 4.5-1). According to the Cultural Resources Study, P-39-005479 was found to be ineligible for inclusion on the National Register of Historic Places (NRHP) and the CRHR by a previous study conducted in 2021.

P-39-000089: Delta-Mendota Canal

The Delta-Mendota Canal crosses the project site at a single point at South McArthur Road. The Delta-Mendota Canal has been identified as a significant component of the Central Valley Project's transfer of water from the Sacramento River Valley to the San Joaquin River Valley. Despite modifications made to the canal in the mid-1960s to integrate the canal with the O'Neill Pumping and Generating Plant, the Delta-Mendota Canal has retained good historic integrity. Therefore, according to the Cultural Resources Study, P-39-000089 was found eligible for, and subsequently included on, the NRHP and the CRHR in 2022 under Criterion A/1 related to development, construction, and operation of the Central Valley Project.

P-39-000090: California Aqueduct

The California Aqueduct crosses the project site at a single point at South Chrisman Road. According to the Cultural Resources Study, P-39-000090 was determined to be eligible for, and subsequently included on, the NRHP and CRHR in 2011. Specifically, the California Aqueduct is eligible under NRHP/CRHR Criteria A/1 and C/3, related to being associated with significant events within the broad patterns of California history and embodying the distinctive characteristics of a method of construction, respectively.

According to the Cultural Resources Study prepared for the proposed project, the California Aqueduct was the largest and most significant water conveyance system developed as part of the State Water Project (SWP), comprising 444 miles of a 701-mile system of aqueducts, canals and pipelines. The aqueduct was a critical component of the SWP and was an essential feature in the development of California by facilitating the agricultural development of the San Joaquin Valley and Southern California. Therefore, the California Aqueduct meets Criterion A/1.

With respect to Criterion C/3, the California Aqueduct introduced design innovations in the construction of a water conveyance system, including efficiency-boosting factors such as a trapezoidal design and concrete lining to carry more water and reduce the loss of head water and seepage. The California Aqueduct is also distinguishable in its use of a high depth-to-width ratio, which allows for the reduction of adverse alignment curvature effects on the flow.

Off-Site Improvements Study Areas

As part of the Archival Research and Windshield Survey prepared for the proposed project, a records search request was conducted for the off-site improvements areas at the CCIC at California State University, Stanislaus on December 10, 2024. The Archival Research and Windshield Survey also included archival records and historical maps review, as well as a windshield survey of the off-site areas. Further details on the record search and windshield survey are provided in the Method of Analysis section below.

According to the Archival Research and Windshield Survey, buildings were not observed within the proposed footprint of the off-site improvements study area, although buildings are present abutting the study area as early as 1879. Therefore, in addition to examining the files at the CCIC, historical maps, and aerial photos of the area, the Archival Research and Windshield Survey

included an examination of the buildings abutting each of the off-site improvement study areas to determine the year of construction and, thus, whether the buildings could meet the age threshold for consideration to the CRHR. According to the Cultural Resource Study, a total of 34 buildings that abut the intersections meet the age threshold for consideration to the CRHR.

In addition, as discussed in the Archival Research and Windshield Survey, multiple parts of the Banta-Carbona Irrigation District located within the vicinity of the off-site improvement study areas have been subjected to an evaluation of their historical importance, including a portion of the Banta-Carbona Lift Canal (P-39-000087), a portion of Lateral 5 (P-39-000088), and a portion of Lateral 6 (P-39-005479). The evaluations concluded that the segments did not meet criteria for inclusion on the CRHR or NRHP because the segments use the same technology as other distribution systems in the area, are not associated with a significant person, and include engineering elements and modifications that date from various periods, thereby losing any former integrity of design. The Archival Research and Windshield Survey also notes that the Delta-Mendota Canal and the California Aqueduct cross the off-site improvement study areas.

Archival results for each of the 16 locations comprising the off-site improvements study area are described below and shown in Figure 4.5-2.

South Kasson Road, Grant Line Road, West 11th Street

A portion of the South Kasson Road/Grant Line Road/West 11th Street intersection has been previously subjected to a cultural resources study. A portion of the Lincoln Highway (P-39-004373) is documented within the intersection. Upon evaluation, P-39-004373 was found ineligible for inclusion on the CRHR. An examination of some buildings adjacent to the intersection found that the properties at 3807 West 11th Street (P-39-005446), 3741 Grant Line Road (P-39-005448), and 3776 Grant Line Road (P-39-005447) were determined to be ineligible for inclusion on the CRHR and NRHP.

In addition to the three resources listed above, one resource was found within 0.25-mile of the South Kasson Road/Grant Line Road/West 11th Street intersection. The resource is a building complex and does not extend into the intersection.

South Chrisman Road and West 11th Street

Archival research conducted as part of the Cultural Resources Study found that a portion of the South Chrisman Road and West 11th Street intersection has been previously subjected to a cultural resources study. Cultural resources have not been documented within the intersection or within 0.25-mile.

South Chrisman Road and West Schulte Road

A portion of the South Chrisman Road and West Schulte Road intersection has been included within five previous cultural resource studies conducted between 1996 and 2015. Cultural resources were not documented within the intersection. Six cultural resources were documented by six different studies conducted within 0.25-mile of the intersection in 2005, 2019, and 2022. The identified resources are buildings and structures that are a part of the Defense Distribution Depot (Tracy Army Depot) and are located at least 290 feet from the off-site improvement area. The buildings were previously evaluated and found ineligible for inclusion on the CRHR and NRHP.

Figure 4.5-2
Off-Site Improvement Study Area Locations

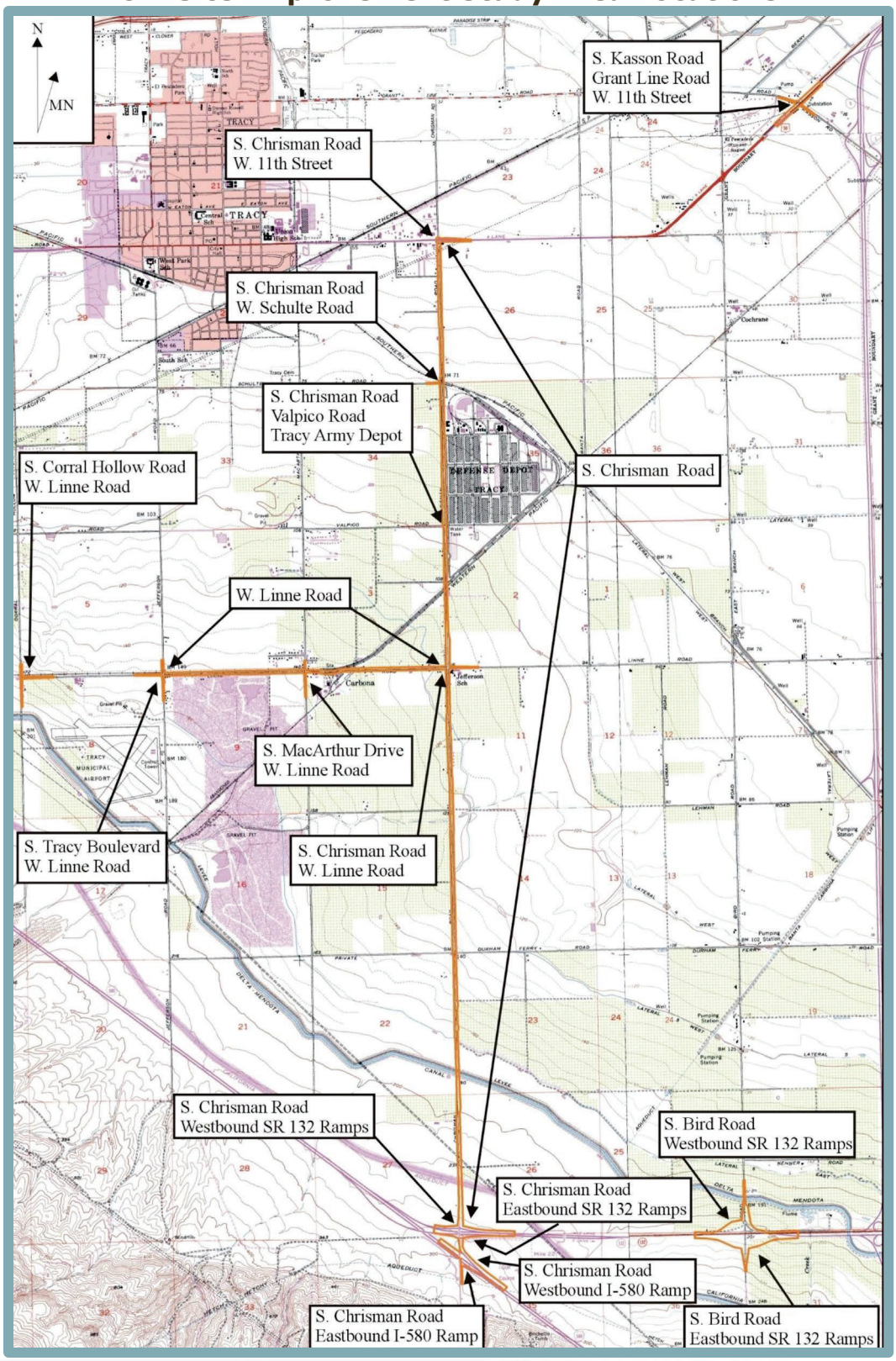


*Figure not OCR compatible.

South Chrisman Road, Valpico Road, and Tracy Army Depot

According to the Cultural Resources Study, a portion of the South Chrisman Road/Valpico Road/ Tracy Army Depot intersection has been previously subjected to five cultural resources studies conducted between 1995 and 2015. Cultural resources were not documented within the South Chrisman Road/Valpico Road/Tracy Army Depot intersection. Four cultural resources are documented within 0.25-mile of the intersection by four previous studies conducted in 1996, 2011, and 2019. The resources are buildings and structures within the Tracy Army Depot, which was previously evaluated and found ineligible for inclusion on the CRHR and NRHP.

South Corral Hollow Road and West Linne Road

The entirety of the South Corral Hollow Road and West Linne Road intersection has been previously subjected to cultural resources study by eight studies conducted between 1990 and 1998, as well as an additional study in 2017. A crossing of South Corral Hollow Road by the Western Pacific Railroad was documented (P-39-000098) within the study area. The crossing was evaluated and found ineligible for inclusion on the NRHP. Additional resources have not been documented within, or within 0.25-mile of, the intersection.

South Tracy Boulevard and West Linne Road

A portion of the South Tracy Boulevard/West Linne Road intersection has been previously subject to six cultural resources studies conducted between 1992 and 1998. Cultural resources were not documented within the intersection. One cultural resource has been documented within 0.25-mile of the off-site improvement area. However, according to the Cultural Resources Study, the resource is located approximately 595 feet away from the intersection and does not have the potential to extend within the site boundaries.

South MacArthur Drive and West Linne Road

A portion of the South MacArthur Drive/West Linne Road intersection has been previously subject to three cultural resources studies in 1995, 1996, and 1998. The studies documented a crossing of the Western Pacific Railroad (specifically, the Western Pacific-Tesla Branch rail line) at West Linne Road (P-39-000098) within the off-site improvement study area. The crossing was evaluated and found ineligible for inclusion on the NRHP. Additional resources have not been documented within, or within 0.25-mile of, the intersection.

South Chrisman Road and West Linne Road

A portion of the South Chrisman Road/West Linne Road intersection has been previously subjected to two cultural resources studies in 1995 and 1996. A portion of Lateral 5 of the Banta-Carbona Irrigation District (P-39-000088) crosses the off-site improvement area and Jefferson School (P-39-005010) was documented at the southeast corner of the intersection. Other cultural resources have not been documented within 0.25-mile of the intersection.

South Chrisman Road and Westbound State Route 132 Ramps

According to the Cultural Resources Study, five previous cultural resource studies conducted between 1990 and 2004 cover nearly the entirety of the intersection of South Chrisman Road and the Westbound SR 132 ramps. Cultural resources have not been documented within the intersection. The closest resources are the California Aqueduct (P-39-000090) and San Joaquin Pipelines 1 and 2 of the Hetch Hetchy Aqueduct (P-39-004860), which do not have the potential to extend into the off-site improvement study area. Additional cultural resources have not been documented within 0.25-mile of the intersection.

South Chrisman Road and Eastbound State Route 132 Ramps

A portion of the intersection between South Chrisman Road and the Eastbound SR 132 Ramps has been previously subjected to four cultural resources studies conducted in 1990, 1994, and 2004. Cultural resources are not documented within the intersection. The closest resources are the California Aqueduct (P-39-000090) and San Joaquin Pipelines 1 and 2 of the Hetch Hetchy Aqueduct (P-39-004860), which do not have the potential to extend into the off-site improvement study area. Additional cultural resources have not been documented within 0.25-mile of the intersection.

South Chrisman Road, Westbound I-580 Ramp

The South Chrisman Road/Westbound I-580 ramp intersection has not been previously subject to cultural resources study and cultural resources have not been documented within the intersection. The closest resources are the California Aqueduct (P-39-000090) and San Joaquin Pipelines 1 and 2 of the Hetch Hetchy Aqueduct (P-39-004860), which do not have the potential to extend into the off-site improvement study area. Other cultural resources have not been documented within 0.25-mile of the intersection.

South Chrisman Road, Eastbound I-580 Ramp

A portion of the South Chrisman Road/Eastbound I-580 ramp intersection has been previously subjected to four cultural resources studies conducted in 2008, 2009, and 2016. The San Joaquin Pipelines 1 and 2 of the Hetch Hetchy Aqueduct (P-39-004860) cross under the off-site improvement study area. P-39-004860 is eligible for inclusion on the NRHP and is listed on the CRHR. A segment of the California Aqueduct (P-39-000090) is documented within 0.25-mile of the intersection, but does not have the potential to extend into the study area.

South Bird Road, Westbound State Route 132 Ramps

The majority of the South Bird Road/Westbound SR 132 ramps intersection has been previously subjected to five cultural resources studies conducted in 1993, 2004, and 2009. A portion of the intersection crosses over the Delta-Mendota Canal (P-39-000089). Two cultural resources have been documented within 0.25-mile of the off-site improvement area: a bridge over Lone Tree Creek (P-39-004445) and the California Aqueduct (P-39-000090). However, neither resource has the potential to extend into the off-site improvement study area.

South Bird Road, Eastbound State Route 132 Ramps

A portion of the South Bird Road/Eastbound SR 132 ramps intersection has been previously subjected to six cultural resources studies conducted between 1990 and 2009. Cultural resources have not been documented within the intersection. Two cultural resources have been documented within 0.25-mile of the off-site improvement study area: a bridge over Lone Tree Creek (P-39-004445) and the other is the California Aqueduct (P-39-000090). However, neither of the resources has the potential to extend into the study area.

South Chrisman Road

Portions of the South Chrisman Road off-site improvement study area have been previously subjected to 18 cultural resources studies conducted between 1990 and 2023. South Chrisman Road crosses three previously documented linear structures: the Delta-Mendota Canal (P-39-000089); the California Aqueduct (P-39-000090); and one of the canals of the Banta-Carbona Irrigation District (P-39-005479). The Delta-Mendota Canal and the California Aqueduct have previously been evaluated and were found eligible for inclusion on the CRHR. The Banta-Carbona Irrigation District Canal was also previously evaluated, but was found ineligible for inclusion on

the CRHR. Several cultural resources were identified within 0.25-mile of the South Chrisman Road off-site improvement study area, but are not located within the study area.

West Linne Road

According to the Cultural Resources Study prepared for the proposed project, much of the West Linne Road area has been previously subjected to cultural resources study, including five studies conducted between 1992 and 1998. As discussed above, a part of Lateral 5 of the Banta-Carbona Irrigation District (P-39-000088) crosses the road and Jefferson School (P-39-005010) was documented at the southeast corner of the West Linne Road/South Chrisman Road intersection. In addition, the Western Pacific-Tesla Branch rail line crosses West Linne Road within the off-site improvement study area (P-39-000098), although the crossing was previously found ineligible for inclusion on the NRHP.

Tribal Cultural Resources

Based on a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) conducted as part of the Cultural Resources Study, as described in further detail in the Method of Analysis section below, recorded Native American sacred sites or traditional cultural properties are not known to exist within the project site.

The County sent invitations to consult on the proposed project pursuant to Assembly Bill (AB) 52 and Senate Bill (SB) 18 on January 24, 2025, as described in the Method of Analysis section below. Tribal cultural resources were not identified for the project site.

4.5.3 REGULATORY CONTEXT

Federal, State, and local governments have developed laws and regulations designed to protect significant cultural and tribal cultural resources that may be affected by actions that they undertake or regulate. The following section contains a summary of basic federal, State, and local regulations governing the preservation of historic, archaeological, and tribal cultural resources of national, State, and local significance.

Federal Regulations

The following are the federal environmental laws and policies relevant to cultural and tribal cultural resources.

Section 106 for the National Historical Preservation Act of 1966

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historical Preservation Act (NHPA) of 1966. Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the NRHP. The criteria for determining NRHP eligibility are found in 36 CFR Part 60. Amendments to the NHPA (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or uses federal funding.

National Register of Historic Places

The NRHP is the nation's master inventory of known historic resources. The NRHP includes listings of resources, including: buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, State, or local level. Resources over 50 years of age may be listed on the NRHP. However, properties under 50 years of age that are of exceptional significance or are contributors to a district can also be included on the NRHP. Four criteria are used to determine if a potential resource may be considered significant and eligible for listing on the NRHP. The criteria include resources that:

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

A resource can be individually eligible for listing on the NRHP under any of the above four criteria, or can be listed as contributing to a group of resources that are listed on the NRHP. A resource can be considered significant in American history, architecture, archaeology, engineering, or culture. Once a resource has been identified as significant and potentially eligible for the NRHP, the resource's historic integrity must be evaluated. Integrity is a function of seven factors: location, design, setting, materials, workmanship, feeling, and association. The factors closely relate to the resource's significance and must be intact for NRHP eligibility.

Historical buildings, structures, and objects are usually eligible under Criteria A, B, and C based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion D, the potential to yield information important in prehistory or history. An archaeological test program may be necessary to determine whether the site has the potential to yield important data. The lead federal agency makes the determination of eligibility based on the results of the test program and seeks concurrence from the State Historic Preservation Officer (SHPO).

Effects to NRHP-eligible resources (historic properties) are adverse if the project may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

State Regulations

The following are the State environmental laws and policies relevant to cultural and tribal cultural resources.

California Environmental Quality Act and California Register of Historic Places

Applicable State historic preservation regulations include the statutes and guidelines contained in CEQA (Public Resources Code [PRC] Sections 21083.2 and 21084.1 and Sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA requires lead agencies to consider the potential effects of a project on historic resources and unique archaeological resources. A "historic resource" includes, but is not limited to, any object, building, structure, site, area, place, record or

manuscript that is historically or archaeologically significant (PRC Section 5020.1). Under Section 15064.5 of the CEQA Guidelines, a resource is considered "historically significant" if one or more of the following CRHR criteria have been met:

1) The resource is associated with events that have made a significant contribution to the broad patterns of California history;
2) The resource is associated with the lives of important persons from our past;
3) The resource embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual or possesses high artistic values; or
4) The resource has yielded, or may be likely to yield, important information in prehistory or history.

In addition, the resource must retain integrity. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

CEQA requires preparation of an EIR if a proposed project would cause a "substantial adverse change" in the significance of a historical resource. A "substantial adverse change" would occur if a proposed project would result in physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines Section 15064.5[b][1]).

In addition to historically significant resources, which can include archaeological resources that meet the criteria listed above, CEQA also requires consideration of "unique archaeological resources." If a site meets the definition of a unique archaeological resource, the site must be treated in accordance with the provisions of PRC Section 21083.2. Under PRC Section 20183.2(g), an archaeological resource is considered "unique" if it:

1) Is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
2) Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
3) Has a special kind or particular quality such as oldest, best example, largest, or last surviving example of its kind;
4) Is at least 100 years old and possesses substantial stratigraphic integrity; or
5) Involves important research questions that can be answered only with archaeological methods.

CEQA also includes specific guidance regarding the accidental discovery of human remains. Specifically, CEQA Guidelines Section 15064.5(e) requires that if human remains are uncovered, excavation activities must be stopped and that the County coroner be contacted. If the county coroner determines that the remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC identifies the most likely descendant, and that individual or individuals can make recommendations for treatment of the human remains under the procedures set forth in CEQA Guidelines Section 15064.5.

The SHPO maintains the CRHR. Properties that are listed on the NRHP are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Assembly Bill 52

AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. "Tribal cultural resources" are defined as either:

> (1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
>
> (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
> (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
>
> (2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under AB 52, a project that may cause a substantial adverse change in the significance of a tribal cultural resource is defined as a project that may have a significant effect on the environment. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. AB 52 (PRC Section 21080.3.1) requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe(s) requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe(s). Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe(s).

Senate Bill 18

Signed in September 2004, SB 18 amended Section 815.3 of the Civil Code, amended Sections 65040.2, 65092, 65351, 65352, and 65560 of the PRC, and added to Sections 65352.3, 65352.4, and 65562.5 of the Government Code, relating to traditional tribal cultural places. SB 18 requires local (i.e., City and County) governments to consult with California Native American tribes, when amending or adopting a general plan or specific plan, or designating land as open space, in order to aid in the protection of traditional tribal cultural places ("cultural places"). The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). Because the proposed project requires County approval of a General Plan Amendment, the project is subject to SB 18 consultation requirements.

Local Regulations

The following are the local environmental laws and policies relevant to cultural and tribal cultural resources.

San Joaquin County General Plan

The relevant goals and policies from the County's General Plan related to cultural and tribal cultural resources are presented below.

Natural and Cultural Resources Element

Goal NCR-6 To protect San Joaquin County's valuable architectural, historical, archeological, and cultural resources.

Policy NCR-6.1 **Protect Historical and Cultural Resources.** The County shall protect historical and cultural resources and promote expanded cultural opportunities for residents to enhance the region's quality of life and economy.

Policy NCR-6.2 **No Destruction of Resources.** The County shall ensure that no significant architectural, historical, archeological, or cultural resources are knowingly destroyed through County action.

Policy NCR-6.3 **Encourage Public and Private Preservation Efforts.** The County shall continue to encourage efforts, both public and private, to preserve the historical and cultural heritage of San Joaquin County and its communities and residents.

Policy NCR-6.5 **Protect Archeological, Paleontological, and Historical Resources.** The County shall protect significant archeological, paleontological, and historical resources by requiring a cultural resources report be prepared by a qualified cultural resource specialist prior to the issuance of any discretionary permit or approval in areas determined to contain significant historic or prehistoric archeological artifacts or paleontological resources that could be disturbed by project construction. The County shall require feasible mitigation identified in the report, such as avoidance, testing, or data recovery efforts, to be implemented. (MMRP)

Policy NCR-6.6 **Tribal Consultation.** The County shall consult with Native American tribes regarding proposed development projects and land use policy changes consistent with the State's Local and Tribal Intergovernmental Consultation requirements.

Policy NCR-6.8 **Land Use and Development.** The County shall encourage land uses and development that retain and enhance significant historic properties and sustain historical community character.

Policy NCR-6.10	**Inadvertent Discovery of Cultural Resources**. If prehistoric or historic-period archaeological resources are encountered during ground disturbing activities in the county, all activities within 100 feet shall halt and the County shall be notified. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that a project could damage a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the County. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals. (MMRP)

4.5.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine potential impacts of the proposed project related to cultural and tribal cultural resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, an impact related to cultural or tribal cultural resources is considered significant if the proposed project would result in any of the following:

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;
- Disturb any human remains, including those interred outside of dedicated cemeteries;

- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
    (a) Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC 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 PRC Section 5024.1. In applying the criteria set forth in subdivision (c) of PRC Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Method of Analysis

The impact analysis contained within this chapter is based primarily on the Cultural Resources Study prepared for the proposed project by Eileen Barrow and Associates, as well as an Archival Research and Windshield Survey of the off-site improvement areas prepared by Tom Origer and Associates, as well as a discussion of tribal consultation efforts conducted by the County, pursuant to AB 52 and SB 18.

Cultural Resources Study

The Cultural Resources Study included archival research, a field survey, and consultation with the NAHC. The methodology of the Cultural Resources Study is described in further detail below.

Archival Research

A variety of documentation pertinent to the study area was examined at local libraries and online, including, but not limited to, 19th- and 20th-century maps and aerial photographs, ethnographic literature, County property ownership records, and local histories. The research was conducted to assess the potential to encounter historic-era and/or tribal cultural archaeological sites and the built environment within the area.

In addition to the examination of pertinent local information, a records search of the California Historical Resources Information System (CHRIS) for the project area was completed at the CCIC on December 10, 2024 (File No. 13142L). As discussed above, according to the CCIC records search results, the majority of the project site has been subject to 10 previous cultural resource studies conducted between 1976 and 2024. The previous studies included cultural resource base maps, records, survey reports, and other materials from sources including, but not limited to, the current listings of properties on the NRHP, the California Historical Landmarks, the CRHR, the California Points of Historical Interest, the Office of Historic Preservation's (OHP) Archaeological Determinations of Eligibility, and the Built Environment Resources Directory (BERD).

Finally, a model for predicting a location's sensitivity for buried archaeological sites was formulated by Byrd et al. based on the age of the landform, slope, and proximity to water. A location is considered to have the highest sensitivity if the landform dates to the late Holocene, has a slope of five percent or less, is within 150 meters of fresh water (492.1 feet), and 150 meters of confluence. The Holocene Epoch is the current period of geologic time, which began approximately 11,700 years ago, and coincides with the emergence of human occupation of the area. A basic premise of the model is that archaeological deposits will not be buried within landforms that predate human colonization of the area. Calculating such factors using the buried

site model, a location's sensitivity is scored on a scale of 1 to 10 and classified, as follows: lowest (<1), low (1 to 3), moderate (3 to 5.5), high (5.5 to 7.5), highest (>7.5).

Field Survey

The entirety of the project site was subjected to a pedestrian survey between October 28 and November 1, 2024. Approximately 84.75 hours were spent in the field, and conditions were cool to warm and sunny. According to the Cultural Resources Study, most of the project site is planted with orchards and vineyards and, thus, is largely clear of ground-obscuring vegetation. The Cultural Resources Study notes that the central portions of some tree rows were covered with grasses and forbs, however, approximately 75 percent of the ground surface was exposed and available for inspection. Approximately 60 acres of the project site is grassland, which was walked in systematic transects spaced 15 meters apart. Hoes were used as needed to clear small patches and enhance ground surface visibility. Areas that were developed with buildings were examined where space allowed.

Special attention was paid to the places where buildings had been observed during archival research. Building areas observed during a previous survey in 2023 were cursorily examined to see if any changes had occurred since previous documentation.

Native American Tribal Contact

As discussed above, Eileen Barrow and Associates contacted the NAHC to request a search of the SLF to determine whether known tribal cultural resources are located within or near the project site. The SLF is populated by members of the Native American community who have knowledge about the locations of tribal resources.

Archival Research and Windshield Survey

This EIR also programmatically reviews a range of off-site intersection and roadway improvements that would be triggered by full project buildout, including roadways within the City of Tracy and San Joaquin County. Access authorization was not obtained for the various study roadway improvement areas, and thus, programmatic review was conducted by archival research and windshield surveys from publicly accessible areas. The methodology of the Archival Research and Windshield Survey report is described in further detail below.

Archival Research

A cultural resources records search for the off-site improvement study areas was completed at the CCIC on September 27, 2023, and December 10, 2024 (File No.s 12669L and 13142L). The records search was conducted to determine the extent of previous surveys within 0.25-mile radius of the study areas, and whether previously documented precontact or historic archaeological sites, architectural resources, or traditional cultural properties exist within the area. According to records from the CCIC, 80 previous cultural resources studies within or immediately adjacent to the 16 off-site improvement study areas were conducted between 1989 and 2023. South Chrisman Road has been subject to the most amount of study, with 18 reports conducted within or immediately adjacent to the South Chrisman Road study area. The only off-site improvement study area that has not been subject to previous cultural resource study is the South Chrisman Road and Westbound Interstate 580 (I-580) Ramp intersection. Several additional investigations have been conducted within 0.25-mile of the off-site improvement areas.

The archival searches of archaeological and historical records, national and State databases, and historic maps included review of the NRHP, the California Historical Landmarks, the CRHR, and the California Points of Historical Interest as listed in the OHP's Historic Property Directory and

the BERD. In addition, archival research was conducted through an examination of 19th- and 20th-century maps and aerial photographs to gain insight into the nature and extent of historical development area.

The Archival Research and Windshield Survey report also included the Byrd et al. model for predicting a location's sensitivity for buried archaeological sites based on the age of the landform, slope, and proximity to water, similar to the above.

Windshield Survey

All off-site improvements study areas, as well as adjacent parcels, were subject to a windshield survey conducted by Tom Origer and Associates. All parcels were photographed from the street. In some instances, parcels adjacent to the study areas fronted a different street and a picture of the front of the property was taken. Some fences or vegetation did not allow for an unobscured picture of buildings on certain adjacent parcels. During the windshield survey, notes were made about demolitions or information that appeared inconsistent with what archival research showed about the year of construction of a property.

The off-site improvement study areas and the number of parcels located adjacent to each location are listed below in Table 4.5-1.

Table 4.5-1
Parcels Adjacent to the Off-Site Improvement Study Areas

Study Area Location	Parcel Count
South Corral Hollow Road/West Linne Road	12
South Tracy Boulevard/West Linne Road	22
South MacArthur Drive/West Linne Road	16
West 11th Street/Grant Line Road/South Kasson Road/I-205 Interchange	16
West Shulte Road/South Chrisman Road	8
West 11th Street/South Chrisman Road	8
Valpico Road/South Chrisman Road	7
West Linne Road/South Chrisman Road	23
South Chrisman Road/Westbound SR 132 Ramps	5
South Chrisman Road/Eastbound SR 132 Ramps	1
South Chrisman Road/Westbound I-580 Ramp	1
South Chrisman Road/Eastbound I-580 Ramp	3
South Bird Road/Westbound SR 132 Ramps	6
South Bird Road/Eastbound SR 132 Ramps	3
South Chrisman Road	115
West Linne Road	33
Total	**279**

Source: Tom Origer and Associates, January 2025.

Assembly Bill 52 and Senate Bill 18 Tribal Consultation

In compliance with AB 52 (PRC Section 21080.3.1) and SB 18, project notification letters were distributed on January 24, 2025, to the applicable tribes who had previously requested notification of new development projects within the County. Specifically, project notification letters were sent to representatives of the Buena Vista Rancheria of Me-Wuk Indians, California Tribal TANF Partnership, California Valley Miwok Tribe, North Valley Yokuts Tribe, and United Auburn Indian Community (UAIC). Requests for consultation were not received within the required consultation periods.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

4.5-1 Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5. Based on the analysis below, even with the implementation of mitigation, the impact is *significant and unavoidable*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase, Specific Plan Buildout

Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

A review of historical maps and aerial photos shows the range of use and occupation within the project site from 1916 to the present. Currently, multiple buildings are located on-site, including an agricultural machinery manufacturing facility, five single-family houses, and various sheds. However, according to the Cultural Resources Study, none of the on-site buildings have been listed on the CRHR. In addition, the field survey of the project site conducted by Eileen Barrow and Associates determined that buildings within the project site are either too recently constructed to warrant further evaluation or are unlikely to meet criteria for CRHR inclusion if evaluated.

For example, the agricultural building located within Map #1 is of simple construction that is ubiquitous in the region. While agriculture is an important part of the area's history, the complex of buildings in which this building is found is a combination of being too recently constructed and lacking enough integrity of buildings that date to the same time period to adequately illustrate the importance of that theme. Therefore, the building at Map #1 would not meet criteria for inclusion on CRHR.

The house at Map #3 is a simple example of the Contemporary Style of the post-war era. In general, this architectural style is characterized by minimal architectural detail and includes:

- Angular and boxy massing with low-profile;
- Flat or low-pitched roof with pronounced roofline;
- Large expanses of glass, with tops of openings aligned at plate line;
- Non-traditional exterior materials;

- Stacked bond brick or concrete;
- Emphasis on horizontality;
- Integration with the surrounding landscape; and
- Often reflect modified Ranch or Split-level with garage or carport on lower level.

The building within Map #3 is unlikely to meet criteria for inclusion in the CRHR, as the building is not directly associated with any important persons or historic events. As an example of the Contemporary Style, the house has some attributes (e.g., boxy, concrete block construction with low-pitched roof), but is not an especially good example. An individual property eligible under Criterion 3 of the CRHR would need to be an excellent or rare example of the architectural style and/or an embodiment of a significant architectural innovation. However, according to the Cultural Resources Study, the building within Map #3 is neither.

Three known cultural resources are located within the project site: the Banta-Carbona Lateral 6 West Canal (P-39-005479), the Delta-Mendota Canal (P-39-000089), and the California Aqueduct (P-39-000090). Lateral 6 of the Banta-Carbona Irrigation System (P-39-005479) was previously evaluated and found ineligible for inclusion on the NRHP and CRHR. Therefore, further recommendations related to the structure are not required.

According to the Cultural Resources Study, the Delta-Mendota Canal and the California Aqueduct were evaluated and are listed on the NRHP and CRHR. Therefore, the structures meet the criteria for consideration as historical resources pursuant to CEQA.

The California Department of Water Resources (DWR) manages the California Aqueduct and the San Luis and Delta-Mendota Water Authority (SLDMWA) manages the Delta-Mendota Canal on behalf of the U.S. Bureau of Reclamation. The Initial Phase would not require the widening of any bridges over the Delta-Mendota Canal or California Aqueduct and therefore would not impact the identified historical resources. However, because full project buildout includes the widening of bridges on South Chrisman Road located over both the Delta-Mendota Canal and the California Aqueduct, the proposed project could result in a substantial adverse change in the significance of the two resources.

Off-Site Improvements Study Areas

As discussed throughout this EIR, full project buildout would trigger a range of off-site intersection and roadway improvements, including improvements to roadways within the City of Tracy and San Joaquin County. A total of 279 parcels are located adjacent, or in very close proximity, to the off-site improvement study areas. The 279 parcels were grouped into the following categories to allow for the assessment of their potential eligibility for inclusion on the CRHR:

- Vacant/Agriculture (84 parcels);
- Pre-WWII Houses – 19th century through 1944 (26 parcels);
- Post-WWII Houses – 1945 through 1975 (44 parcels);
- Pre-WWII Buildings (non-residential) – 19th century through 1944 (eight parcels);

- Post-WWII Buildings (non-residential) – 1945 through 1975 (10 parcels);
- Rail and Canal Structures (17 parcels); and
- Modern Buildings/Structures (90 parcels).

The 84 parcels classified as Vacant/Agricultural do not contain important buildings or structures and, thus, are not discussed any further. In addition, buildings constructed since 1975 are considered modern buildings too recently constructed to be eligible for the CRHR, and the 90 parcels within the Modern Buildings/Structures category do not warrant further investigation. Only the parcels that fall under the categories of Pre-WWII Houses 19th century through 1944, Post-WWII Houses 1945 through 1975, Pre-WWII Buildings (non-residential) 19th century through 1944, Post-WWII Buildings (non-residential) 1945 through 1975, and Rail and Canal Structures are discussed in further detail below.

Pre-WWII Houses – 19th Century through 1944

According to the Archival Research and Windshield Survey prepared for the off-site improvement areas, 26 parcels contain buildings within the Pre-WWII Houses – 19th Century through 1944 category. The buildings located within the parcels include houses, some of which have associated outbuildings. According to the Archival Research and Windshield Survey report, a number of buildings located within this category have the potential to meet criteria for inclusion on the CRHR.

Post-WWII Houses – 1945 through 1975

Of the 279 total parcels adjacent or close to the off-site improvement study areas, 44 parcels contain buildings within the Post-WWII Houses – 1945 through 1975 category. Although the buildings could be considered under the context of post-World War II development, individual single-family houses are not generally eligible for the CRHR based on criterion one, as the buildings do not adequately convey associations with an event or person of recognized significance in California or American history such as World War II. If the residences were part of a tract, or community that was developed at the time, then the residences could be eligible as part of a district. However, according to the Archival Research and Windshield Survey report, the buildings adjacent to the off-site improvement study areas are not a part of a cohesively developed subdivision or tract. Evidence of association with a potential theme of Cold War-era construction or that the buildings were associated with people important to local, State, or national history was not found; therefore, criterion two of the CRHR is not met. The buildings within the category are not architecturally distinctive and would not meet criterion three of the CRHR. In general, buildings do not meet CRHR criterion four. As such, buildings within the Post-WWII Houses – 1945 through 1975 category are considered ineligible for inclusion on the CRHR.

Pre-WWII Buildings (Non-Residential) – 19th Century through 1944

Eight parcels contain buildings that fall within the Pre-WWII Buildings (Non-Residential) – 19th Century through 1944 category. Two of the parcels contain the San Joaquin Defense Depot, which was constructed in 1942. The San Joaquin Defense Depot buildings were evaluated and found ineligible for inclusion on the NRHP. According to the Archival Research and Windshield Survey report, the remaining six parcels contain buildings that have the potential to meet criteria for inclusion on the CRHR.

Post-WWII Buildings (Non-Residential) – 1945 through 1975

According to the Archival Research and Windshield Survey prepared for the off-site improvement areas, 10 parcels contain buildings within the Post-WWII Buildings (Non-Residential) – 1945 through 1975 category. One property has been previously evaluated and found ineligible for inclusion on the CRHR.

Similar to the buildings within the Post-WWII Houses – 1945 through 1975 category, individual buildings that date to this time period would need to be an important example of the time period to be eligible for inclusion on the CRHR. If the buildings were part of a tract or community, then the buildings could be eligible as part of a district. However, the buildings are not a part of a cohesive planned development and are not associated with important historical individuals. With respect to the architectural style as eligibility, the buildings are all vernacular; while some exhibit a few characteristics that reflect an architectural style, none constitute an example of a style necessary for a building to meet CRHR criterion 3 of the CRHR. Therefore, the 10 parcels do not contain buildings that meet criteria for inclusion on the CRHR.

Rail and Canal Structures

While 17 parcels containing rail and canal structures are located adjacent or in very close proximity to the off-site improvement study areas, the parcels are comprised of the same linear railroad and canal structures crossing different parcels. According to the Archival Research and Windshield Survey report, six such structures warrant evaluation, including the following:

- Western Pacific Rail line;
- Western Pacific Rail line-Tesla Branch (P-39-000098);
- Southern Pacific-San Francisco and New Orleans Rail line (now managed by the San Joaquin Valley Railroad);
- Banta-Carbona Irrigation District Lateral 4 West Canal;
- Banta-Carbona Irrigation District Lateral 5 West Canal (P-39-000088); and
- Banta-Carbona Irrigation District Lateral 6 West Canal (P-39-005479).

In addition, although not located on registered parcels, the Delta-Mendota Canal and the California Aqueduct also cross the off-site improvement study areas. Both structures have been evaluated and are listed on the NRHP and CRHR.

Most of the crossings of the Western Pacific Rail line and the Western Pacific Rail line – Tesla Branch within the off-site improvement study areas have been previously examined and do not meet the criteria and integrity requirements for inclusion on the CRHR. One crossing of the Western Pacific Rail line – Tesla Branch over West Linne Road has been removed. The crossing of the Western Pacific Rail line at South Chrisman Road and the crossing of the Southern Pacific-San Francisco and New Orleans Rail line (now managed by the San Joaquin Valley Railroad) at West Lehman Road and at South Chrisman Road had not been examined prior to preparation of the Archival Research and Windshield Survey prepared for the proposed project. As discussed in Appendix C to the Archival Research and Windshield Survey report, both crossings meet the age requirement for inclusion on the CRHR and should be formally evaluated prior to alterations.

A segment of the Banta-Carbona Lift Canal (P-39-000087), a segment of Lateral 5 (P-39-000088), and a segment of Lateral 6 (P-39-005479) of the Banta Carbona Irrigation District have been previously evaluated and found ineligible for inclusion on the CRHR. Therefore, according to the Archival Research and Windshield Survey report, Lateral 4 is unlikely to meet criteria for inclusion on the CRHR because of the ineligibility of the other canal segments.

As previously discussed, the San Joaquin Pipelines 1 and 2 of the Hetch Hetchy Aqueduct were found eligible for inclusion on the NRHP, and are listed on the CRHR. The San Francisco Public Utilities Commission (SFPUC) owns and manages the Hetch Hetchy Aqueduct. Project applicants who work within the right-of-way (ROW) of the Hetch Hetchy Aqueduct are required by the SFPUC to show compliance with the requirements of CEQA. Where the San Joaquin Pipelines 1 and 2 of the Hetch Hetchy Aqueduct cross the off-site improvement study areas, the pipelines are underground. Therefore, according to the Archival Research and Windshield Survey report prepared for the proposed project, the pipelines are unlikely to be impacted by any road widening activities. However, should the status of the pipelines change, the off-site improvements could impact such resources.

Off-Site Improvement Study Areas Conclusion

Overall, according to the Archival Research and Windshield Survey, 32 buildings and structures have the potential to be eligible for listing on the CRHR (see Table 4.5-2). Thus, further evaluation by an architectural historian who meets the Secretary of the Interior's Standards would be required prior to any relevant intersection or road improvements to determine whether the structures would meet the criteria for inclusion on the CRHR. Without such evaluations, construction of the off-site improvements could potentially impact historic buildings and structures eligible for listing.

Conclusion

Based on the above, certain existing structures on the project site or within the off-site improvements study area would be considered eligible for listing under the NRHP or CRHR. The Initial Phase would not impact the existing structures listed under the NRHP or CRHR; however, the proposed bridge widenings and roadway and intersection improvements associated with Specific Plan Buildout and the off-site improvements could potentially impact resources eligible for listing under the NRHP or CRHR. Therefore, development of the proposed project could result in a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact. However, until site-specific evaluations of the buildings and structures abutting the off-site improvement study areas are conducted, the degree to which potential impacts to existing historic structures can be avoided cannot be determined. Therefore, in order to establish a conservative analysis, the impact would remain *significant and unavoidable,* even with mitigation.

Table 4.5-2
Properties Abutting or Within Off-Site Improvement Study Areas that Warrant Evaluation

Address	APN	Date	Off-Site Improvement Study Area
22656 South Kasson Road	239-060-070	Post 1937	South Kasson Road/Grant Line Road/West 11th Street
3698 West 11th Street	239-070-040	1930	South Kasson Road/Grant Line Road/West 11th Street
3706 West 11th Street	239-070-050	1935	South Kasson Road/Grant Line Road/West 11th Street
28444 South MacArthur Drive	248-070-180	1943	South MacArthur Drive/West Linne Road
27707 South Chrisman Road	248-080-010	1903	South Chrisman Road
8393 West Linne Road	248-080-250	1920	West Linne Road
27251 South Chrisman Road	248-100-040	1935	South Chrisman Road
27527 South Chrisman Road	248-100-280	1940	South Chrisman Road
28055 South Chrisman Road	248-620-020	1926	South Chrisman Road
28291 South Chrisman Road	248-630-050	Post 1942 (USGS)	South Chrisman Road/West Linne Road
24195 South Chrisman Road	250-150-190	Post 1942 (USGS)	South Chrisman Road/West 11th Street
24201 South Chrisman Road	250-150-210	Post 1942 (USGS)	South Chrisman Road
24301 South Chrisman Road	250-150-220	1942	South Chrisman Road
24353 South Chrisman Road	250-150-230	1939	South Chrisman Road
24427 South Chrisman Road	250-160-110	1927	South Chrisman Road
7490 West 11th Street	250-200-010	Post 1942 (USGS)	South Chrisman Road/West 11th Street
7200 West 11th Street	250-200-020	1915	South Chrisman Road/West 11th Street
27690 South Chrisman Road	252-080-030	Post 1942 (USGS	South Chrisman Road
27728 South Chrisman Road	252-080-040	1922	South Chrisman Road
28720 South Corral Hollow Road	253-110-200	Post 1942(USGS)	South Corral Hollow Road/West Linne Road
10450 West Linne Road	253-120-440	Post 1942 (USGS)	West Tracy Boulevard/West Linne Road
8880 West Linne Road	253-210-040	Pre1916	South MacArthur Drive/West Linne Road
8482 W Linne Road	253-210-250	1926	West Linne Road
7700 West Linne Road	253-220-030	Post 1942 (USGS)	South Chrisman Road/West Linne Road
29325 South Chrisman Road	253-220-090	1942	South Chrisman Road
29999 South Chrisman Road	253-220-110	Post 1942 (USGS)	South Chrisman Road
7594 West Linne Road	253-220-150	1909	South Chrisman Road/West Linne Road
29561 South Chrisman Road	253-220-240	1937	South Chrisman Road
7212 West Linne Road	253-320-030	Post 1922(USGS)	South Chrisman Road/West Linne Road
29100 South Chrisman Road	253-320-110	1925	South Chrisman Road
Western Pacific Railroad at South Chrisman Road	248-010-180 252-010-100	N/A	South Chrisman Road
Southern Pacific-San Francisco and New Orleans Rail Line at South Chrisman Road	252-010-010 250-010-220	N/A	South Chrisman Road/West Schulte Road

Source: Tom Origer and Associates, January 2025.

Initial Phase

None required.

Specific Plan Buildout

4.5-1(a) The proposed widening of the crossings of the California Aqueduct and the Delta-Mendota Canal shall be designed in keeping with the guidelines outlined in The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings (2017). An architectural historian shall review the design of the crossings prior to approval of improvement plans associated with such improvements to ensure that the guidelines are met. The proposed crossings shall also be reviewed by the State Historic Preservation Officer (SHPO) prior to approval of plans associated with such improvements to ensure that the construction of the crossings would not have an adverse effect on the structures.

In addition, any proposed development and construction that encroaches adjacent to or within the Delta-Mendota Canal right-of-way shall meet the requirements of the Engineering and Operations and Maintenance (O&M) Guidelines for Crossings as enforced by the San Luis & Delta-Mendota Water Authority (SLDMWA). Any crossings shall be designed in such a way to avoid adverse effects on the NRHP eligibility of the Delta-Mendota Canal and avoid affecting the character-defining features of the Delta Mendota Canal, including the historical alignment and ability to convey water as part of a largescale water conveyance system. Pursuant to the SLDMWA, the proposed bridge shall span the Delta-Mendota Canal without affecting the alignment or function. Pursuant to the Bureau of Reclamation's Guidelines, all new bridge crossings associated with the proposed project shall fully span the Delta-Mendota Canal. Final Delta-Mendota Canal bridge design shall be subject to approval by the SLDMWA and the San Joaquin County Department of Public Works.

The California Department of Water Resources (DWR) manages the California Aqueduct and requires that an encroachment permit be obtained for any crossing above or below the California Aqueduct. The crossing shall avoid adverse effects on the NRHP eligibility of the California Aqueduct and the character-defining features of the California Aqueduct, including the historical alignment and ability to convey water as part of a largescale water conveyance system. Typically, character preservation is accomplished by creating a crossing that spans the California Aqueduct and would not affect the alignment or function. Final California Aqueduct bridge design shall be subject to approval by the DWR and San Joaquin County Department of Public Works.

Proof of compliance with the aforementioned standards shall be submitted to the San Joaquin County Community Development Department for review and approval.

Off-Site Improvements Study Area

4.5-1(b) Prior to construction of the off-site improvements within study areas identified in Table 4.5-2 of this EIR, additional survey work shall be conducted on the 32 buildings and structures within or abutting such improvements to determine if the buildings and structures would meet criteria for inclusion on the CRHR. In addition, the buildings and structures shall be subjected to an evaluation by an architectural historian who meets the Secretary of the Interior's Standards.

Evaluation of the buildings and structures shall include: the development of an appropriate historical context applicable to the building/structure type and potential period of significance; an examination of the architecture or engineering of the building/structure; and sufficient historical research about the property to establish the potentially important people associated with the building/structure. Once completed, a determination of the building/structure's eligibility for inclusion on the CRHR shall be made, as well as a determination of the building/structure's integrity. All work shall be overseen by an architectural historian that meets the Secretary of the Interior's Standards and shall be documented in a report and on appropriate Department of Parks and Recreation (DPR) 523 forms. All materials shall be submitted to the San Joaquin County Community Development Department as proof of compliance. In addition, if the building/structure is located within another agency's jurisdiction, the materials shall also be submitted to the relevant agency.

If a formal evaluation finds that a building and/or structure meets criteria for listing on the CRHR and would be impacted by the off-site improvements, and protection and/or preservation is not possible, then mitigation shall include, but is not limited to: relocation of the building/structure; intensive documentation of the building prior to demolition, such as documentation promulgated by the Historic American Buildings Survey and the Historic American Engineering Record; and site interpretation. Specific and appropriate mitigation shall be developed by the architectural historian relative to the specific project impacts.

South Chrisman Road/Eastbound I-580 Ramp

4.5-1(c) Roadway improvements located above the underground San Joaquin Pipelines 1 and 2 of the Hetch Hetchy Aqueduct shall be subject to the guidelines outlined in The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, & Reconstructing Historic Buildings (2017). An architectural historian shall review the design of the crossings prior to approval of improvement plans to ensure that the guidelines are met and the construction of the off-site improvements would not have an adverse effect on the structures. Final design of the roadway improvements shall be subject to approval by Caltrans and the San Joaquin County Department of Public Works. Proof of compliance with this measure shall be submitted to the San Joaquin County Community Development Department.

4.5-2 Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase, Specific Plan Buildout

Based on the archival research and field surveys conducted as part of the Cultural Resources Study, known archaeological sites are not located within the project site. Given the project site's history of disturbance associated with agricultural uses and based on landform age, the analysis of the environmental setting, and incorporating an analysis of sensitivity for buried sites, the Cultural Resources Study concluded that the majority of the project site has a low potential for buried archaeological site indicators due to the scarcity of natural fresh water. Two locations within the project site, where small drainages flow out of the hills into the valley and into the project site, have a high potential to include buried archaeological resources. The location of the high buried site potential within the study area is outside of the Initial Phase site boundaries and is shown in Figure 4.5-3. As part of the full project buildout, the southernmost area would be preserved as an open space/retention basin area and the larger area adjacent to the Delta-Mendota Canal would be developed with limited industrial uses.

The project area is located within the ancestral territory of local Native American tribes. While field surveys conducted as part of the Cultural Resources Study did not detect human remains, cultural sites, or artifacts of ceremonial significance within the project site, the potential for human remains to be discovered during construction cannot be eliminated due to the known precontact occupation of the project area by Native American tribes.

Based on the high sensitivity of limited portions of the project site, unknown archaeological resources could exist beneath the ground surface within the project site. In the event that on-site ground-disturbing activities encounter such resources during project construction, a substantial adverse effect could occur.

Off-Site Improvement Study Area

Application of the buried sites model conducted as part of the Archival Research and Windshield Survey report indicates a low potential for buried resources throughout most of the off-site improvement study areas; however, the Archival Research and Windshield Survey report identifies two small areas with a high potential to include buried archaeological resources (see Figure 4.5-4). The first location is on South Chrisman Road and the second is at the eastern end of South Bird Road near the eastbound and westbound SR 132 ramps.

Figure 4.5-3
Locations of High Buried Site Potential Within Project Site

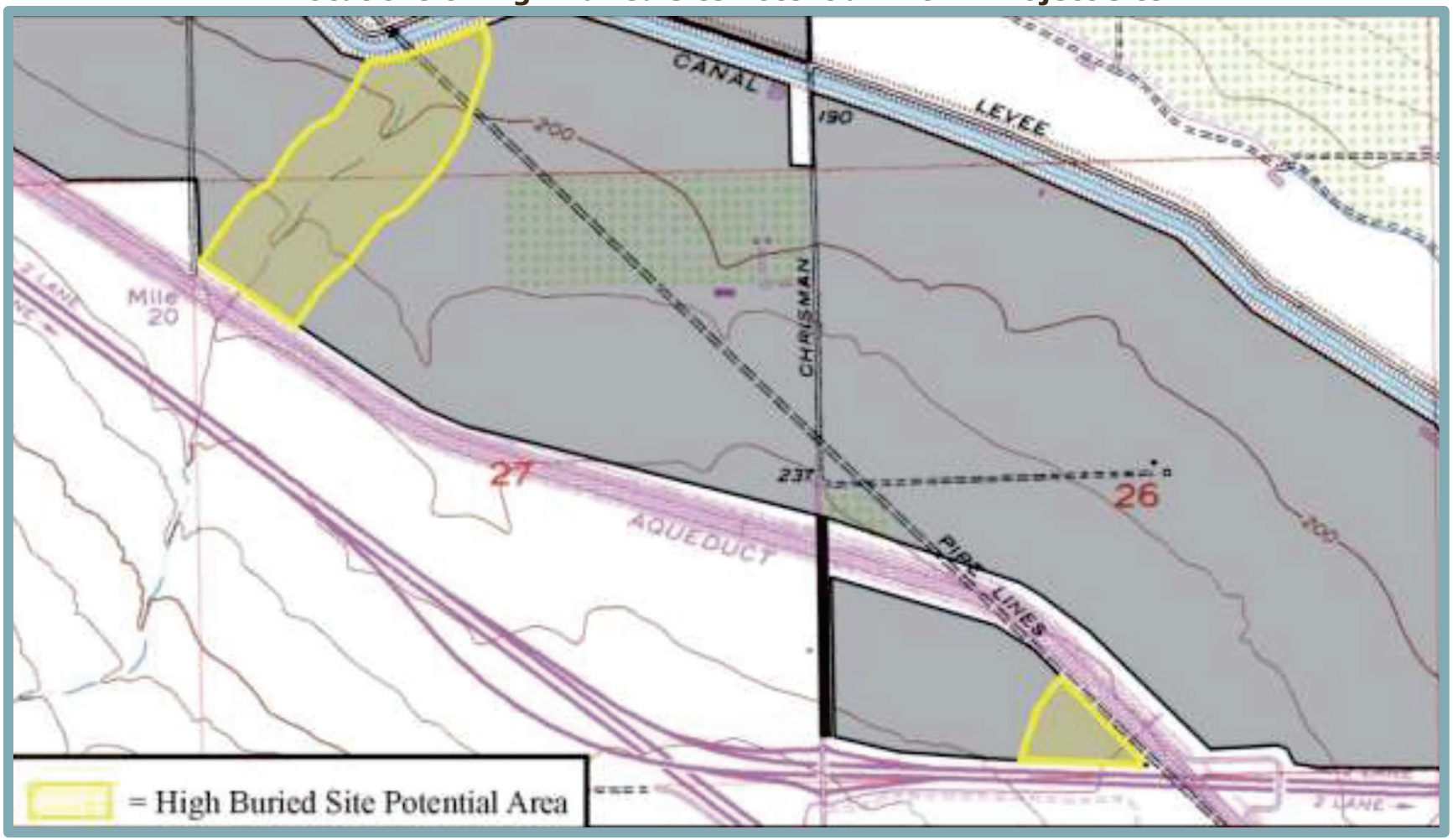
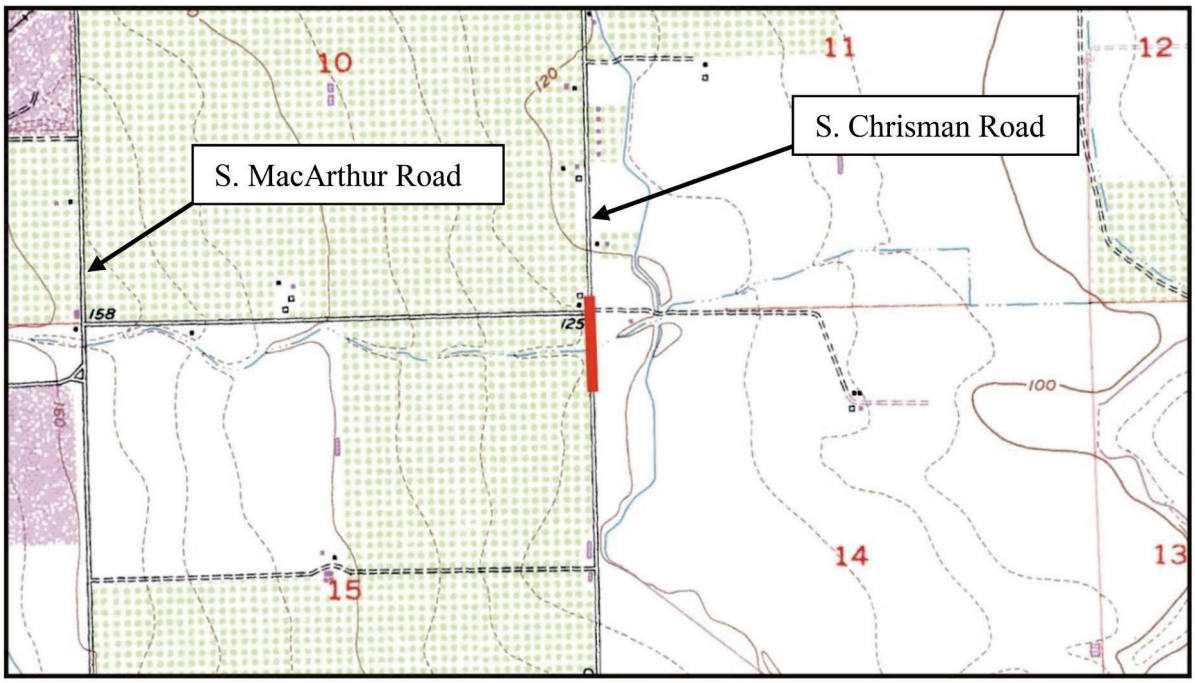
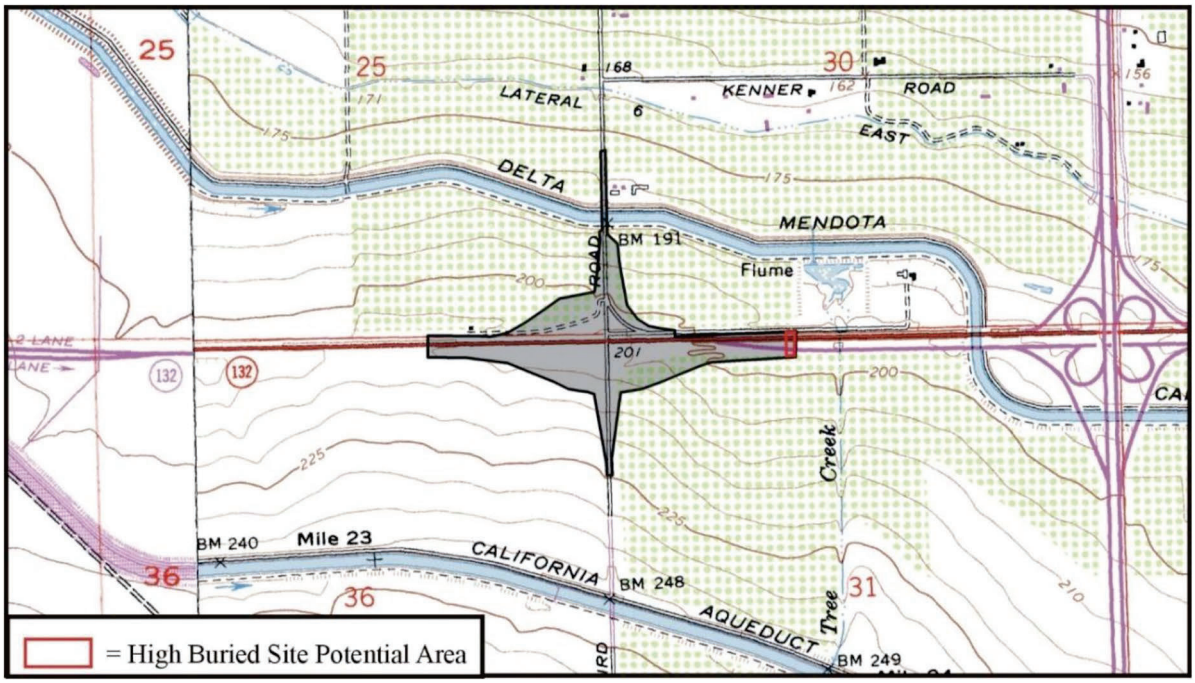


*Figure not OCR compatible.

Figure 4.5-4
Off-Site Improvement Study Areas with High Buried Site Potential



Location of high buried site sensitivity (shown in red) along South Chrisman Road



Location of high buried site sensitivity (shown in red) along South Bird Road/SR 132.

*Figure not OCR compatible.

In addition, while known archaeological resources have not been documented within any of the off-site improvement study areas, only the South Corral Hollow Road/West Linne Road intersection has been completely studied. The remaining intersections, as well as the off-site improvement areas located on South Chrisman Road and most of West Linne Road have not been surveyed in their entirety. Therefore, unknown archaeological resources could exist beneath the ground surface and ground-disturbing activities associated with the off-site improvements could result in a substantial adverse effect if such resources are encountered.

Conclusion

Based on the above, although archaeological resources have not been identified in the immediate project vicinity and are not anticipated to occur on the project site due to a lack of known occurrences in the region, the possibility exists that previously unknown resources could be discovered within the project site or off-site improvement areas during construction activities. Therefore, construction activities associated with project buildout, including off-site improvements, could uncover undocumented archaeological resources and the proposed project could cause a substantial adverse change in the significance of a unique archaeological resource. As such, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.5-2(a) requires ground-disturbing activities to cease if archaeological resources are discovered. Mitigation Measure 4.5-2(b) establishes the protocol if articulated or disarticulated human remains are discovered during project construction. Mitigation Measure 4.5-2(c) details the protocol if archaeological resources are discovered. Mitigation Measure 4.5-2(d) requires a cultural resources study to be conducted prior to any construction of off-site improvements, requires a subsurface investigation in locations of high buried site potential, and requires archaeologist review of any changes to improvement footprints. These mitigation measures address discovery of unidentified archaeological resources. Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

4.5-2(a) *Pursuant to CCR Section 15064.5(f) of the CEQA Guidelines, if archaeological resources are discovered during project-related activities, all ground-disturbing work shall be halted immediately until a qualified archaeologist who meets the Secretary of the Interior's Professional Qualification Standards can evaluate the find.*

Construction may continue on other parts of the project site while evaluation of the find is being made, provided that ground-disturbing activities are conducted at least 50 feet from the location of the potential archaeological resource while the archaeologist is evaluating its importance. Should the potential archaeological resource be determined significant, then the archaeologist shall develop appropriate mitigation measures specific to the resource, which may include, but

not be limited to, measures similar to Mitigation Measure 4.5-2(c) below.

4.5-2(b) *The following language shall be noted on Improvement Plans for any future development, subject to review and approval by the San Joaquin County Community Development Department or another agency within whose jurisdiction the off-site improvement study area is located:*

If articulated or disarticulated human remains are encountered within the proposed project site during construction activities, excavation or disturbance of the location shall be halted within 100 feet of the find. The San Joaquin County Coroner shall be immediately notified. If the Coroner determines the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall determine and notify a Most Likely Descendant (MLD). Further actions shall be determined, in part, by the desires of the MLD. The MLD shall be afforded 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendant may request mediation by the NAHC.

Specific Plan Buildout

4.5-2(c) *Prior to construction activities within the areas of the project site with high buried site potential, such areas shall be subject to a subsurface investigation conducted by a qualified archaeologist that meets the Secretary of the Interior's Standards for Archaeology to look for buried archaeological site indicators. The subsurface study shall include the excavation of soils to the maximum depth of proposed disturbance or to a depth where soils formed prior to the occupation of California is reached to investigate the areas for the presence of buried archaeological site indicators.*

If buried archaeological site indicators are found and would be impacted by the proposed development, the preferred treatment of the resource is protection and preservation. Protection and preservation shall be achieved in one of two ways: direct avoidance (i.e., not developing within the boundaries of the archaeological site); or by protecting intact archaeological deposits through the placement of sufficient fill over the deposit during and after construction.

If protection and preservation are not possible, then a subsurface testing program shall be conducted to determine if the archaeological site is eligible for inclusion on the California Register. The subsurface testing program shall be overseen by an archaeologist who meets the Secretary of the Interior's Standards and shall be outlined in a

Subsurface Testing Program Plan for Archaeological Resources. The plan shall include the following: a research design appropriate for the archaeological site type; a discussion and rationale of the investigation's field and laboratory methods; and an identification of the planned treatment and disposition of any recovered cultural materials, including the steps that shall be followed in the event of discovery of human remains. The identified steps shall be consistent with Health and Safety Code Section 7050.5. Following the completion of the subsurface testing program, a report shall be prepared that documents the methods of investigation, the types of analyses conducted, and a determination of the archaeological site's eligibility for inclusion on the California Register of Historic Resources (CRHR). The report shall include completed appropriate Department of Parks and Recreation (DPR) 523 forms for the archaeological site.

If the testing program finds that an archaeological site eligible for listing on the CRHR would be impacted, and protection and preservation is not possible, then data recovery of the impacted locations shall be necessary. Data recovery shall be performed by a qualified archaeologist that meets the Secretary of the Interior's Standards using appropriate archaeological techniques. Data recovery shall include processing and analysis of recovered cultural materials using appropriate archaeological methods, as well as the preparation of the recovered materials for permanent disposition pursuant to the requirements of the Archaeological Resources Treatment Plan. Monitoring may also be recommended by the archaeologist, but the decision to recommend monitoring as a mitigation measure shall be dependent upon the findings of the testing program.

Proof of compliance with the aforementioned standards shall be submitted to the San Joaquin County Community Development Department for review and approval.

Off-Site Improvements Study Area

4.5-2(d) *Prior to any proposed off-site intersection or roadway improvements, with the exception of any improvements at the South Corral Hollow Road/West Linne Road intersection, a cultural resources study shall be conducted to determine if any archaeological sites are present. The study shall be conducted by a qualified archaeologist that meets the Secretary of the Interior's Standards for Archaeology. In addition, the locations of high buried site potential identified in the Archival Research and Windshield Survey report prepared for the proposed project by Tom Origer and Associates (see Figure 4.5-2 of this EIR) shall be subjected to a subsurface investigation to determine the presence of buried archaeological site indicators in the event that development is proposed. The subsurface study shall include the excavation of soils to the maximum depth of proposed disturbance or to a depth where soil formed prior to the occupation of California is reached. If the footprint of proposed development at any of the intersections or roads changes,*

the changes shall be reviewed by an archaeologist who meets with the Secretary of the Interior's Standards for Archaeology to determine if additional archaeological survey is necessary prior to any proposed improvements. The subsurface study shall be submitted to the San Joaquin County Community Development Department, as well as to other applicable agencies if the site is located within another jurisdiction.

If archaeological site indicators are found during any of the studies recommended above and would be impacted by the proposed improvements, the preferred treatment of the resource is protection and preservation. Protection and preservation shall be achieved in one of two ways: direct avoidance (i.e., not developing within the boundaries of the archaeological site); or by protecting intact archaeological deposits through the placement of sufficient fill over the deposit during and after construction.

If protection and preservation are not possible, then a subsurface testing program shall be conducted to determine if the archaeological site is eligible for inclusion on the California Register. The subsurface testing program shall be overseen by an archaeologist who meets the Secretary of the Interior's Standards and shall be outlined in a Subsurface Testing Program Plan for Archaeological Resources. The plan shall include the following: a research design appropriate for the archaeological site type; a discussion and rationale of the investigation's field and laboratory methods; and an identification of the planned treatment and disposition of any recovered cultural materials, including the steps that shall be followed in the event of discovery of human remains. The identified steps shall be consistent with Health and Safety Code Section 7050.5. Following the completion of the subsurface testing program, a report shall be prepared that documents the methods of investigation, the types of analyses conducted, and a determination of the archaeological site's eligibility for inclusion on the California Register of Historic Resources (CRHR). The report shall include completed appropriate Department of Parks and Recreation (DPR) 523 forms for the archaeological site.

If the testing program finds that an archaeological site eligible for listing on the CRHR would be impacted, and protection and preservation is not possible, then data recovery of the impacted locations shall be necessary. Data recovery shall be performed by a qualified archaeologist that meets the Secretary of the Interior's Standards using appropriate archaeological techniques. Data recovery shall include processing and analysis of recovered cultural materials using appropriate archaeological methods, as well as the preparation of the recovered materials for permanent disposition pursuant to the requirements of the Archaeological Resources Treatment Plan. Monitoring may also be recommended by the archaeologist, but the decision to recommend monitoring as a mitigation measure shall be dependent upon the findings of the testing program.

Proof of compliance with the aforementioned standards shall be submitted to the San Joaquin County Community Development Department for review and approval. In addition, if the off-site improvement study area is located within another agency's jurisdiction, the materials shall also be submitted to the relevant agency for review and approval.

4.5-3 Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase, Specific Plan Buildout, and Off-Site Improvement Study Area

In compliance with AB 52 (PRC Section 21080.3.1) and SB 18, the County sent project notification letters on January 24, 2025, to tribes who requested notification within the geographic area of the County. Requests for consultation were not received within the required consultation period.

A search of the NAHC SLF for Native American cultural resources within the project site returned negative results, indicating known tribal cultural resources are not located within the project site. Based on the findings of the Cultural Resources Study and Archival Research and Windshield Survey prepared for the proposed project, as well as the results of the NAHC SLF search, known tribal cultural resources do not occur within the project site, nor in the project vicinity, nor within the off-site improvement areas. Nevertheless, while background research and the field/windshield surveys did not indicate the presence of known tribal cultural resources, the project site and off-site improvement study areas include limited areas of high potential for buried archaeological resources. Given the history of tribal presence in the area, such resources could include tribal cultural resources. Therefore, buried tribal cultural resources associated with local tribes could potentially be identified on the project site and the off-site improvement areas during project construction activities.

Conclusion

Based on the above, ground-disturbing activities associated with the proposed project could cause a substantial change in the significance of a tribal cultural resource as defined in PRC Section 21074, and a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.5-2(a) requires ground-disturbing activities to cease if archaeological resources are discovered. Mitigation Measure 4.5-2(b) establishes the protocol if articulated or disarticulated human remains are discovered. These mitigation measures address discovery of unidentified tribal cultural resources.

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout, and Off-Site Improvement Study Area

4.5-3 Implement Mitigation Measures 4.5-2(a) and 4.5-2(b).

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 6, Statutorily Required Sections, of this EIR.

4.5-4 Cause a cumulative loss of cultural resources. Based on the analysis below, the cumulative impact is *less than significant*.

Based on the nature of cumulative analysis, the following discussions include an analysis of potential impacts associated with development of the full Specific Plan Buildout and off-site improvement areas.

Specific Plan Buildout, Off-Site Improvement Area

Generally, while some cultural and tribal cultural resources may have regional significance, the resources themselves are site-specific, and impacts to each resource are project-specific. For example, impacts to a subsurface archaeological find at one project site would not generally be made worse by impacts to a cultural or tribal cultural resource at another site due to development of another project. Rather, the resources and the effects upon each resource are generally independent. A possible exception to the aforementioned general conditions would be where a cultural resource represents the last known example of its kind or is part of larger cultural resources. For such a resource, cumulative impacts, and the contribution of a project to them, may be considered cumulatively significant.

As described throughout this chapter, the proposed project could result in adverse effects to cultural resources, including historical resources such as the Delta-Mendota Canal and California Aqueduct, potential archaeological resources located within the identified areas of high potential to contain such resources, and/or any unknown archaeological resources or human remains. However, implementation of the project-specific mitigation measures set forth in this chapter would ensure that potential impacts related to the foregoing potential impacts would be reduced to the maximum extent feasible.

Similar to the proposed project, future development projects within the County and City of Tracy would be required to implement project-specific mitigation to ensure any potential impacts to identified cultural resources are reduced to a less-than-significant

levels. For example, Policy NCR-6.2 requires that the County shall ensure that significant architectural, historical, archaeological, or cultural resources are not knowingly destroyed through County action. Policy NCR-6.6 requires an archaeological report to be prepared by a qualified cultural resource specialist prior to the issuance of any discretionary permit or approval in areas determined to contain significant historic or precontact archaeological artifacts that could be disturbed by project construction. Policy NCR-6.6 requires consultation from the County with Native American tribes regarding proposed development projects and land use policy changes consistent with the State's Local and Tribal Intergovernmental Consultation requirements. The City of Tracy General Plan also includes Policy P4 under Objective CC-3.1, which requires the City to identify and preserve cultural and historic resources by including a standard condition of approval that construction within a project site shall halt until an assessment of the identified resource can be made. In addition, policy P6 under Objective CC-3.1 requires the City to consult tribal representatives if tribal cultural resources are discovered within a project site.

Given that cultural resource impacts are generally site-specific and each future project within the County would be required to adhere to County policies, any potential impacts associated with cumulative buildout of the planning area would not combine to result in a significant cumulative impact.

Based on the above, implementation of the aforementioned mitigation measures would reduce all project-specific impacts to less-than-significant levels and the potential for impacts related to a cumulative loss of cultural resources, to which implementation of the proposed project might contribute, would be ***less than significant.***

Mitigation Measure(s)

None required.

4.6 Geology and Soils

4.6 GEOLOGY AND SOILS

4.6.1 INTRODUCTION

The Geology and Soils chapter of this EIR describes the geologic and soil characteristics of the project site and evaluates the extent to which implementation of the proposed project could be affected by unstable earth conditions and various geologic and geomorphic hazards. In addition, the chapter evaluates known mineral resources on the project site, any potential adverse effects of the proposed project on the availability of such resources, and any adverse impacts on paleontological resources.

Information presented within this chapter is primarily drawn from a Geotechnical Feasibility Report (GFR) prepared by ENGEO, Inc. (see Appendix I),[1] the San Joaquin County General Plan,[2] and the associated General Plan EIR.[3]

4.6.2 EXISTING ENVIRONMENTAL SETTING

Background setting information regarding the geology and soils, seismicity, mineral resources, and paleontological resources associated with the project site and the Off-Site Improvements Study Area and the surrounding region is provided below.

Regional Setting

The project site and the Off-Site Improvements Study Area is located within the margins of the Great Valley and Coast Range geomorphic provinces of California. The Great Valley is an elongate, asymmetric trough filled with a thick sequence of sediments beginning in the Jurassic period and continues currently. The sediments within the Great Valley vary in thickness and are estimated to be up to ten kilometers deep. Such sediments are mostly derived from the erosion of the Sierra Nevada Mountain Range to the east and, to a lesser extent, from the Coast Range Mountains to the west.

Regional Seismicity

A fault is defined as a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side. A fault zone is a zone of related faults that is commonly braided and subparallel, but may be branching or divergent. Movement within a fault causes an earthquake. When movement occurs along a fault, the energy generated is released as waves that cause ground shaking. Ground shaking intensity varies with the magnitude of the earthquake, the distance from the epicenter, and the type of rock or sediment through which the seismic waves move.

The potential risk of fault rupture is based on the concept of recency and recurrence. The more recently a particular fault has ruptured, the more likely the fault would rupture again. The California Geological Survey defines an “active fault” as one that has had surface displacement within the

1 ENGEO, Inc. *Geotechnical Feasibility Report.* April 29, 2025.
2 San Joaquin County. *San Joaquin County General Plan.* Adopted December 2016.
3 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report*. Certified October 2014.

past 11,000 years (Holocene). Potentially active faults are defined as those that have ruptured between 11,000 and 1.6 million years before the present (Quaternary). Faults are generally considered inactive if evidence of displacement is not present during the Quaternary.

Although San Joaquin County does not contain active faults, the County is located in a region that lies between two areas of seismic activity. The active faults associated with the San Andreas Fault System of the greater San Francisco Bay Area lie west of the County line, and a regional shear zone associated with the Sierra Nevada foothills, known as the Foothills Fault System, lies east of the County line. Based upon seismologic and geologic conditions, the maximum level of ground motion potentially experienced in the County would occur as a result of a 7.9 magnitude earthquake on the San Andreas Fault. Minor ground shaking can result in partial collapse of buildings, and extensive damage in poorly built or sub-standard structures.

Project Site Characteristics

The project site consists of approximately 1,576.7 acres located north of Interstate 580 (I-580) and State Route (SR) 132 and is generally bounded by Bird Road to the east; the Delta Mendota Canal to the north; Tracy Boulevard to the west; and the southern boundary is formed by the California Aqueduct, west of Chrisman Road, and SR-132, east of Chrisman Road, in San Joaquin County, California. The project site is currently developed with active agricultural land, including almond and cherry orchards, and an agricultural machinery manufacturing facility (A.B. FAB, Inc.). According to the GFR, pipeline markers for existing underground oil and gas lines were observed on-site, trending northwest to southeast. The Off-Site Improvements Study Area consists of a range of intersections and roadways located in the project area.

The geologic conditions on the project site, as well as the Off-Site Improvements Study Area, are discussed below in further detail, including descriptions of existing site geology, soil conditions, seismicity and ground shaking, potential for earthquake-induced liquefaction, and expansive soils.

Site Geology and Subsurface Conditions

According to the GFR, the majority of the project site was mapped as Holocene to Pleistocene aged alluvial fan deposits consisting of unconsolidated gravel, sand, silt, and clay. The western portion of the project site was mapped as Miocene to Pliocene fanglomerate deposits consisting of conglomerates, siltsone, and sandstone primarily derived from the Coast Range to the southwest.

Surficial soil of the project site consists of lean to fat clay underlain by lean clay with sand to sandy lean clay. As part of the GFR, ENGEO, Inc. drilled six borings on-site to a maximum depth of approximately 25 feet below existing grade, the locations of which are shown in Figure 4.6-1. In addition, 15 test pits were excavated across the project site to a maximum depth of approximately eight feet below existing grade.

Borings performed by ENGEO, Inc. generally encountered interbedded layers of sand and clay at depths ranging from ten to 20 feet below ground surface. According to the GFR, the surficial soil samples consisted of moderate to highly expansive clay with plasticity index values ranging from 12 to 30. Undocumented fill was encountered in seven of the 14 test pit excavations; specifically, in excavations within existing access roads. The undocumented fill was approximately 0.5-feet to two feet thick and consisted of lean to fat clay with varying amounts of sand. Groundwater was not encountered in any of the subsurface explorations, and is estimated to be present greater than 50 feet below the existing grade.

Figure 4.6-1
Soil Boring and Test Pit Locations

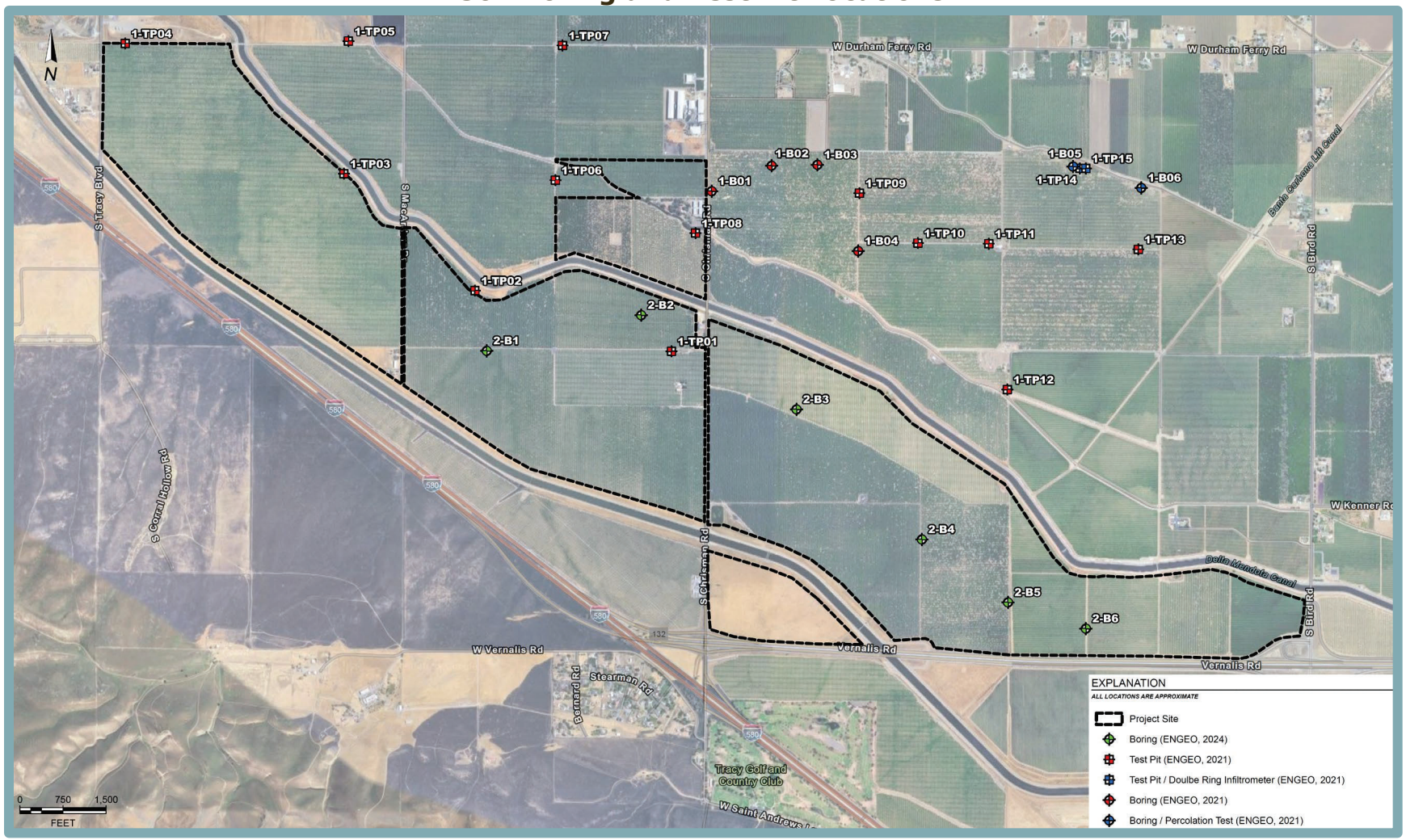


*Figure not OCR compatible.

Seismicity and Ground Shaking

The intensity of ground shaking resulting from an earthquake is a function of the size of the earthquake, the duration of the energy release, the distance from the subject location, and the ability of the geologic materials to transmit the energy. In general, the greater the energy release and the closer the center of release to the site, the greater the intensity of the ground shaking.

Fault rupture hazards occur near active faults and tend to reoccur along the surface traces of previous fault movements. According to the GFR, the site does not include any active faults and is not located within an Alquist-Priolo Special Studies Zone. However, the project site is located in an area of moderate seismicity. The nearest active earthquake fault zones are listed in Table 4.6-1, below.

Table 4.6-1
Active Faults Capable of Producing Significant Ground Shaking at the Project Site

Fault Name	Distance From Site (miles)	Direction From Site	Maximum Moment Magnitude
Great Valley	1	South	6.9
Greenville Connected	12	West	7.0
Mount Diablo Thrust	24	West	6.7
Calaveras	26	West	7.0
Hayward-Rodgers Creek	29	West	7.3
Green Valley Connected	36	West	6.8

Source: ENGEO, Inc., 2024.

As shown in Table 4.6-1, the two nearest active earthquake fault zones are the Great Valley fault, located approximately one mile to the south, and the Greenville fault, located approximately 12 miles to the west. Portions of the Great Valley fault are considered seismically active blind thrust faults; however, because the Great Valley fault segments do not extend to the ground surface, the State has not defined such areas as Earthquake Fault Zones. The Great Valley fault is considered to be capable of causing significant ground shaking at the project site. However, the Great Valley fault is believed to have a greater interval between ground shaking events than the other, more distant faults listed above. Other large earthquakes have historically occurred in the Bay Area to west of the project site and along the margins of the Central Valley, and many earthquakes of low magnitude occur each year. The GFR did not note the San Andreas Fault as having the potential to cause significant ground shaking at the project site.

Liquefaction and Subsidence

Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than about 25 percent and located within the top 40 feet are most susceptible to liquefaction and surface rupture/lateral spreading. The California Geological Survey (CGS) has designated certain areas within California as potential liquefaction hazard zones, which are areas considered at risk of liquefaction-related ground failure during a seismic event based upon mapped surficial deposits and the depth to the areal groundwater table.

The project site is not in a mapped liquefaction hazard zone. In addition, the sand encountered in the on-site borings was generally medium dense and often contained a significant amount of fine-grained material. Furthermore, groundwater was not encountered in any of the borings. Thus, the GFR determined that the potential for liquefaction at the project site is low.

Subsidence is the gradual settling or sinking of surface soil deposits with little horizontal motion. Subsidence within San Joaquin County is usually the result of pumping groundwater or oxidation of peat in the Delta. According to Figure 4.I-1, Soils, of the County General Plan EIR, the project site is not located within an area that has been designated as containing soils prone to subsidence. Therefore, the GFR determined that the potential for subsidence to occur on-site is low. Nonetheless, subsidence generated by groundwater pumping is a known issue that is currently being addressed in the County.

As discussed above, undocumented fill was encountered in seven of the 14 test pit excavations; specifically, in excavations within existing access roads. The undocumented fill was approximately 0.5-feet to two feet thick and consisted of lean to fat clay with varying amounts of sand. Because the manner of placement, type of material used, and degree of compaction of the undocumented fill is unknown, the GFR determined that such material is considered non-engineered. Non-engineered fill can undergo excessive settlement, especially under new fill or building loads.

Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume change due to variation in moisture content. Compressible materials consisting of surficial organic material, loose soils, undocumented fills, debris, rubble, rubbish, etc., are considered unsuitable materials for support of proposed structures as such materials can differentially settle. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may cause unacceptable settlement of structures. As stated above, the GFR determined that the soils encountered on-site have a moderate to high expansion potential.

Mineral Resources

According to the County's General Plan EIR, mineral resources within San Joaquin County consist primarily of sand and gravel aggregate, with limited mining of peat, gold, and silver. While 13 active mining operations exist within the County, the project site does not contain any such resources. In addition, Figure 4.O-1, Aggregate Resources, of the General Plan EIR indicates that the project site is not located within a mineral resource zone, and, thus, is unlikely to contain significant mineral resources. As described in Chapter 3, Project Description, of this EIR, several established surface mining operations are located to the northwest of the project site.

Paleontological Resources

Paleontological resources include fossil remains, as well as fossil localities and formations, which have produced fossil material in other nearby areas. According to the County's General Plan EIR, the vast majority of paleontological specimens from San Joaquin County have been found in rock formations in the foothills of the Diablo Mountain Range. However, remains of extinct animals such as mammoth, could be found virtually anywhere in the County, especially along watercourses such as the San Joaquin River and its tributaries.

Off-Site Improvements Study Area Characteristics

As discussed in Chapter 3, Project Description, of this EIR, the Local Transportation Analysis (LTA) prepared for the proposed project by Fehr & Peers identifies a range of intersection and roadway improvements that would be triggered by full buildout of the proposed project. The analysis of these prospective improvements will be conducted at a programmatic level, as is appropriate given that they are not components of the proposed project.

The majority of the Off-Site Improvements Study Area consists of developed areas that have been designed and engineered as roadways; the soil conditions underlying the existing roadways were analyzed and addressed prior to construction. Small portions of the Off-Site Improvements Study Area boundaries extend to currently undeveloped areas, for which a project-specific analysis has not been prepared. However, as discussed in the Regional Setting section of this chapter, although San Joaquin County does not contain active faults, the County is located in a region that lies between two areas of seismic activity. Additionally, similar to the project site, the Off-Site Improvements Study Area is located in a relatively flat region of the County, and is not identified in the General Plan EIR as an area likely to contain mineral resources or paleontological resources. Although a geotechnical report has not been prepared for the Off-Site Improvements Study Area, Figure 4.I-1, Soils, of the General Plan EIR identifies the southwestern area of San Joaquin County, which encompasses both the project site and the Off-Site Improvements Study Area, has a high potential to contain expansive soils. Figure 4.I-1 also identifies that the portions of the Off-Site Improvements Study Area nearest to the City of Tracy may have the potential for subsidence. Furthermore, according to the General Plan EIR, although generalized liquefaction mapping has not been completed for San Joaquin County, liquefaction studies for Delta conditions indicated that at least the Delta portion of the County is likely to have areas with moderate to high susceptibility for liquefaction; the potential for liquefaction throughout the remainder of the County could vary and would depend on site-specific data.

4.6.3 REGULATORY CONTEXT

The following section is a brief summary of the regulatory context under which geology and soils, mineral resources, and paleontological resources are managed at the federal, State, and local levels.

Federal Regulations

The following are the federal environmental laws and policies relevant to geology and soils, mineral resources, and paleontological resources.

Federal Earthquake Hazards Reduction Act

Passed by Congress in 1977, the Federal Earthquake Hazards Reduction Act is intended to reduce the risks to life and property from future earthquakes. The Act established the National Earthquake Hazards Reduction Program (NEHRP). The goals of NEHRP are to educate and improve the knowledge base for predicting seismic hazards, improve land use practices and building codes, and to reduce earthquake hazards through improved design and construction techniques.

International Building Code

The Uniform Building Code (UBC) was first published in 1927 by the International Council of Building Officials and is intended to promote public safety and provide standardized requirements for safe construction. The UBC was replaced in 2000 by the new International Building Code (IBC), published by the International Code Council (ICC), which is a merger of the International

Council of Building Officials' UBC, Building Officials and Code Administrators International's National Building Code, and the Southern Building Code Congress International's Standard Building Code. The intention of the IBC is to provide more consistent standards for safe construction and eliminate any differences between the three preceding codes. All State building standard codes are based on the federal building codes.

Federal Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained through the National Pollutant Discharge Elimination System (NPDES) permit program or point sources are discrete conveyances such as pipes or man-made ditches.

National Pollutant Discharge Elimination System

The NPDES permit program addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. Created in 1972 by the Clean Water Act, the NPDES permit program is authorized to California's Regional Water Quality Control Board (RWQCB) by the U.S. Environmental Protection Agency (EPA) to perform many permitting, administrative, and enforcement aspects of the program. The terms of the NPDES permits implement pertinent provisions of the Federal CWA, such as erosion prevention measures, to protect surface waters, including lakes, rivers, streams, bays, dry steam beds, wetlands, and storm sewers.

State Regulations

The following are the State environmental laws and policies relevant to geology and soils, mineral resources, and paleontological resources.

Alquist-Priolo Earthquake Fault Zoning Act

The 1972 Alquist-Priolo (AP) Earthquake Fault Zone Act was passed to prevent the new development of buildings and structures for human occupancy on the surface of active faults. The Act is directed at the hazards of surface fault rupture and does not address other forms of earthquake hazards. The locations of active faults are established into fault zones by the AP Fault Zone Act. Local agencies regulate any new developments within the appropriate zones in their jurisdiction.

The AP Fault Zone Act regulates development near active faults so as to mitigate the hazard of surface fault rupture. The AP Fault Zone Act requires that the State Geologist (Chief of the California Department of Mines and Geology [CDMG]) delineate "special study zones" along known active faults in California. Cities and counties affected by the special study zones must regulate certain development projects within the special study zones. The AP Fault Zone Act prohibits the development of structures for human occupancy across the traces of active faults. According to the AP Fault Zone Act, active faults have experienced surface displacement during the last 11,000 years. Potentially active faults are those that show evidence of surface displacement during the last 1.6 million years. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity sometimes is difficult to obtain and may not exist.

Seismic Hazards Mapping Act

The California Seismic Hazards Mapping Act of 1990 (California Public Resources Code Section 1690-2699.6) addresses non-surface rupture earthquake hazards, including liquefaction, induced landslides, and subsidence. A mapping program is also established by this Act, which identifies areas within California that have the potential to be affected by such non-surface rupture hazards. The Seismic Hazards Mapping Act specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

California Building Standards Code

The State of California regulates development within the State through a variety of tools that reduce or mitigate potential hazards from earthquakes or other geologic hazards. The 2019 California Building Standards Code (CBSC) (California Code of Regulations, Title 24) governs the design and construction of all building occupancies and associated facilities and equipment throughout California. In addition, the CBSC governs development in potentially seismically active areas and contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The California building standards include building standards in the national building code, building standards adapted from national codes to meet California conditions, and building standards adopted to address particular California concerns. It should be noted that the CBSC is updated on a triennial cycle. The 2019 CBSC, which contains new code changes, became effective on January 1, 2020.

Local Regulations

The following are the local environmental laws and policies relevant to geology and soils, mineral resources, and paleontological resources.

San Joaquin County General Plan

Goals and policies from the County's General Plan related to geology and soils that are applicable to the proposed project are presented below:

Land Use Element

Goal LU-2 Promote efficient development and land use practices in new development that provide for the protection of vital resources and enhancement of communities.

LU-2.9 **Preliminary Soils Report.** The County shall require a preliminary soils report for new development projects in areas with shallow or unstable soils or slopes in excess of 15 percent. If the preliminary soil report indicates soil conditions could be unstable, the County shall require a detailed geological report by a registered geologist and registered civil engineer or a registered engineering geologist that demonstrates the suitability of any proposed or additional development.

Natural and Cultural Resources Element

Goal NCR-6 To protect San Joaquin County's valuable architectural, historical, archeological, and cultural resources.

Policy NCR-6.5 **Protect Archeological, Paleontological, and Historical Resources.** The County shall protect significant archeological, paleontological, and historical resources by requiring a cultural resources report be prepared by a qualified cultural resource specialist prior to the issuance of any discretionary permit or approval in areas determined to contain significant historic or prehistoric archeological artifacts or paleontological resources that could be disturbed by project construction. The County shall require feasible mitigation identified in the report, such as avoidance, testing, or data recovery efforts, to be implemented. (MMRP)

Public Health and Safety Element

Goal PHS-2 To protect people from flood hazards.

PHS-2.15 **Seismic Impacts to Flood Control Facilities.** The County shall comply with state and federal requirements to improve and maintain flood control facilities to withstand seismic and geologic impacts.

Goal PHS-3 To protect life and property from seismic and geologic hazards.

PHS-3.1 **Consider Geologic Hazards for New Development.** The County shall consider the risk to human safety and property from seismic and geologic hazards (e.g., slope/levee stability, unstable soils, expansive soils, etc.,) as identified through a geotechnical investigation by a California licensed geotechnical engineer in designating the location and intensity for new development and the conditions under which that development may occur in accordance with the most current version of the County's building code. The County shall require feasible mitigation identified in the geotechnical investigations to be implemented. (MMRP)

PHS-3.2 **Location of Sensitive Land Uses.** The County shall not approve any of the following land uses if they are located within one-eighth of a mile of any active fault or on soil that is highly susceptible to liquefaction as identified in a geotechnical investigation by a California licensed geotechnical engineer: facilities necessary for emergency services; major utility lines and facilities; manufacturing plants using or storing hazardous materials; high occupancy structures, such as multifamily residences and large public assembly facilities; and facilities housing dependent populations, such as prisons, schools, and convalescent centers. (MMRP)

PHS-3.3 **Emergency Service Facilities.** The County shall require emergency service facilities to be capable of withstanding earthquakes per the California Building Code, Chapter 16, Volume 2, and remain operational to provide emergency response.

PHS-3.4 **Liquefaction Studies.** The County shall require proposals for new development in areas determined by the County to have high liquefaction potential to include detailed site-specific liquefaction studies by a California licensed geotechnical engineer or engineering geologist in accordance with the most current County building code. (MMRP)

PHS-3.5 **Subsidence or Liquefaction.** The County shall require that all proposed structures, utilities, or public facilities within County-recognized areas of near-surface subsidence or liquefaction be located and constructed in a manner that minimizes or eliminates potential damage.

PHS-3.7 **Erosion Control.** The County shall encourage the planting of vegetation to decrease loss of soil by erosion.

PHS-3.8 **Soil Conservation and Restoration.** The County shall support soil conservation and restoration efforts of the U.S. Soil Conservation Service and the Resource Conservation Districts.

San Joaquin County Code of Ordinances

Sections of the County Code of Ordinances related to geology and soils, mineral resources, and paleontological resources that are applicable to the proposed project are presented below.

Series 500: Subdivision Regulations

Series 500, Subdivision Regulations, of the San Joaquin Ordinance Code requires new Major Subdivision projects to provide a preliminary geotechnical report (Section 9-502.060) to "address geologic hazards." The geotechnical report must be "prepared by a State-registered geotechnical engineer or State-registered geologist and [be] based upon adequate test borings." The report should provide "estimates of expected peak ground accelerations during maximum credible earthquake potentially affecting the site."

Series 600: Infrastructure Standards and Service Financing

Series 600, Infrastructure Standards and Service Financing, provides requirements for onsite wastewater disposal facilities, including a sanitation permit (Sections 9-605.010[b] and 9-605.010[c]) and disposal facility standards (Section 9-605.020).

Series 700, Chapter 9-704: Grading and Excavation

Series 700, Chapter 9-704, Grading and Excavation, provides requirements for grading, including obtaining a grading permit (Section 9-704.020[a]), exemptions (Section 9-704.020[b]), and removal of earth materials from the site (Section 9-704.020[d]).

4.6.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to geology and soils, mineral resources, and paleontological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would result in any of the following:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault;
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction;
    - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- 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;
- 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;
- 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; and/or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Method of Analysis

The analysis of the proposed project's potential impacts related to geology and soils is based primarily on the GFR prepared for the proposed project by ENGEO, Inc. Information related to mineral resources and paleontological resources is sourced primarily from the County's General Plan and the associated General Plan EIR.

Geotechnical Feasibility Report

The GFR prepared for the proposed project by ENGEO, Inc. drew on information from previous studies, including regional geologic maps and fault maps prepared by the California Department of Conservation's CGS. Impacts related to geology, soils, and seismicity were evaluated based on available data (maps, soil surveys, reports), and professional judgement. In addition, a preliminary field exploration was conducted by ENGEO, Inc. employees between November 11 and November 16, 2021. ENGEO, Inc. conducted an additional field exploration on August 16,

2024. The field exploration included drilling six borings and excavating 15 test pits at the locations indicated in Figure 4.6-1.

Mineral Resources

The assessment of the proposed project's potential to affect mineral resources was based on the County's General Plan, which is based upon data maintained by San Joaquin County and publications of the Departments of Conservation, CGS and Division of Oil, Gas, and Geothermal Resources.

Paleontological Resources Analysis

The assessment of paleontological resources and the potential for discovery on the project site was based primarily on the County's General Plan.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

4.6-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. Based on the analysis below, the impact is *less than significant*.

Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous and feature similar soil characteristics, the potential for impacts related to seismic hazards from developing either project component would be similar. Thus, the following discussion applies to both project components. A discussion of the Off-Site Improvements Study Area is also provided below.

Initial Phase, Specific Plan Buildout

As discussed above, the project site is not located within an Alquist-Priolo Fault Zone. Evidence of recent faulting within the project site area has not been detected, nor have any active faults been mapped at or adjacent to the project site. In addition, consistent with General Plan Policy LU-3.2, the project site is not located within one-eighth of a mile of the nearest earthquake fault; the nearest fault is the Great Valley fault, located approximately one mile south of the site.

The project site is located in an area of moderate seismicity. As such, a large earthquake on a nearby fault could cause minor ground shaking in the vicinity of the project, potentially resulting in an increased risk of structural loss, injury, or death. Liquefaction and related seismic hazards such as lateral spreading and differential settlement have the potential to compromise the structural integrity of the proposed buildings. Despite the potential for seismic events to cause damage to the structures on the project site, all structures would be designed in accordance with the CBSC, and would be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3)

resist major earthquakes without collapse, but with some structural, as well as non-structural, damage.

Due to the absence of a permanently elevated groundwater table and despite the moderate seismicity of the project area, the GFR determined that the potential for seismically induced damage to the proposed structures due to liquefaction, surface rupture, and settlement is minimal. Furthermore, because the project site does not contain any steep slopes, the risk of landslide at the project site would not be substantial.

Off-Site Improvements Study Area

Similar to the project site, the Off-Site Improvements Study Area is not located within an Alquist-Priolo Fault Zone and is located within an area of moderate seismicity. Despite the fact that a site-specific geotechnical evaluation has not been conducted for the Off-Site Improvements Study Area, the General Plan EIR did not identify the region as having a high potential for liquefaction, surface rupture, or settlement. The Off-Site Improvements Study Area also does not contain any steep slopes; as such, the risk of landslide with the Study Area would not be substantial. In addition, similar to the discussion of the Initial Phase and Specific Plan Buildout, future roadway improvements within the Off-Site Improvements Study Area would be required to be designed in accordance with the CBSC and would be required to comply with all applicable local, State, and federal regulations related to seismic hazards.

Conclusion

Overall, the proposed development would not be subject to substantial risks related to fault rupture hazards. Due to compliance with CBSC requirements related to seismic design and the lack of substantial natural slopes within the project site and the Off-Site Improvements Study Area, the potential for the proposed project to expose people or structures to the risk of loss, injury, or death involving rupture of an earthquake fault, strong ground shaking, ground failure, liquefaction, or landslides would be ***less than significant***.

Mitigation Measure(s)

None required.

4.6-2 Result in substantial soil erosion or the loss of topsoil. Based on the analysis below, the impact is *less than significant*.

Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous, the potential for impacts related to soil erosion from developing either project component would be similar. Thus, the following discussion applies to the potential for both project components. A discussion of the Off-Site Improvements Study Area is also provided below.

Initial Phase, Specific Plan Buildout

Erosion refers to the removal of soil from exposed surfaces by wind or water. Although naturally occurring, erosion is often accelerated by human activities that disturb soil and vegetation. Grading, excavation, removal of vegetation cover, and loading activities associated with construction could temporarily increase erosion, runoff, and

sedimentation. Ground-disturbing activities associated with the proposed project could also result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential within the construction and staging areas.

NPDES permits are required for discharges of pollutants to waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, dry stream beds, wetlands, and storm sewers. The RWQCB issues permits in lieu of direct issuance by the Environmental Protection Agency. The terms of the NPDES permits implement pertinent provisions of the Federal CWA. In accordance with the NPDES General Construction Permit, a Stormwater Pollution Prevention Plan (SWPPP) is required for any project that disturbs at least one acre of soil. Given that the Initial Phase of the proposed project would disturb approximately 181.26 acres, and full project buildout would disturb approximately 1,576.7 acres within the site, the project would be required to prepare a SWPPP and submit a Notice of Intent (NOI) to the RWQCB.

The SWPPP would be kept on-site during construction activity and made available upon request to representatives of San Joaquin County or the RWQCB. The SWPPP would include details of how sediment and erosion control practices, also known as best management practices (BMPs), would be implemented. Implementation of the SWPPP would comply with County, State, and federal water quality requirements.

Off-Site Improvements Study Area

Similar to the Initial Phase and Specific Plan Buildout components of the proposed project, future intersection and roadway improvements within the Off-Site Improvements Study Area could involve ground-disturbing activities that could result in soil compaction and wind erosion effects that could adversely affect soils. In accordance with the NPDES permit, any roadway construction projects within the Off-Site Improvements Study Area that would disturb more than one acre of soil would be required to prepare a SWPPP and submit a NOI to the RWQCB. Implementation of the SWPPP would comply with County, State, and federal water quality requirements. Regardless of the acreage of soils disturbed within the Off-Site Improvements Study Area, all future development would be subject to local and State codes and requirements for erosion control and grading. For example, pursuant to Section 9-704.020 of the County's Code of Ordinances, a valid grading permit, which would include appropriate measures to prevent soil erosion, would be required from the County Building Inspection Division prior to initiation of any grading or excavation.

Conclusion

Based on the above, development of the proposed project would not result in substantial soil erosion or the loss of topsoil with the preparation and implementation of a SWPPP in accordance with the NPDES General Construction Permit. In addition, compliance with all applicable local and State codes and requirements related to erosion control and grading would ensure that future construction within the Off-Site Improvements Study Area would not result in adverse impacts related to such. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.6-3 Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous, the potential for impacts related to unstable geological units and/or soils from developing either project component would be similar. Thus, the following discussion applies to the potential for both project components. A discussion of the Off-Site Improvements Study Area is also provided below.

Initial Phase, Specific Plan Buildout

Issues associated with unstable geologic units and/or soils, including expansive soils, lateral spreading, subsidence, liquefaction, and collapse are discussed below. Potential impacts related to landslides are addressed above under Impact 4.6-1.

Lateral Spreading

Lateral spreading is associated with terrain near free faces such as excavations, channels, or open bodies of water. The project site is generally level. The GFR determined that based on topographic and lithologic data, the risk of lateral spreading is low to negligible at the project site. Thus, because the project site does not contain any steep slopes or free faces, the proposed project would not be subject to substantial risks related to lateral spreading.

Subsidence

Subsidence is the settlement of soils of very low density, generally from either oxidation of organic material, desiccation and shrinkage, or both, following drainage. Subsidence takes place gradually, usually over a period of several years, and is a common consequence of liquefaction. As discussed above, during the field exploration of the project site, undocumented fill was encountered at seven of the 14 test pit excavations. According to the GFR, non-engineered fill can undergo excessive settlement, especially under new fill or building loads. ENGEO, Inc. provides the recommendation that the extent and depth of non-engineered fill on-site should be evaluated further, and that the undocumented fill should be removed and replaced with compacted engineered fill. Without removal of the non-engineered fill, the proposed project could be subject to subsidence.

Subsidence generated by groundwater pumping within the County is a known issue. As discussed further in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, the proposed project would primarily use surface water supply from the Byron-Bethany Irrigation District (BBID) and would only use groundwater as a supplemental future supply to address any surface water shortages that occur during drought. As such, development of the proposed project would result in a significant reduction in groundwater pumping as compared to the existing on-site agricultural

operations, which rely primarily on groundwater. Therefore, the proposed project would contribute towards alleviating potential impacts related to subsidence induced by groundwater pumping.

Liquefaction

Liquefaction occurs when saturated fine-grained sand and/or silts lose their physical strength temporarily during earthquake-induced shaking and behave as a liquid. Soil most susceptible to liquefaction is clean, loose, saturated, uniformly graded, fine-grained sand. The sand encountered in the borings conducted as part of the GFR was generally medium dense and contained a significant amount of fine-grained material. In addition, groundwater was not encountered within any of the on-site borings. Therefore, the GFR concluded that the potential for liquefaction at the project site is low during seismic shaking, and the proposed structures and associated improvements would not be subject to substantial risks associated with liquefaction.

Collapse

As discussed above, all structures constructed as part of the proposed project would be required to adhere to the provisions of the most recent version of the CBSC in effect at the time of building permit issuance. Structures built according to the seismic design provisions of current building codes would be able to resist major earthquakes without collapse, but with some structural, as well as non-structural damage. Given the project's adherence to the CBSC requirements, the proposed project would not be subject to substantial risks associated with building collapse.

Expansive Soils

According to the GFR prepared by ENGEO, Inc., the project site contains soils with moderate to high expansion potential. Expansive soils have the potential to compromise the structural integrity of project features, which could be a significant impact. However, in order to meet the CBSC Chapter 18 requirements, the project applicant's geotechnical engineer would be responsible for conducting final geotechnical evaluations of the on-site soils to further determine the extent of soils with adverse shrink-swell properties prior to grading and construction activities. Based on subsurface conditions, the project applicant's geotechnical engineers would make recommendations for project element designs to accommodate for the effects of expansive soils. The GFR states that building damage due to volume changes associated with expansive soil can be reduced by: using a rigid mat foundation that is designed to resist the settlement and heave of expansive soil; deepening the foundations to below the zone of moisture fluctuation; and/or using footings at normal shallow depths but bottomed on a layer of select fill with a low expansion potential. The applicant would select one or more of the measures in consultation with qualified engineers before grading activities begin. Therefore, with implementation of the aforementioned corrective actions, the proposed project would not be exposed to substantial risks related to expansive soils.

Off-Site Improvements Study Area

Although a site-specific geotechnical report has not been prepared for the Off-Site Improvements Study Area, due to the proximity to the project site, similar geotechnical concerns, such as non-engineered fill and expansive soils, could be present within portions of the Off-Site Improvements Study Area. Without the preparation and

submittal of a geotechnical report, the extent to which soils within the Off-Site Improvements Study Area could be unstable cannot be determined, and potential issues related to such could occur. The Off-Site Improvements Study Area intersects with the jurisdictions of various agencies (California Department of Transportation [Caltrans], San Joaquin County, City of Tracy) that would be required to review and approve the recommendations of future geotechnical reports.

Conclusion

From a geotechnical standpoint, the project site is preliminarily considered suitable for the proposed construction. Thus, the proposed project would not likely be subject to issues associated with lateral spreading, subsidence, liquefaction, collapse, or expansive soils. However, implementation of recommendations included in a final geotechnical engineering report would be required in order to ensure adequate support of the proposed improvements. In addition, geotechnical concerns, such as non-engineered fill, may be present within the Off-Site Improvements Study Area, which would need to be addressed through appropriate design. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.6-3(a) requires a final geotechnical engineering report to be submitted with each improvement plan and conformity with the report's recommendations. Mitigation Measure 4.6-3(b) requires a site-specific, design level geotechnical report with improvement plans associated with each off-site improvement. These mitigation measures ensure the project design accounts for and addresses soil/geology issues. Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout

4.6-3(a) *The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for review and approval by the San Joaquin County Community Development Department. The report shall address and make recommendations on the following:*

A. Road, pavement, and parking area design;
B. Structural foundations, including retaining wall design (if applicable);
C. Grading practices;
D. Erosion/winterization;
E. Special problems discovered on-site, (i.e., open bodies of water, expansive/unstable soils, etc.);
F. The presence of undocumented fill on-site; and
G. Slope stability.

Once approved by the San Joaquin County Community Development Department, a copy of the final report shall be provided to the San Joaquin County Community Development Department for its use. It is the responsibility of the developer to provide for engineering inspection

and certification that earthwork has been performed in conformity with recommendations contained in the report.

Off-Site Improvements Study Area

4.6-3(b) *Prior to improvement plan approval for any roadway improvements within the Off-Site Improvements Study Area, the project applicant shall submit a site-specific, design-level geotechnical report produced by a California Registered Geotechnical Engineer to the agency within whose jurisdiction the improvement areas are located for review and approval. The geotechnical report shall include, but would not be limited to, an analysis of the on-site geologic and seismic conditions, including soil sampling and testing to determine appropriate roadway design specifications.*

4.6-4 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 or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Based on the analysis below, the impact is *less than significant*.

Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous, the potential for impacts related to seismic hazards from developing either project component would be similar. Thus, the following discussion applies to the potential for both project components. A discussion of the Off-Site Improvements Study Area is also provided below.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

As previously noted, several established surface mining operations are located northwest of the project site. However, according to Figure 4.O-1, Aggregate Resources, of the County General Plan EIR, neither the project site nor the Off-Site Improvements Study Area contain any known mineral resources that would be of value to the region or the residents of the State. Therefore, development of the proposed project and future improvements within the Off-Site Improvements Study Area would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.6-5 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. Based on the analysis below, *no impact* would occur.

Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous, the potential for impacts related to having soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems from developing either project component would be similar. Additionally, the potential for such impacts to occur related to future development within the Off-Site Improvements Study Area Is similar to the project site. Thus, the following discussion applies to the potential for all project components to result in impacts related to having soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

The proposed project would include the development of the project site with industrial, commercial, and public uses. As stated in Chapter 3, Project Description, of this EIR, the proposed project will include the development of a dedicated wastewater system specifically sized to serve the project's site-specific needs. Wastewater produced by the proposed project would be treated and disposed of on-site at a wastewater treatment facility (WWTP) located in the Pacific Gateway East development area. The WWTP would treat wastewater to tertiary standards, allowing treated wastewater to be used throughout the project site for landscape irrigation. Generally, the WWTP would use membrane bioreactor (MBR) technology in above-ground steel tank systems to produce treated wastewater suitable for irrigation and waste activated sludge suitable for landfill disposal. As such, on-site wastewater treatment would not impact on-site soils.

In addition, any future development within the Off-Site Improvements Study Area would consist of intersection and roadway improvements, and would not include the development or use of septic tanks or alternative wastewater disposal systems. Therefore, ***no impact*** would occur related to having 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.

Mitigation Measure(s)

None required.

4.6-6 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous, the potential for impacts to paleontological resources and geologic features from developing either project component would be similar. Thus, the following discussion

applies to both project components. A discussion of the Off-Site Improvements Study Area is also provided below.

Initial Phase, Specific Plan Buildout

According to the Cultural Resources Study prepared for the proposed project by Eileen Barrow & Associates (Barrow),[4] paleontological resources have not been recorded or observed within the project site. Additionally, occurrences of fossil resources are closely tied to the geologic units. The soil types at the project site are not considered unique geologic features and are common within the geographic area of the County. As such, development of the proposed project would not destroy a unique geologic feature. However, previously unknown paleontological resources could exist within the project site.

Off-Site Improvements Study Area

Although the project-specific Cultural Resources Study did not evaluate the Off-Site Improvements Study Area, due to the proximity of the Study Area to the project site, the soil types within the Off-Site Improvements Study Area are unlikely to be considered unique geologic features. Thus, future construction within the Off-Site Improvements Study Area would not destroy a unique geologic feature. Although the General Plan EIR does not specify that the Off-Site Improvements Study Area is located in a region that contains or is likely to contain recorded paleontological resources, as stated above, previously unknown paleontological resources could exist within the Off-Site Improvements Study Area.

Conclusion

Although the proposed project would not have the potential to result in the destruction of unique geologic features, previously unknown paleontological resources could exist within the project site and/or the Off-Site Improvements Study Area. Thus, ground-disturbing activity, such as grading, trenching, or excavating associated with implementation of the proposed project or future construction within the Off-Site Improvements Study Area could have the potential to disturb or destroy unknown paleontological resources. Therefore, the proposed project could result in the direct or indirect destruction of a unique paleontological resource, and a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.6-6 establishes the protocol to be used should paleontological resources be discovered during ground-disturbing activities, thereby addressing the potential for discovery of unknown paleontological resources. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

4.6-6 *Should paleontological resources be discovered during ground-disturbing activities, work shall be halted in the area within 50 feet of*

[4] Eileen Barrow and Associates. *Cultural Resources Study for the Pacific Gateway Environmental Impact Report, Tracy, San Joaquin County, California*. January 22, 2025.

the find. The applicant shall notify the San Joaquin County Community Development Department or other appropriate agency within whose jurisdiction the improvement area is located and retain a qualified paleontologist to inspect the discovery. If deemed significant under criteria established by the Society for Vertebrate Paleontology with respect to authenticity, completeness, preservation, and identification, the resource(s) shall then be salvaged and deposited in an accredited and permanent scientific institution (e.g., University of California Museum of Paleontology [UCMP] or Sierra College), where the discovery would be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any future grading plans, utility plans, and improvement plans approved by the San Joaquin County Engineering and Surveying Division or other appropriate agency within whose jurisdiction the improvement area is located for the proposed project, where excavation work would be required. Construction may continue in areas outside of the buffer zone.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 6, Statutorily Required Sections, of this EIR.

4.6-7 Cumulative impacts to geology and soils, mineral resources, and paleontological resources. Based on the analysis below, the cumulative impact is *less than significant*.

Because the footprints of the Initial Phase and Specific Plan Buildout are contiguous, the potential for cumulative impacts related to geology and soils, mineral resources, and paleontological resources from developing either project component would be similar. Additionally, the potential for such impacts to occur related to future development within the Off-Site Improvements Study Area Is similar to the project site. Thus, the following discussion applies to the potential for all project components.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

While some geologic characteristics may affect regional construction practices, impacts and mitigation measures are primarily site-specific and project-specific. For example, impacts resulting from development on expansive soils at one project site are not worsened by impacts from development on expansive soils or undocumented fill at another project site. Rather, the soil conditions, and the implications of such conditions for each project, are independent.

The General Plan EIR notes that in the County, subsidence is usually the result of pumping groundwater. Development within the General Plan area that relies on groundwater could contribute to cumulative subsidence impacts. As discussed previously, the proposed project's domestic water needs would be met primarily through surface water supplied by the BBID. Thus, the proposed project's contribution to subsidence induced by groundwater pumping would be reduced as compared to the existing on-site agricultural operations, which rely primarily on groundwater. Therefore, the proposed project's incremental contribution to the impact would be less-than-cumulatively considerable.

As such, the potential for cumulative impacts related to geology, soils, seismicity, paleontological resources, and mineral resources, to which implementation of the proposed project might contribute, is ***less than significant***.

Mitigation Measure(s)

None required.

4.7 Hazards and Hazardous Materials

4.7 HAZARDS AND HAZARDOUS MATERIALS

4.7.1 INTRODUCTION

The Hazards and Hazardous Materials chapter of the EIR describes existing and potentially occurring hazards and hazardous materials within the project area. Specifically, the chapter identifies whether the proposed project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

The Hazards and Hazardous Materials chapter is primarily based on information drawn from the Phase I Environmental Site Assessment (ESA) prepared for the project site by Cameron-Cole (see Appendix J).[1] Further information was sourced from the San Joaquin County General Plan[2] and the associated General Plan EIR.[3]

4.7.2 EXISTING ENVIRONMENTAL SETTING

The following section includes a definition of hazardous materials and descriptions of the existing conditions associated with the project site related to hazards and hazardous materials.

Hazardous Materials

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if the material appears on a list of hazardous materials prepared by a federal, State, or local regulatory agency or if the material has characteristics defined as hazardous by such an agency. The California Environmental Protection Agency (CalEPA), California Department of Toxic Substance Control (DTSC) defines hazardous waste, as found in the California Health and Safety Code Section 25141(b), as follows:

> […] its quantity, concentration, or physical, chemical, or infectious characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

The following discussion focuses on the potential Recognized Environmental Conditions (RECs) associated with the project site. A REC indicates the presence or likely presence of any hazardous substances in, on, or at a property due to any release into the environment, under conditions

1 Cameron-Cole. *Phase I Environmental Site Assessment 1,580-Acre Tract – Pacific Gateway Tracy, California 95304*. January 31, 2025.
2 San Joaquin County. *San Joaquin County General Plan Policy Document.* December 2016.
3 San Joaquin County. *San Joaquin County 2035 General Plan EIR*. October 2014.

indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.[4]

Additionally, the following includes a discussion of historical RECs and controlled RECs associated with the project site. A historical REC indicates a past release of hazardous substances or petroleum products that has occurred in connection with a property and has been addressed to the satisfaction of the applicable regulatory authority. A historical REC does not have any property use restrictions, and, thus, does not have any use limitations with respect to future activities on the property. A controlled REC refers to a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority, with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls.

Project Area Conditions

A discussion of project site conditions, the Off-Site Basin parcel conditions, and Off-Site Improvements Study Area conditions is included below.

Project Site

As discussed in Chapter 3, Project Description, of this EIR, the approximately 1,576.7-acre project site is currently comprised of active agricultural land, including almond and cherry orchards, with agricultural uses dating back to at least 1937. The project site is relatively flat and lies at an elevation of approximately 183 feet above mean sea level (amsl). Assuming groundwater flow follows topography, the shallow groundwater flow in the vicinity of the site is inferred to be to the northeast.

An agricultural machinery manufacturing facility (A.B. FAB, Inc.) that designs and builds dust control equipment for agricultural processing is located on-site. The A.B. FAB, Inc. facility consists of four single-story structures used for office space, materials storage, and a manufacturing facility. Residential trailers, equipment storage buildings, and multiple workshops are also located within the project site. Residential properties, as well as an abandoned concrete pit most likely associated with the California Aqueduct, are located within the project site. A natural gas pipeline transects the project site, and a hazardous liquid pipeline runs along the western project site boundary.

The project site is generally located in an existing agricultural area with agricultural uses located to the north (e.g., orchards, Crown Nut almond processing plant), to the south between the Aqueduct and Interstate 580 (I-580), and to the east of Bird Road. Several established surface mining operations are located to the northwest of the project site.

During the site reconnaissance conducted as part of the Phase I ESA, two groundwater supply wells and nutrient mixing stations associated with the agricultural operations were observed on-site. However, as shown in Figure 4.11-1 in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, a total of seven groundwater supply wells have been identified within the project site. In addition, a septic tank is located on-site. Cameron-Cole observed three, 200-gallon fuel aboveground storage tanks (ASTs), two, 10,000-gallon water tanks, and a 3,000-gallon empty storage tank. The fuel tanks all had significant staining surrounding the area. Cameron-Cole observed two, 55-gallon drums containing what appears to be waste oil, two, 55-gallon drums

[4] ASTM International. *ASTM E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* 2013.

used for burn barrels of household trash, and approximately 10, 55-gallon drums, most of which were empty, but a few contained residual material labeled as pesticides/herbicides. Numerous discarded containers containing substances not in connection with identified uses were observed scattered across the project site. Cameron-Cole observed apparently discarded materials in various locations on the project site including cargo containers, a truck bed, and old vehicles. An approximately 200-foot by 300-foot pond was observed adjacent to the fenced-in tank storage area along South Chrisman Road, and an approximately 10-foot by 10-foot pit was observed at the main shop area.

The Phase I ESA identified potential RECs on-site, including on-site pipelines, the A.B. FAB Inc. manufacturing facility, agricultural pesticides, and regulatory database listings, which are discussed in further detail below. In addition, as discussed further below, improperly stored hazardous materials were identified on-site, which was determined to constitute an REC in connection with the project site, as defined by the applicable standard.

Gas Transmission and Petroleum Pipelines

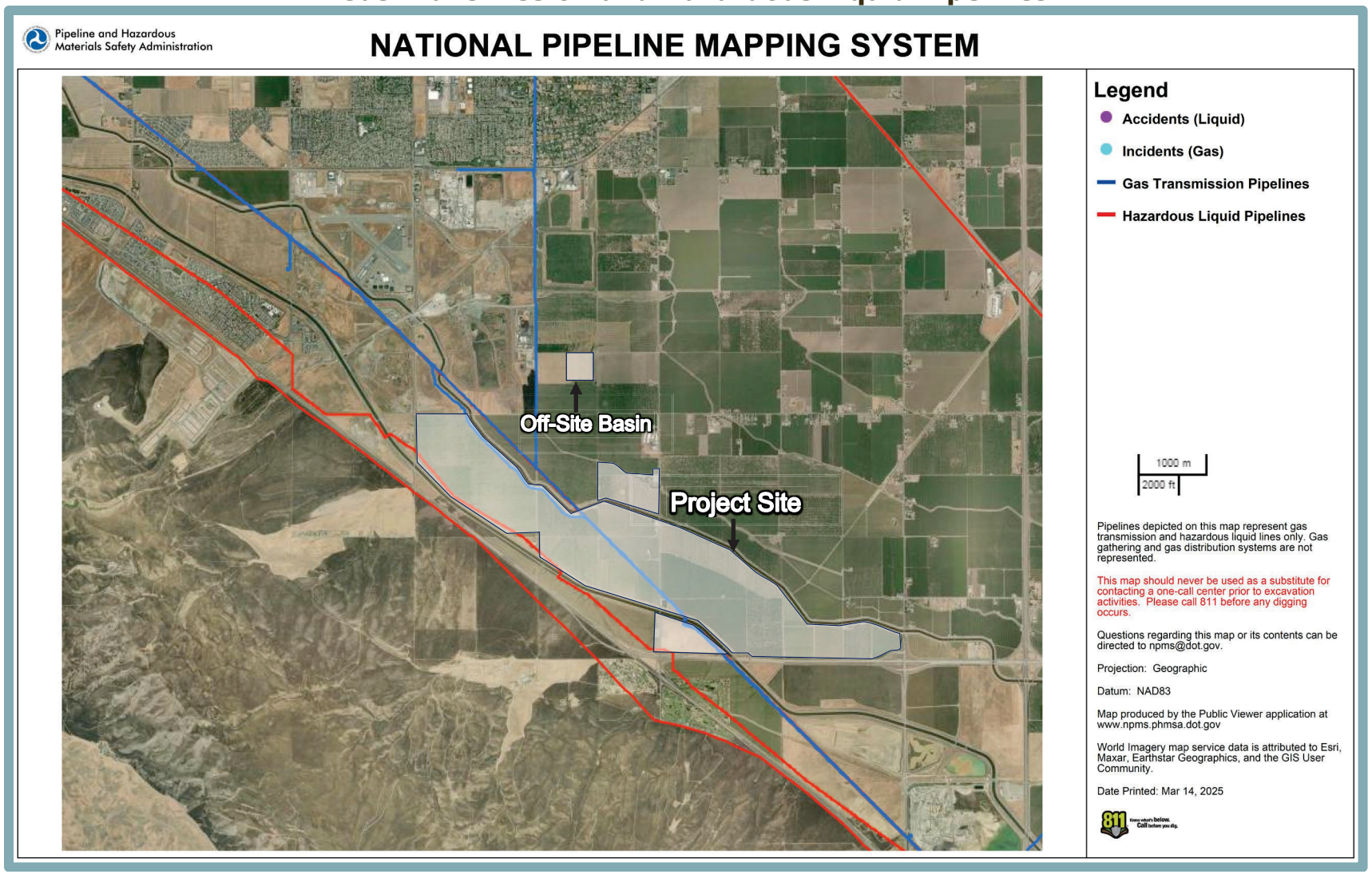
A Pacific Gas & Electric Company (PG&E) natural gas transmission pipeline transects the project site, and a Phillips 66 petroleum pipeline runs along the southern project site boundary (see Figure 4.7-1). According to the National Pipeline Mapping System (NPMS), reported spills or releases were not found in association with the pipelines, and, therefore, the Phase I ESA determined that the presence of the underground pipelines does not constitute an REC.

A.B. FAB, Inc, Manufacturing

The A.B. FAB, Inc. property is located within the proposed University Center development area of the project site, north of the Delta-Mendota Canal. As discussed above, A.B. FAB, Inc. is a metal fabrication business that specializes in dust control systems for almond hullers, shellers, and processors. Manufacturing equipment including laser cutters, metal bending machines, several welding stations, metal shaping machines, materials storage, and a paint booth were observed inside the four metal frame structures located on the property. Hazardous substances observed at the time of the site reconnaissance included approximately five, three-gallon diesel jerry cans, three, five-gallon pails of compressor oil, five, one-gallon containers of hydraulic fluid, one, one-gallon container of WD-40, eight acetylene gas cylinders, and three, 40-pound propane tanks that are used to power forklifts. Two, 10,000-gallon ASTs were observed along the eastern property boundary. According to Mr. Branden Mendes, Operations Manager with A.B. FAB, Inc., the ASTs are used to store water associated with the on-site fire suppression system. Mr. Mendes also indicated the facility generates oily rags that are properly disposed of off-site by a third-party vendor. Metal scraps and shavings are reportedly stored in a dumpster that is periodically transported off-site for proper disposal. Mr. Mendes indicated that the only solvent used at the facility is consistent with metal fabrication workshops, aside from the WD-40.

As observed during the January 10, 2025 site reconnaissance, the materials were stored on impervious surfaces, in closed containers, and visible indicators of leaks or spills were not observed. Minor staining was observed in areas where vehicles are stored or parked, but is located on concrete pavement, and according to Cameron-Cole would be classified as a de minimis condition. Based on the proper storage of the hazardous materials and lack of any stained soil or concrete indicative of a release, the Phase I ESA determined that the observed hazardous substances and/or materials at A.B. FAB, Inc. do not constitute a REC in connection with the project site as defined by the applicable standard.

Figure 4.7-1
Gas Transmission and Hazardous Liquid Pipelines



Source: National Pipeline Mapping System, 2025.

*Figure not OCR compatible.

Agricultural Pesticides

The project site has been subject to agricultural use dating back to at least 1937. Although evidence of spills, misuse, or misapplication of pesticides, herbicides, or fertilizers was not identified, the historical agricultural use of the project site and surrounding area could have resulted in the presence of fertilizer and/or pesticide residuals on the project site. However, according to the Phase I ESA, proper application of pesticides on agricultural properties is not considered a release under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), and, therefore the potential presence of such constituents on portions of the project site would not be considered a REC under the ASTM International E1527-13 Standard Practice. However, the potential presence of such constituents on the project site may constitute a Business Environmental Risk (BER). A BER is defined in the ASTM E1527-21 Standard Practice as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated.

Regulatory Database Listings

According to the Envirosite Report conducted as part of the Phase I ESA, the project site was identified in the Hazardous Waste Information System (HAZNET), Hazardous Waste Generators (HWG), CalEPA Regulated Site Portal (CALEPA SITES), Enforcement & Compliance History (ECHO), U.S. Environmental Protection Agency (USEPA) Facility Registry Services (FRS), USEPA Hazardous Waste Manifest System (MANIFEST EPA), and Resource Conservation and Recovery Act Non-Generator (RCRA_NONGEN) databases. The project site was identified within the databases based on operations associated with three facilities, two of which are no longer active. The inactive facilities, 1X Marchese Farms, located at 32400 South Chrisman Road, and Pushpinder Singh, located at 34234 South Chrisman Road, were identified in the HAZNET and HWG databases. The Phase I ESA determined that neither facility had reported releases or violations associated with this database listing prior to ceasing generation of hazardous or other regulated wastes. The third facility, A.B. FAB, Inc., located at 32483 South Chrisman Road, was identified in the CALEPA SITES, ECHO, FRS, HAZNET, HWG, MANIFEST EPA, and RCRA_NONGEN databases regarding the storage and handling of hazardous substances or materials. The Phase I ESA determined that there were no reported violations or releases associated with operations at A.B. FAB, Inc. facility. In addition, based on interview comments with a representative of the property owner, A.B. FAB, Inc. facility no longer generates hazardous waste. Therefore, the Phase I ESA determined that the identified database listings for the A.B. FAB, Inc. portion of the project site does not constitute RECs as defined by the applicable standard.

In addition, the Envirosite Report identified a total of nine sites included on regulatory databases within the approximate minimum search distance (AMSD) of the project site. However, violations or incidents were not identified in connection with the database listings, and cases achieved regulatory closure or compliance. Therefore, the Phase I ESA determined that the identified sites within the AMSD of the project site do not constitute a REC in connection with the project site as defined by the applicable standard.

Off-Site Basin Parcel

The proposed 40-acre off-site retention basin (Basin 4) location consists mainly of agricultural land, along with two shop buildings and various equipment storage areas. As discussed below, an REC in connection with the Off-Site Basin parcel as defined by the applicable standard was identified.

Off-Site Improvements Study Area

The Local Transportation Analysis (LTA) prepared for the proposed project identifies a range of intersection and roadway improvements that would be triggered by full buildout of the proposed project. The study areas associated with the intersection and roadway improvements, as well as the specific study areas associated with South Chrisman Road, are presented in Figure 3-15 and Figure 3-16 of this EIR. Phase I ESAs were not prepared for the off-site improvement areas. Therefore, a review of the list of hazardous material sites compiled pursuant to Government Code Section 65962.5 was conducted for each of the intersection and roadway improvement areas.[5,6,7,8]

The Intersection Study Areas were not identified on the DTSC Hazardous Waste and Substances Site list, the State Water Resources Control Board (SWRCB) Geotracker database, the list of solid waste disposal sites identified by the SWRCB, or on the list of active cease and desist orders and cleanup and abatement orders from the SWRCB. Sites within the vicinity of the off-site improvement areas that were identified in the database queries are discussed in further detail below. However, while the review of the list of hazardous material sites compiled pursuant to Government Code Section 65962.5 identified sites in the vicinity of or on the off-site improvement areas, all cases of such sites are closed, or the sites are currently undergoing remediation or monitoring. Therefore, the identification of hazardous waste sites in the vicinity of the off-site roadway improvements are not known to constitute a REC.

EnviroStor Database

The Jefferson School Reconstruction Site is identified on the EnviroStor database, and is located directly southeast of Intersection Study Area #9, South Chrisman Road and West Linne Road. The DTSC received a letter from Jefferson School District on November 6, 2013 stating that the Jefferson School District filed a California Environmental Quality Act (CEQA) Notice of Exemption with the San Joaquin County Clerk for the Jefferson School Reconstruction Project. The letter also stated that the project falls under Categorical Exemption Classes 2 and 14, which allows the Jefferson School District to submit the project to the California Department of Education (CDE) for site approval under a modernization program. As a modernization project, DTSC site approval is not required. As stated in the letter from November 6, "the District has decided to proceed with local oversight for the removal action… and will complete the removal action as part of the demolition phase of the reconstruction project." Based on the Jefferson School District's decision to move forward with remediation of the site under local oversight, the DTSC closed the project file.

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5 Department of Toxic Substances Control. *EnviroStor*. Available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=+. Accessed March 2025.

6 California State Water Resources Control Board. *GeoTracker. List of Leaking Underground Storage Tank Sites.* Available at: https://geotracker.waterboards.ca.gov/search?CMD=search&case_number=&business_name=&main_street_name=&city=&zip=&county=&SITE_TYPE=LUFT&oilfield=&STATUS=&BRANCH=&MASTER_BASE=&Search=Search. Accessed March 2025.

7 California State Water Resources Control Board. *Sites Identified With Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit*. Available at: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf. Accessed March 2025.

8 California State Water Resources Control Board. *List of "Active" Cease and Desist Orders and Cleanup and Abatement Orders*. Available at: https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CDOCAOList.xlsx. Accessed March 2025.

The Proposed Charter High School Site is identified on the EnviroStor database, and is located directly at Intersection Study Area #1, South Chrisman Road and 11th Street. However, the site has a status of No Further Action, as of August 3, 2011.

The Defense Distribution Depot San Joaquin – Tracy Site is identified on the EnviroStor database, and is located approximately 850 feet to the southeast of Intersection Study Area #4, South Chrisman Road and Schulte Road. However, on August 17, 2004, DTSC certified one part of the site as closed, and the second part of the site was certified to be closed on March 5, 2009.

The Trinkle and Boys Ag Flying, Inc. is identified on the EnviroStor database, and is located approximately 0.25-mile north of Intersection Study Area #13, Durham Ferry Road and State Route (SR) 33. However, Trinkle and Boys conducted a site assessment and surface remediation through crop uptake, and the site was determined to require No Further Action by the Private Sites Cleanup Unit on March 22, 2012.

GeoTracker Database

The GeoTracker Database identifies leaking underground storage tanks (LUST) Cleanup Sites, Cleanup Program Sites, and Military Cleanup Sites in the vicinity of South Chrisman Road and the Intersection Study Areas. LUST Cleanup Sites along South Chrisman Road include Country Mart Texaco, Jefferson School District, Reich's Grocery, and C. Navarra property. Other sites include the Country Market Site, located approximately 700 feet from Intersection Study Area #7, Tracy Boulevard and Linne Road; the Private Residence Site, located approximately 4,070 feet to the northwest of Intersection Study Area #10, Ahern Road, Lehman Road, and Southbound Interstate-5 (I-5) ramps; the Triple E. Produce Site and Ro-Lab America Rubber Co. Site are identified as Cleanup Program Sites, and are located approximately 1,160 feet and 1,020 feet, respectively, to the southeast of Intersection Study Area #8, MacArthur Drive and Linne Road. All of the aforementioned Sites are identified with a Case Closed status.

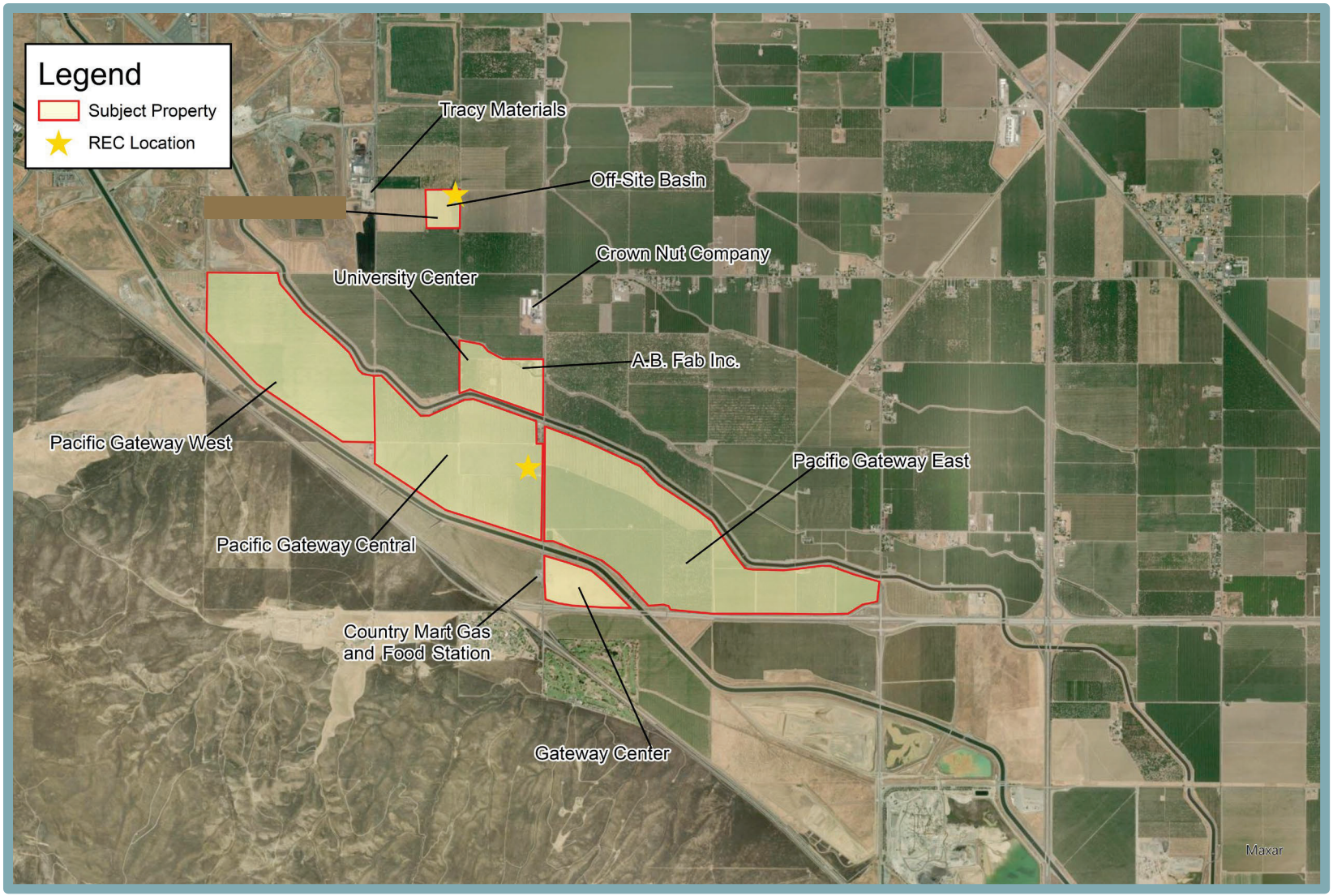
Military Cleanup Sites are identified along South Chrisman Road within the Defense Distribution Depot (DDD) San Joaquin – Tracy Site. A total of seven open Military Cleanup Sites are identified within the DDD. However, all such sites have a status of undergoing remediation or verification monitoring.

On-Site Recognized Environmental Conditions

Two estimated 200-gallon fuel ASTs were observed on the project site within the proposed Pacific Gateway Central development area (see Figure 4.7-2). Although the ASTs were located within a secondary containment structure, evidence of stained/discolored soil and concrete was observed both inside and outside the secondary containment. A petroleum odor was also noted in the soil surrounding the secondary containment structure. In addition, approximately 10, 55-gallon drums labelled as containing pesticides or herbicides, most of them empty but some containing residual fluids, were observed stored on bare soil without secondary containment.

Large areas of stained/discolored soils impacted by what appeared to be hydraulic fluid or oil were also observed around various pieces of farm equipment or machinery that were stored in exterior locations. Two approximately 330-gallon plastic intermediate bulk containers (IBCs) containing used oil were also observed stored in exterior locations with direct soil contact. Evidence of spillage on the side of the IBCs and significant staining on the surrounding soils was observed at the time of the site reconnaissance.

Figure 4.7-2
Identified RECs



Source: Cameron-Cole, 2025.

*Figure not OCR compatible.

A large pile of more than 100 discarded one- to five-gallon pesticide/herbicide containers was observed to be haphazardly strewn in and around a storage building in the same area. Approximately one dozen empty 330-gallon IBCs were observed. Labels indicate the IBCs formerly contained herbicides. A pile of 25 lead acid automotive batteries were observed improperly stored directly on soil adjacent to a storage building. Several 55-gallon drums used as burn barrels, containing what appeared to be household trash, were also observed. Approximately 30 boxes of unused pesticides and water conditioning agents were observed in the vicinity of the shop, all of which were stored directly on the soil. Based on the observed improper storage and visual evidence of releases to the environment, the Phase I ESA determined that the hazardous substances and petroleum products observed within the proposed Pacific Gateway Central portion of the project site constitute a REC as defined by the applicable standard.

As part of the site reconnaissance, Cameron-Cole observed a 200-gallon AST, approximately 50 one- to five-gallon pesticide/herbicide containers, two, 55-gallon drums containing what appeared to be waste oil, and various pieces of farm equipment including tractors, all-terrain vehicles (ATVs), trucks, sprayers, and tillers on the 40-acre, non-contiguous parcel identified as the Off-Site Basin. The Off-Site Basin consisted mainly of agricultural land in addition to two shop buildings and various equipment storage areas. Numerous large, covered mounds of almonds undergoing fumigation were also observed within the Off-Site Basin parcel. Visual evidence of stained/discolored soil and petroleum odors were noted around the AST and the waste oil drums. Limited areas of de minimis staining were observed around some of the agricultural equipment in this area. Based on the improper storage of materials and the evidence of releases surrounding the AST and drums, the Phase I ESA determined that hazardous substances or petroleum products observed within the Off-Site Basin parcel constitute a REC as defined by the applicable standard.

Nearest Airports

The closest public use airport to the project site is Tracy Municipal Airport, which is located approximately 1.6 miles to the northwest of the project site. The project site is not located in the vicinity of any private airstrips. According to the San Joaquin County Airport Land Use Compatibility Plan (ALUCP), the western portion of the project site is located within the Airport Influence Area (AIA) (see Figure 4.7-3).

4.7.3 REGULATORY CONTEXT

The following discussion contains a summary of regulatory controls pertaining to hazardous substances, including federal, State, and local laws and ordinances.

Federal Regulations

Federal agencies that regulate hazardous materials include the USEPA, the Occupational Safety and Health Administration (OSHA), the U.S. Department of Transportation (DOT), and the National Institute of Health (NIH). Prior to August 1992, the principal agency at the federal level regulating the generation, transport, and disposal of hazardous waste was the USEPA under the authority of the Resource Conservation and Recovery Act (RCRA). On August 1, 1992, however, the California DTSC was authorized to implement the State's hazardous waste management program for the USEPA. The USEPA continues to regulate hazardous substances under the CERCLA. The following federal laws and related regulations govern hazardous materials.

Figure 4.7-3
Tracy Municipal Airport Compatibility Zones

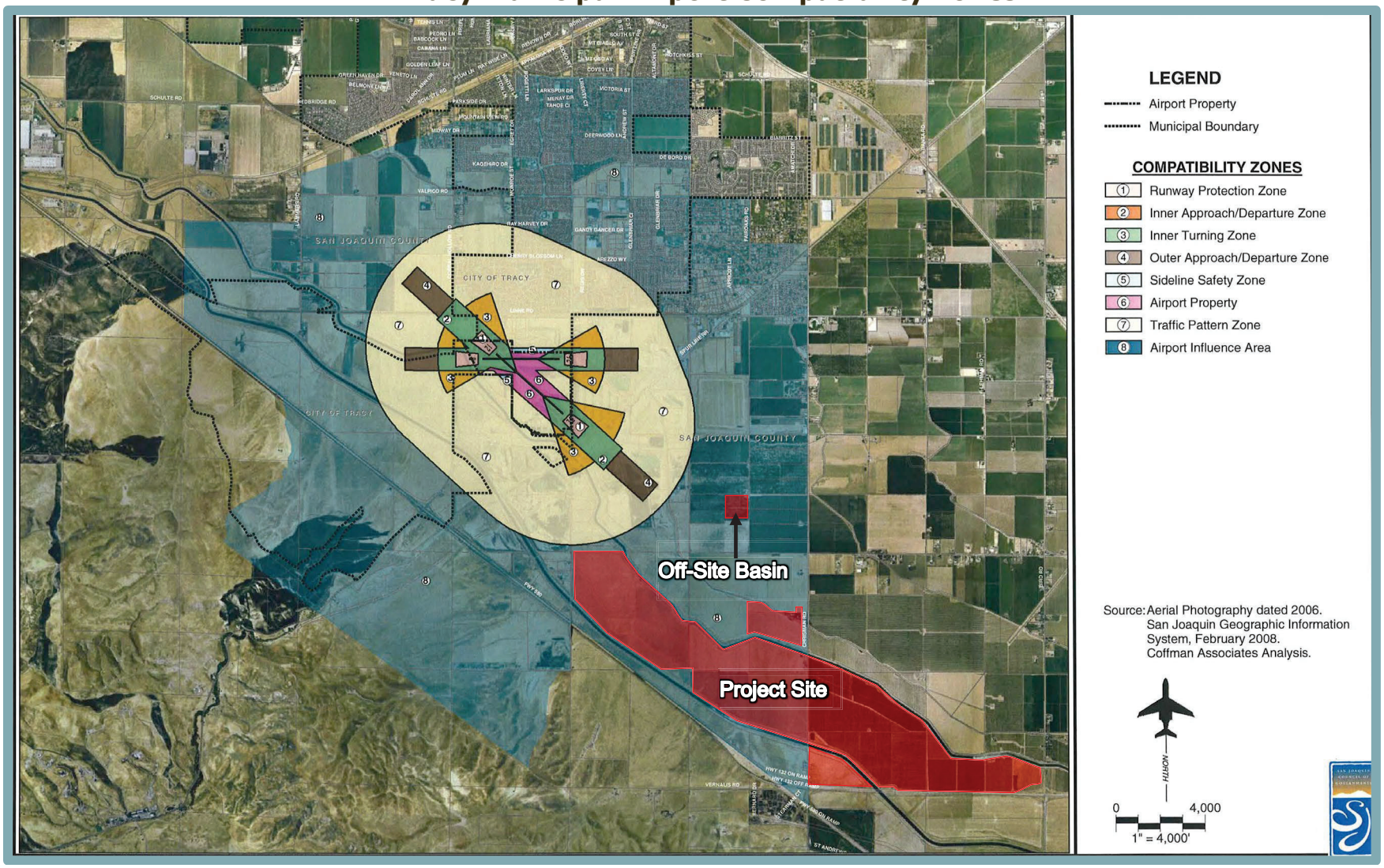


*Figure not OCR compatible.

Occupational Safety and Health Act

Congress passed the Occupational Safety and Health Act (29 U.S.C. Section 651 et seq. [1970]) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions.

In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. OSHA requires 40 hours of training for hazardous materials operators, as well as an annual eight-hour refresher course, which includes training regarding personal safety, hazardous materials storage and handling, and emergency response.

Comprehensive Environmental Response, Compensation, and Liability Act

The CERCLA (42 U.S.C. Section 9601 et seq. [1980]) provides a federal “Superfund” to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the USEPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. The USEPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, USEPA obtains private party cleanup through orders, consent decrees, and other small party settlements. The USEPA also recovers costs from financially viable individuals and companies once a response action has been completed. The USEPA is authorized to implement the CERCLA in all 50 states and U.S. territories.

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Act (SARA) of 1986 (Title III; Section 305[a]) reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definition clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. In addition, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). SARA, Title III provides funding for training in emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals. Title III of SARA addresses concerns about emergency preparedness for hazardous chemicals, and emphasizes helping communities meet their responsibilities in preparing to handle chemical emergencies and increasing public knowledge and access to information on hazardous chemicals present in their communities.

Resource Conservation and Recovery Act

The RCRA (42 U.S.C. Section 6901 et seq. [1976]) gives USEPA the authority to control hazardous waste from the "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for USEPA, more stringent hazardous waste



management standards, and a comprehensive UST program. States have the authority to implement individual hazardous waste programs in lieu of the RCRA as long as the state program is as stringent as federal RCRA requirements and is approved by the USEPA.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. Section 2601 et seq. [1976]) provides USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions related to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics, and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint (LBP).

U.S. Department of Transportation

Transportation of hazardous materials is regulated by the DOT's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 CFR Parts 100 to 185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive required training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections; use of vehicle controls and equipment, including emergency equipment; procedures for safe operation of the transport vehicle; training on the properties of the hazardous material being transported; and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 CFR Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

Asbestos Hazard Emergency Response Act

The 1986 Asbestos Hazard Emergency Response Act (AHERA) was signed into law as Title II of the TSCA, requiring the Asbestos Model Accreditation Plan (MAP) for accrediting individuals conducting asbestos inspection and corrective-action activities in schools and public and commercial buildings. The MAP provides guidance on the minimum training requirements for accrediting asbestos professionals, such as procedural entry, exit, sampling and monitoring, safety hazards, and relevant federal, State, and local regulatory standards.

Lead-based Paint Regulations

Lead pollutants are regulated by several laws administered by the USEPA, including the TSCA, the Residential Lead-based Paint Hazard Reduction Act of 1992, the Clean Air Act, the Clean Water Act (CWA), the Safe Drinking Water Act (SDWA), the RCRA, and CERCLA. The aforementioned regulations address lead in paint, dust and soil, and air and water, as well as the disposal of lead wastes. Regulations specific to LBP include, but are not limited to, the Lead Renovation Repair and Painting Program Rule, the Lead Abatement Program, the residential Lead-based Paint Disclosure Program, and Residential Hazards of Lead in Paint, Dust and Soil. Such regulations require risk assessments, inspections, and work practices that work to minimize exposure to lead hazards.

State Regulations

CalEPA and the SWRCB establish rules governing the use of hazardous materials and the management of hazardous waste. Within CalEPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL). The following discussion contains the applicable State laws.

Regional Water Quality Control Board

The CalEPA and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in California. Within CalEPA, DTSC has primary regulatory responsibility for hazardous waste management. Enforcement of regulations can be delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law. Along with the DTSC, the RWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. The RWQCB's regulations are contained in Title 27 of the California Code of Regulations (CCR). The DTSC, RWQCB, and/or a local agency typically oversee investigation and cleanup of contaminated sites.

Department of Toxic Substances Control

The DTSC was established to protect California against threats to public health and degradation to the environment and to restore properties degraded by past environmental contamination. Through statutory mandates, DTSC cleans up existing contamination, regulates management of hazardous wastes, and prevents pollution by working with businesses to reduce hazardous waste and use of toxic materials in California. DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. In addition, DTSC's Site Mitigation and Brownfields Reuse Program oversees the cleanup of State Superfund sites. State Superfund sites are additionally known as Annual Workplan sites, listed sites, or Cortese List sites. Superfund sites demonstrate evidence of a hazardous substance release or releases that could pose a significant threat to public health and/or the environment. DTSC requires responsible parties to cleanup such sites. When responsible parties cannot be found or where they do not take proper and timely action, DTSC may use State funds to undertake the cleanup.

Cortese List

Pursuant to Government Code Section 65962.5(a), the DTSC must compile and update, as appropriate and at least annually, submit to the Secretary for Environmental Protection a list of all of the following:

1. All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
2. All land designated as hazardous waste property or border zone property pursuant to former Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
3. All information received by the DTSC pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
4. All sites listed pursuant to Section 25356 of the Health and Safety Code.

California Code of Regulations

Hazardous waste is characterized and defined in CCR, Title 22, Sections 66261.2. Soils that meet the descriptions of the characteristics of hazardous waste defined therein and contain contaminants above regulatory screening levels are considered hazardous waste and must be handled and disposed of as such. The CCR includes the California Health and Safety Code.

California Health and Safety Code

The handling and storage of hazardous materials is regulated at the federal level by the USEPA under CERCLA, as amended by the SARA. Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses that store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

Ammonia is an example of an acutely hazardous material (AHM) that is regulated by the California OES under the California Accidental Release Program (CalARP), the USEPA under the Risk Management Program (40 CFR 68), and OSHA under the Process Safety Management Program (OSHA 1910.119). The CalARP and Risk Management Program require that all facilities that store, handle, or use AHMs above a minimum quantity, known as the threshold planning quantity, are required to develop a plan and prepare supporting documentation that summarizes the facility's potential risk to the local community and identifies safety measures to reduce potential risks to the public.

The HWCL, Chapter 6.5 of the California Health and Safety Code, is administered by the CalEPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

In California, the underground storage of hazardous materials is regulated by Chapter 6.7 of the California Health and Safety Code, pursuant to the Underground Storage of Hazardous Substances Act. Under Section 25280, the USTs used for the storage of substances hazardous to public health and safety and to the environment are stored prior to use or disposal in thousands of underground locations in the State. The USTs used for storage are potential sources of contamination of the ground and underlying aquifers, and may pose other dangers to public health and the environment. Chapter 6.7 establishes orderly procedures that will ensure that newly constructed USTs meet appropriate standards and that existing tanks be properly maintained, inspected, tested, and upgraded so that the health, property, and resources of the people of the State will be protected.

In addition, Section 25505 of the Health and Safety Code requires that facilities provide a Hazardous Materials Business Plan (HMBP) if they handle reportable quantities of hazardous materials at any given time in the year. Reportable quantities are 500 pounds for a solid, 55 gallons for a liquid, and 200 cubic feet for a gas. There are chemicals that have exceptions to the reportable quantities. All of the information for HMBPs must be uploaded into the California Environmental Reporting System (CERS). CERS is an online database that stores all of the

HMBP information for Certified Unified Program Agency (CUPA) agencies and emergency first responders viewing.[9]

California Vehicle Code Section 31303

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. California Vehicle Code Section 31303 regulates the transport of hazardous materials.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by OES, which coordinates the responses of other agencies, including CalEPA, CHP, California Department of Fish and Wildlife (CDFW), Central Valley RWQCB, and the South San Joaquin County Fire Authority (SSJCFA).

Unified Hazardous Materials Management Regulatory Program

On January 1, 1996, CalEPA implemented a unified hazardous waste and hazardous materials management regulatory program (Unified Program), to consolidate the administration of specified statutory requirements for the regulation of hazardous wastes and materials. The Unified Program is implemented at the local level by government agencies certified by the Secretary of CalEPA. The CUPA is responsible for implementation of the Unified Program. CUPA is certified and responsible for oversight of the following consolidated programs: Hazardous Materials Release Response Plans and Inventories (Business Plans); California Accidental Release Program; Underground Storage Tank Program; Aboveground Petroleum Storage Act; Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements.

Local Regulations

Relevant San Joaquin County guidelines and regulations, as well as San Joaquin County General Plan goals and policies, related to hazards and hazardous materials are discussed below.

San Joaquin County General Plan

The following goals and policies related to hazards and hazardous materials from the San Joaquin County General Plan are applicable to the proposed project.

Public Health and Safety Element

Goal PHS-1 To maintain a level of disaster preparedness necessary for the protection of public and private property, and the health, safety, and welfare of people living and working in San Joaquin County.

Goal PHS-7 To protect County residents, visitors, and property from hazardous materials and wastes.

[9] San Joaquin County Environmental Health Department. *Hazardous Materials Business Plan Guidelines*. May 21, 2020.

Policy PHS-7.1 **Minimize Hazardous Materials and Wastes.** The County shall discourage the use of hazardous materials and the creation of hazardous wastes.

Policy PHS-7.3 **Control Hazardous Materials.** The County shall require the use, storage, and disposal of hazardous materials and wastes to comply with local, State, and Federal safety standards.

Policy PHS-7.5 **Locate Hazardous Materials Away from Populated Areas.** To the extent feasible, the County shall require proposed activities and land uses that use, store, or dispose of hazardous materials or wastes to be located away from existing and planned populated areas.

Policy PHS-7.6 **Require Hazardous Materials Management Plans.** The County shall require businesses that use or store materials and wastes on-site to prepare Hazardous Materials Management Plans (Business Plans) that map and inventory all hazardous materials and contain contingency plans for accidents, designate an individual or individuals as emergency coordinator(s), and ensure that all employees understand the potential for accidents and the appropriate response. Plans must follow the requirements for Federal, State, and/or local defined special flood hazard areas.

Policy PHS-7.8 **Consistency with Hazardous Waste Management Plan.** The County shall require all new development to be consistent with the County Hazardous Waste Management Plan (CHWMP). Any proposed hazardous waste facility, or expansion of an existing hazardous waste facility, shall be consistent with the CHWMP.

Policy PHS-7.9 **Require Disclosure of Hazardous Materials and Waste.** The County shall require public disclosure of hazardous materials and wastes for existing and proposed businesses.

Goal PHS-8 To promote the safe operation of public and private airports and protect the safety of County Residents.

Policy PHS-8.1 **Land Use Compatibility.** The County shall prohibit land uses within unincorporated areas that interfere with the safe operation of aircraft or that would expose people to hazards from the operation of aircraft.

Policy PHS-8.4 **Compliance with Federal Aviation Administration (FAA) Regulations.** The County shall require development within airport approach and departure zones to be in compliance with FAA Regulations that address objects affecting navigable airspace.

Public Facilities and Services Element

Policy TM-8.5 **Compatible Land Uses.** The County shall require that only compatible land uses be permitted near airports, in accordance with the Airport Land Use Plan.

Policy TM-8.6 **Airport Operations.** The County shall ensure that airport operations are protected from:

- Projections or structures into navigable airspace;
- Light and glare;
- Emissions affecting visibility;
- Interference with communications; and
- Bird hazards, such as from ponds and landfills.

San Joaquin County Office of Emergency Services

San Joaquin County's OES provides emergency management services in cooperation with local cities and special districts, including fire agencies. During an active incident, such as fire or flood, the OES helps initiate first responses. The functions of the OES include emergency planning, response, recovery, and mitigation, including preparation of a Local Hazard Mitigation Plan (LHMP).

San Joaquin County Environmental Health Department

The San Joaquin County Environmental Health Department (SJCEHD) is the CUPA for local implementation of the California Accidental Release Prevention Program and several other hazardous materials and hazardous waste programs. SJCEHD is responsible for regulating USTs, ASTs, Hazardous Waste, and HMBPs. The HMBP program applies to facilities that handle reportable quantities of hazardous materials at any given time in the year. Reportable quantities are 500 pounds for a solid, 55 gallons for a liquid, and 200 cubic feet for a gas.[10] The CalEPA oversees the implementation of the HMBP program at the state level.

San Joaquin County Hazardous Waste Generator Program

The San Joaquin County Hazardous Waste Generator Program is under authority of California Health and Safety Code Section 25200 et seq.; CCR Title 22, Section 66001 et seq. The purpose of the program is to protect public health and the environment from exposure to hazardous wastes by regulation of the businesses and industries that generate hazardous waste. The program consists of comprehensive inspection, chemical emergency response, surveillance, complaint investigation, and assistance to industry, enforcement, and public education. A total of 1,150 facilities within San Joaquin County are under regulation of the program.

San Joaquin County Local Hazard Mitigation Plan

The currently adopted San Joaquin County LHMP[11] was updated in January 2023 as required by the Federal Emergency Management Agency (FEMA), and was approved by FEMA and the County Board of Supervisors in April 2023.[12]

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10 San Joaquin County Environmental Health Department. *Hazardous Materials Business Plan Guidelines*. May 21, 2020.

11 San Joaquin County. *San Joaquin County Local Hazard Mitigation Plan*. January 2023.

12 San Joaquin County Office of Emergency Services. *Multi-Jurisdictional Hazard Mitigation Plan (MJHMP)*. Available at: https://www.sjgov.org/department/oes/mjhmp. Accessed January 2025.

The LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 so that San Joaquin County would be eligible for the FEMA Pre-Disaster Mitigation and Hazard Mitigation Grant Programs, as well as lower flood insurance premiums. The LHMP is a multi-jurisdictional plan that geographically covers the entire area within San Joaquin County's jurisdictional boundaries, and was developed with input from various San Joaquin County departments, four cities within the County, and other agencies. The LHMP is intended to guide hazard mitigation planning to reduce the effects of hazard events, including wildfires.

San Joaquin County Emergency Operations Plan

The San Joaquin County Emergency Operations Plan (EOP) was developed by the San Joaquin County OES and adopted on February 17, 2022.[13] The EOP establishes a County emergency management structure, overall operational concepts, and provides the guidelines needed for emergency response planning, preparation, training and execution throughout unincorporated San Joaquin County. Such strategies would be applicable to any natural disaster or manmade emergency occurring in or near San Joaquin County. Emergency events could include wildfires, landslides, storms, floods originating from dam failure, earthquakes, and countywide public health emergencies, all of which have potentially catastrophic long-term public safety, economic, social and political implications.

San Joaquin County Code of Ordinances

The following provisions from the San Joaquin County Code of Ordinances relate to hazards and hazardous materials and are applicable to the proposed project.

Title 4, Division 8: Hazardous Materials

Section 4-8004 of the San Joaquin County Code establishes fees for businesses which handle hazardous materials to fund the implementation and administration of the provisions of Chapter 6.95 of the Health and Safety Code, titled Hazardous Materials Release Response Plans and Inventory. Fees shall be paid annually at the time of submittal of a hazardous materials inventory form to the County.

Title 5, Division 4: Wells and Well Drilling

Section 5-4206 of the San Joaquin County Code, Abandonment of Wells, requires that upon determination that any well is abandoned as provided in the rules and regulations adopted pursuant to Tile 5, Division 4 of the San Joaquin County Code, the well must be destroyed in the manner prescribed so that entrance of degraded or contaminated water into usable aquifers, or creation of a safety hazard, are minimized.

Title 9, Section 9-502.070: Surface and Subsurface Contamination Report

Section 9-502.070 of the San Joaquin County Code, Surface and Subsurface Contamination Report, requires that a surface and subsurface contamination report be submitted at the time of Tentative Map submittal. The surface and subsurface contamination report shall be prepared by a qualified environmental professional and shall identify any potential source of surface or subsurface contamination caused by past or current land uses. The report shall include evaluation of nonpoint source of hazardous materials, including agricultural chemical residues, as well as potential point sources, such as fuel storage tanks, septic systems, or chemical storage areas. If the report indicates surface and subsurface contamination is present, corrective action shall be

[13] San Joaquin County Office of Emergency Services. *Emergency Operations Plan.* Adopted February 17, 2022.

taken, as recommended in the report and concurred with by the Environmental Health Department prior to the issuance of the building permit.

Airport Land Use Commission

The San Joaquin Council of Governments (SJCOG) Board of Directors serves as the Airport Land Use Commission (ALUC) for San Joaquin County and the cities of Escalon, Lathrop, Lodi, Manteca, Mountain House, Ripon, Tracy, and Stockton. The State Aeronautics Act (Public Utilities Code Sections 21670 et seq.) identifies the role and responsibilities of ALUCs in land use planning. The Act is intended to ensure that proposed land uses in areas around public-use airports are compatible with continued airport operations.

San Joaquin County Airport Land Use Compatibility Plan

One of the ALUC's primary functions is to develop and adopt an ALUCP for each public-use airport within its jurisdiction. The San Joaquin County ALUCP includes land use policies focused on four compatibility factors: safety, noise, airspace, and overflight. The San Joaquin County ALUCP was adopted in July 2009 and amended in January 2018.

The basic function of the San Joaquin County ALUCP is to promote compatibility between airports within the County, including the Tracy Municipal Airport and the surrounding land uses. The ALUCP establishes of a set of compatibility criteria applicable to new development located within the Airport Influence Area established by the ALUCP. The ALUCP establishes zones regarding noise compatibility, safety compatibility, airspace protected, and overflight compatibility, and establishes criteria for land uses in each zone.

4.7.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hazards and hazardous materials. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

In accordance with CEQA Guidelines Appendix G, an impact related to hazards and hazardous materials is considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- 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 or excessive noise for people residing or working in the project area;

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (see Chapter 4.14, Wildfire); and/or
- Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires (see Chapter 4.14, Wildfire).

Impacts related to wildland fires are addressed in Chapter 4.14, Wildfire, of this EIR. Thus, further discussions related to impairing implementation of or physically interfering with an adopted emergency response plan or emergency evacuation plan, or the exposure of people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fire, are not discussed in further detail in this chapter.

Method of Analysis

The determination of site conditions and the presence of RECs associated with the proposed project presented in this chapter are based primarily on the Phase I ESA prepared for the proposed project by Cameron-Cole. The purpose of the Phase I ESA was to identify whether RECs exist at the project site, where RECs are defined by the ASTM as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. […]." The Phase I ESA was performed in accordance with the ASTM E1527-13 standard.

The following tasks were performed as part of the Phase I ESA:

- Historical records such as aerial photographs, historical topographic maps, City directories, and other readily-available historical sources were evaluated, as available, to research the history of the site and vicinity;
- Federal, State, and local environmental databases were reviewed to identify sites that use, store, or have released hazardous materials. The database search was performed by Envirosite. The Envirosite database report (presented as Appendix C to the Phase I ESA, which is included as Appendix J to this EIR) provide federal and State information intended to meet ASTM guidelines for Phase I ESA. Regulatory files were reviewed for the identified sites, subject to the limitations of the ASTM guidance document.
- Limited screenings for potential vapor encroachment conditions (VECs) were conducted.
- A surface reconnaissance of the project site was performed on foot by Cameron-Cole on January 10, 2025.
- Persons with knowledge of the site were interviewed.

For further details regarding the methodology and results of the Phase I ESA prepared by Cameron-Cole, see Appendix J to this EIR.

Project-Specific Impacts and Mitigation Measures

The project site conditions have been compared to the standards of significance presented above in order to determine the project's impact significance. If significant impacts are identified for the construction and operational phases of the proposed project, recommended mitigation measures have been included to reduce the identified impacts to less-than-significant levels.

4.7-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Based on the analysis below, with implementation of mitigation, the impact is *less than significant*.

Given that development of both the Initial Phase and Specific Plan Buildout would result in similar land uses, the following discussion applies to the potential for both components of the overall proposed project to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Initial Phase, Specific Plan Buildout

The Initial Phase would include approximately four million square feet (sf) of light industrial uses, a 25,000-sf University facility, and the proposed Veterans of Foreign Wars (VFW) facility. Full Specific Plan Buildout would include construction of approximately 24,768,000 sf of industrial uses, buildout of a 66.5-acre University Center plus 9.8 acres for future expansion, 160,000 sf of commercial uses, and various other site improvements over a 25- to 30-year period. While the future tenants of the proposed industrial buildings are currently unknown, operations associated with the proposed project would be typical of other industrial uses in the County, and would be governed by the uses permitted for the site pursuant to the County's General Limited Industrial (I-L) zoning district, as further defined in the proposed Specific Plan. The I-L zone is intended to implement the Light Industrial land use category of the General Plan, which provides for warehouse, distribution, fulfillment center, light manufacturing and assembly and other light industrial uses requiring large facilities to efficiently move goods.

Maintenance and operation of the proposed industrial uses may use common cleaning products, fertilizers, and herbicides on-site, any of which could contain potentially hazardous chemicals; however, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount anticipated to be used on the site, routine use of such products would not represent a substantial risk to public health or the environment. In addition, while not currently anticipated, in the event that future operations associated with the proposed warehouses involve the routine use, transport, or disposal of hazardous materials, such materials would be safely managed in accordance with applicable regulations and would be subject to County review depending on the type or quantity of chemicals proposed for use. Policy PHS 7.6 of the General Plan would require businesses that use or store materials and wastes on-site to prepare Hazardous Materials Management Plans that map and inventory all hazardous materials and contain contingency plans for accidents, designate an individual or individuals as emergency coordinator(s), and ensure that all employees understand the potential for accidents and the appropriate response. Pursuant to the California Health and Safety Code Section 25505 and the County's Hazardous Materials Business Plan Guidelines, the proposed project would be subject to a site inspection every three years, and HMBP elements must be reported into CERS annually. Portable quantities of hazardous materials must be reported into the CERS chemical inventory within 30 days of being on-site, and employees must be trained on procedures on how to mitigate a hazardous materials leak or spill.

Operations of the proposed University Center could involve the routine transport, use, disposal, or generation of substantial amounts of hazardous materials related to biohazardous, medical, and radioactive wastes associated with the university. The use or disposal of any hazardous materials would be subject to safety procedures mandated by applicable federal, State and local laws and regulations (e.g., RCRA, HWCL, and principles prescribed by the State of California Department of Health Services). Federal and State laws would be extended to all new facilities developed under the proposed project, as applicable.

The proposed University Center would also be required to comply with Titles 8, 14, 17 and 22 of the CCR. In accordance with such, spent hazardous materials generated on a daily basis would be placed in special containers and would be kept in specially designated and ventilated accumulation areas. The hazardous wastes would be collected and accumulated in designated and secured areas designed to prevent accidental release to the environment. Wastes would be transported off-site by licensed hazardous waste transporters to permitted hazardous waste disposal facilities. Biohazardous wastes are managed in the same way, though separately from other hazardous wastes. In addition, should any radioactive materials be used on-site, they would be handled in accordance with strict regulatory guidelines of the Department of Energy, the Nuclear Regulatory Commission, the USEPA and the California Radiation Control Law (California Health and Safety Code Sections 114960-115273). Radioactive waste would be collected, prepared, and packaged in accordance with regulations and then transported by a radioactive waste broker to a licensed radioactive waste disposal facility.

The CHP and DOT strictly regulate the transportation of hazardous materials and such regulations apply to the project. Procedures mandated by federal and State laws and regulations, including driver training and licensing, standardized hazard warning placards for vehicles, shipping manifest requirements, and standards for classifying, handling, and packaging hazardous materials, would ensure that the use, transport, or disposal of hazardous materials does not expose employees, visitors, or the nearby public to significant health or safety risks. Thus, operations of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Construction activities associated with implementation of the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. As such, it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluids, adhesives, paint, and other similar materials would be brought to the project site, used, and stored during the construction period. However, any such hazardous materials would be transported, handled, stored, and disposed of in accordance with all applicable local, State, and federal laws regulating the use of hazardous materials. Possible resource damage from hazardous materials, such as motor oil or gasoline, could occur if construction personnel service vehicles or construction equipment outside of designated work areas.

The project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and

Safety Code Section 25510(a), except as provided in subdivision (b),[14] the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, SJCEHD) in accordance with the regulations adopted pursuant to Section 25510(a). The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, City, or County fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractors are required to notify the SJCEHD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures. In addition, as discussed further in Chapter 4.8, Hydrology and Water Quality, of this EIR, preparation of and adherence to a Stormwater Pollution Prevention Plan (SWPPP) and associated Best Management Practices (BMPs) during project construction would ensure impacts from potential spills of hazardous materials and/or contamination of stormwater runoff would be minimized. Furthermore, the industrial activities associated with operation of the proposed project, including manufacturing activities, transportation, vehicle maintenance, and operation of the wastewater treatment plant (WWTP) would require approval of individual Industrial General Permits from the County. The industrial general permits would require preparation of industrial SWPPPs to address any activities that would have the potential to release pollutants to stormwater, including material and chemical storage; vehicle operation and maintenance; and material handling and transport.

Thus, development of the Initial Phase and Specific Plan Buildout could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Off-Site Improvements Study Area

Operations of the proposed roadway and intersection improvements would not include any activities that would involve the routine transport, use, or disposal of substantial amounts of hazardous materials. All development within the Off-Site Improvements Study Area would be limited to roadway improvements on existing roadways in order to address increased traffic in the vicinity of the project site as a result of the proposed project. Construction of the roadway improvements would be required to comply with all aforementioned regulations related to the temporary handling, storage, and transportation of hazardous and toxic materials. Possible resource damage from hazardous materials, such as motor oil or gasoline, could occur if construction personnel service vehicles or construction equipment outside of designated work areas. Thus, development within the Off-Site Improvements Study Area could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Conclusion

Based on the above, possible resource damage from hazardous materials, such as motor oil or gasoline, could occur if construction personnel service vehicles or construction equipment outside of designated work areas. The project could create a

[14] Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.7-1 requires the identification and designation of work areas set up to allow for servicing of vehicles and construction equipment while preventing resource damage from hazardous materials, thereby addressing the potential for hazardous material release during construction vehicle/equipment maintenance. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout

4.7-1 Prior to the approval of any grading or building permits, all plans shall identify designated work areas for servicing vehicles or construction equipment. Such work areas shall be clearly demarcated on-site and developed so as to prevent resource damage from hazardous materials, such as motor oil or gasoline.

4.7-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

According to the *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (*CBIA*), the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future users. In those specific instances, it is the impact of the project on the environment – and not the impact of the environment on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (*Id.* at pp. 377-378.). Therefore, where existing hazardous conditions already occur on the project site or vicinity, the discussion below focuses on the proposed project's potential to exacerbate risks associated with such conditions.

The Phase I ESA prepared for the proposed project included an analysis of potential RECs within the project site and Off-Site Basin parcel. The Initial Phase would be limited to portions of the University Center and Pacific Gateway East development area. Full Specific Plan Buildout would occur within all development areas, as well as the Off-Site Basin parcel. Therefore, the potential for both components of the overall proposed project to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment are discussed separately below.

Initial Phase

As discussed above, the Phase I ESA identified two RECs, neither of which would occur within areas to be developed as part of the Initial Phase. The Initial Phase portion of the project site does not contain any readily discernable RECs, including, but not limited to, ASTs, USTs, septic systems/cesspools, or PCB containing equipment. Therefore, the following includes a discussion of the remaining environmental conditions associated with the Initial Phase portion of the project site, including the potential presence of residual agricultural pesticides, an existing groundwater well, and an on-site gas transmission line.

Agricultural Pesticides

As discussed above, the Initial Phase area is currently comprised of orchards. Although evidence of spills, misuse, or misapplication of pesticides, herbicides, or fertilizers was not identified during the Phase I ESA, the historical agricultural use of the project site and surrounding area could have resulted in the accumulation of fertilizer and/or pesticide residuals on the project site. According to the Phase I ESA, proper application of pesticides on agricultural properties is not considered a release under CERCLA and therefore the potential presence of such constituents on portions of the project site would not be considered a REC under the ASTM International E1527-21 Standard Practice.

The Phase I ESA noted that the potential presence of such constituents on the project site may constitute a BER, depending on the intended future uses of the site. As discussed above, a BER is defined in the ASTM E1527-21 Standard Practice as a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated as part of the Phase I ESA. As such, the presence of a BER would not constitute a significant environmental impact pursuant to CEQA.

In addition, the majority of uses developed as part of the Initial Phase would be industrial, which is not considered a sensitive use that may be affected by persistent pesticides. Rather, persistent pesticides are typically a concern for residential uses. Furthermore, any persistent pesticides and their effect on future workers would pertain to the effect of the project site on the project, and, therefore, is not a concern pursuant to CEQA. The focus of CEQA should be on whether the project would exacerbate an existing hazardous condition. Exacerbation of persistent pesticides would not occur, as the Initial Phase site would be capped with impervious surfaces and dust control measures would be set in place to ensure any soil with pesticide residue is not transported off-site. Regarding the proposed University Center, students would not live on-site during the Initial Phase.

Groundwater Well

As identified in Figure 4.11-1 in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, groundwater Well #17 is located within the Initial Phase area, which would be abandoned as part of the proposed project. However, abandonment of Well #17 would be required to be conducted in compliance with the California Department of Water Resources (DWR) Water Well Standards, Bulletins 74-81 and

74-90, as well as the San Joaquin County Well Standards.[15] Therefore, compliance with the applicable standards would ensure a less-than-significant impact would occur related to well abandonment.

Gas Transmission Line

An existing PG&E gas transmission pipeline transects the project site, with a portion located within the Initial Phase of the Pacific Gateway East development area. The industrial development of the Initial Phase has been designed to site all buildings outside of the 50-foot pipeline easement, and existing rights associated with the easement would be respected. As such, the gas pipeline would not pose a risk to the Initial Phase during operation. However, consultation with PG&E would be necessary prior to commencement of grading and construction activities associated with the proposed project in order to ensure that the pipeline is not damaged as a result of such activities. Without consultation, the proposed project could damage the gas pipeline, thereby creating a significant hazard to the public or environment related to the release of gas. Thus, a significant impact could occur.

Specific Plan Buildout

The following includes a discussion of the environmental conditions associated with Specific Plan Buildout, including improperly stored hazardous materials, the potential presence of residual agricultural pesticides, existing groundwater wells and a septic tank, an on-site gas transmission line and petroleum line, and the potential presence of asbestos-containing building materials and LBP.

Improperly Stored Hazardous Materials

As previously discussed, improperly stored hazardous substances and petroleum products with evidence of releases were observed on-site within the Pacific Gateway Central development area. Stained and discolored soil, a petroleum odor, and evidence of spilling was observed around numerous improperly stored storage containers and two, 200-gallon fuel ASTs, therefore constituting a REC as defined by the applicable standard. In addition, improper storage of materials and the evidence of releases surrounding a 200-gallon AST and waste oil drums was observed within the Off-Site Basin parcel, therefore constituting a REC as defined by the applicable standard. Therefore, without proper removal or disposal of the improperly stored hazardous substances and petroleum products, as well as potentially impacted soils, a significant impact could occur associated with Specific Plan Buildout.

Agricultural Pesticides

As discussed above, similar to the Initial Phase, the historical agricultural use of the project site and surrounding area could have resulted in the accumulation of fertilizer and/or pesticide residuals on the project site. The potential presence of such constituents on the projects site may constitute a BER, depending on the intended future uses of the site. However, according to the Phase I ESA, the presence of a BER would not constitute a significant environmental impact pursuant to CEQA. While buildout of the University Center with up to 1,600 beds for student housing would occur as part of Specific Plan Buildout, similar to the Initial Phase, exacerbation of persistent

[15] San Joaquin County Environmental Health Department. *Standards for Well Construction & Destruction in San Joaquin County*. February 2005.

pesticides would not occur, as the Specific Plan Buildout site would be capped with impervious surfaces and dust control measures would be set in place to ensure any soil with pesticide residue is not transported off-site.

Groundwater Wells and Septic Tank

As identified in Figure 4.11-1 in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, groundwater Wells #2, #9, #10, #11, #12, and #18 are located in the Specific Plan Buildout area, and would be abandoned as part of the proposed project. However, abandonment of the wells would be required to be conducted in compliance with the California DWR Water Well Standards, Bulletins 74-81 and 74-90, as well as the San Joaquin County Well Standards.

In addition, a septic tank is located within the A.B. FAB, Inc. Property. At such time the A.B. FAB, Inc. business is demolished, the septic tank would be required to be abandoned in accordance with local, State, and federal regulations, including the Uniform Plumbing Code. All abandoned septic tanks, or those to be abandoned, would be required to be destroyed by removal or filling with earth, sand, or other approved material.[16]

Compliance with the applicable standards would ensure a less-than-significant impact would occur related to well and septic tank abandonment.

Natural Gas and Petroleum Pipeline

As discussed above, a PG&E natural gas pipeline transects the project site, and a Phillips 66 petroleum pipeline runs along the southern project site boundary. According to the NPMS, reported spills or releases were not found in association with the pipelines, and, therefore, the Phase I ESA determined that the presence of the underground pipelines does not constitute an REC. However, because the design of future site plans for Specific Plan Buildout is currently unknown, the proposed project could include development of new buildings within the gas or petroleum pipeline easements. As such, the pipelines could pose a risk to the proposed project if future buildings were to be located within the existing easements. Consultation with PG&E and Phillips 66 would be necessary prior to commencement of grading and construction activities associated with Specific Plan Buildout in order to ensure that the pipelines are not damaged as a result of such activities. Without consultation, the proposed project could create a significant hazard to the public or environment related to the release of gas or petroleum, and a significant impact could occur.

Asbestos-Containing Building Materials and Lead-Based Paint

Asbestos is the name for a group of naturally occurring silicate minerals that are considered to be “fibrous” and through processing can be separated into smaller and smaller fibers. The fibers are strong, durable, chemical resistant, and resistant to heat and fire. Because of its fiber strength and heat resistance, asbestos has been used in a variety of building construction materials for insulation and as a fire retardant. Exposure to asbestos increases the risk of developing lung disease, such as lung cancer,

[16] San Joaquin County Environmental Health Department. *Onsite Wastewater Treatment Standards*. January 2017.

mesothelioma, and asbestosis.[17] For buildings constructed prior to 1980, the Code of Federal Regulations (CFR) (Title 29, Section 1926.1101) states that all thermal system insulation (boiler insulation, pipe lagging, and related materials) and surface materials must be designated as "presumed asbestos-containing material" unless proven otherwise through sampling in accordance with the standards of the Asbestos Hazard Emergency Response Act. In addition, lead is a highly toxic material that may cause a range of serious illnesses, and in some cases death. Lead was most commonly used in paint. In 1978, the Consumer Product Safety Commission banned the use of lead as an additive to paint; however, LBPs could be present in structures built prior to 1970. Typically, human exposure to lead from older vintage paint could occur during renovation, maintenance, or demolition work.

According to the Phase I ESA, four fabricated metal storage buildings and a mobile home are located on-site. Historical records indicate at least one on-site building was present as early as 1963; thus, asbestos-containing building materials and LBP were potentially used in the construction and/or maintenance of the structure. Due to the potential presence of asbestos-containing building materials, and LBPs, during demolition and ground-disturbing activities associated with the proposed project, construction workers could come into contact with, and be exposed to, asbestos-containing building materials or LBP materials. Additionally, workers could potentially be exposed to elevated concentrations of lead or asbestos in the soil in the vicinity of the structure. Collection and disposal of asbestos-containing building materials and lead materials, including LBP, by untrained personnel could cause asbestos and lead dust emissions to be transported off-site, resulting in the release of hazardous material into the environment. Therefore, a significant impact could occur.

Off-Site Improvements Study Area

As previously discussed, while sites were identified on or within in the vicinity of the off-site roadway improvement areas as part of the review of the list of hazardous material sites compiled pursuant to Government Code Section 65962.5, all cases of such sites are closed, or the sites are currently undergoing remediation or monitoring. Therefore, the identification of such sites does not constitute a REC. However, the prospective intersection and roadway improvements would involve ground disturbing activities, which could create a significant hazard to the public or the environment, if hazardous materials are present within the Off-Site Improvements Study Area. The list of off-site physical roadway improvements that would be constructed by the proposed project is not definitive at this time due to a variety of factors, with the main factor being that many of the intersections/roadways are in jurisdictions other than San Joaquin County, and, thus, successful implementation of identified improvements would require other agency approval (e.g., City of Tracy, Caltrans). In such instances of extraterritorial jurisdiction, the County cannot impose the improvements on the other jurisdictions. Because it is currently unknown what roadway and intersection improvements would occur, further analysis of the Off-Site Improvements Study Area has not been conducted. Therefore, the potential exists for the prospective improvements to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

[17] U.S. Environmental Protection Agency. *Learn About Asbestos*. Available at: https://www.epa.gov/asbestos/learn-about-asbestos#find. Accessed July 2025.

Conclusion

According to the Phase I ESA prepared for the proposed project, the observed improperly stored hazardous substances and petroleum products and evidences of releases within the Pacific Gateway Central development area and Off-Site Basin parcel constitute a REC defined by the applicable standard. In addition, due to the on-site gas transmission line and petroleum pipeline, and potential presence of asbestos, LBP, and other hazardous materials, construction activities could result in the release of hazardous material into the environment. Therefore, implementation of the proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment, and the proposed project could result in a ***significant*** impact.

Mitigation Measure(s)

Mitigation Measures 4.7-2(a) through 4.7-2(f) establish the investigation parameters and protocol to ensure public safety in relation to the gas and petroleum pipelines, possible soil contamination, and lead-based paint or asbestos. Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout

4.7-2(a) Prior to the approval of any grading permits for development within the direct vicinity of the PG&E gas transmission pipeline or the Phillips 66 petroleum pipeline, as applicable, the construction contractor, a representative from PG&E and/or Phillips 66, and a representative from the San Joaquin County Public Works Department shall meet on the project site and the applicant shall prepare site-specific safety guidelines for construction in the field to the satisfaction of the San Joaquin County Public Works Department Development Services staff. The safety guidelines and field-verified location of the pipeline(s) shall be noted on the Improvement Plans and be included in all construction contracts involving the project site, subject to review and approval by the San Joaquin County Public Works Department.

Specific Plan Buildout

4.7-2(b) Prior to the initiation of construction of project components within the Pacific Gateway Central development area, a soil assessment of the stained and discolored soil observed surrounding the existing storage building and diesel aboveground storage tanks shall be conducted to determine the presence of potential soil contamination. Once the soils are collected, the soils are to be tested for probable contaminants of concern. If soil contaminates are not found, further action is not required; however, if concentrations of any contaminant are detected in excess of established thresholds, the assessment shall include appropriate measures, including, but not limited to, soil remediation to an acceptable total threshold limit concentration (TTLC) level according to applicable State and federal regulations or proper excavation and disposal of the soil at a licensed landfill facility. All recommended measures shall be implemented by the

project applicant, subject to review and approval by the San Joaquin County Environmental Health Department.

4.7-2(c) Prior to the initiation of construction of project components within the Off-Site Basin parcel, a soil assessment of the stained and discolored soil observed surrounding the aboveground storage tank and waste oil drums shall be conducted to determine the presence of potential soil contamination. Once the soils are collected, the soils are to be tested for probable contaminants of concern. If soil contaminates are not found, further action is not required; however, if concentrations of any contaminant are detected in excess of established thresholds, the assessment shall include appropriate measures, including, but not limited to, soil remediation to an acceptable total threshold limit concentration (TTLC) level according to applicable State and federal regulations or proper excavation and disposal of the soil at a licensed landfill facility. All recommended measures shall be implemented by the project applicant, subject to review and approval by the San Joaquin County Environmental Health Department.

4.7-2(d) Prior to approval of any future improvement plans for the project, the existing petroleum and gas pipelines and associated easements shall be included on the utility sheets. All proposed buildings shall be located outside of existing easements and any applicable pipeline operator setback specifications and standards shall be met to the satisfaction of the San Joaquin County Public Works Department.

4.7-2(e) Prior to issuance of a demolition permit by the County for any on-site structures as part of buildout subsequent to the Initial Phase, the project applicant shall provide a site assessment that determines whether any structures to be demolished contain lead-based paint (LBP) or asbestos. If structures do not contain LBP or asbestos, further mitigation is not required; however, if LBP is found, all loose and peeling paint shall be removed and disposed of by a licensed and certified lead paint removal contractor, in accordance with California Air Resources Board recommendations and OSHA requirements. If asbestos is found, all construction activities shall comply with all requirements and regulations promulgated through the San Joaquin Valley Air Pollution Control District (SJVAPCD) Asbestos Dust Mitigation Plan. The demolition contractor shall be informed that all paint on the buildings shall be considered as containing lead and/or asbestos. The contractor shall follow all work practice standards set forth in the Asbestos National Emission Standards for Hazardous Air Pollutants (Asbestos NESHAP, 40 CFR, Part 61, Subpart M) regulations, as well as Section V, Chapter 3 of the OSHA Technical Manual. Work practice standards generally include appropriate precautions to protect construction workers and the surrounding community, and appropriate disposal methods for construction waste containing lead paint or asbestos in accordance with federal, State, and local regulations subject to approval by the San Joaquin County Environmental Health Department.

Off-Site Improvements Study Area

4.7-2(f) If indicators of apparent soil contamination (soil staining, odors, debris fill material, etc.) are encountered within the Off-Site Improvements Study Area during off-site roadway improvements, the impacted area(s) shall be isolated from surrounding, non-impacted areas. The project applicant shall hire an environmental professional to obtain samples of the potentially impacted soil for analysis of the contaminants of concern and comparison with applicable regulatory screening levels (i.e., Environmental Screening Levels, California Human Health Screening Levels, Regional Screening Levels, etc.). The results of the soil sampling shall be submitted to the San Joaquin County Environmental Health Department. Where the soil contaminant concentrations exceed the applicable regulatory screening levels, the impacted soil shall be excavated and disposed of off-site at a licensed landfill facility to the satisfaction of the San Joaquin County Environmental Health Department.

4.7-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Based on the analysis below, the impact is *less than significant*.

The potential for both phases of the overall proposed project, as well as the off-site improvements, to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school are discussed separately below.

Initial Phase

The areas of the project site to be developed under the Initial Phase are not located within one quarter-mile of an existing school. The nearest school to the project site is Jefferson School, located approximately 2.3 miles north of the project site. Therefore, the Initial Phase of the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Specific Plan Buildout

As discussed above, the nearest existing school is Jefferson School, located approximately 2.3 miles north of the project site. The Initial Phase would include a 25,000-sf University facility within the University Center development area, which would serve as Phase 1 of the university campus. Specific Plan Buildout would include expansion of the University Center over an estimated 20-year period based on student demand. However, an analysis of the proposed project's potential to emit hazardous materials or handle hazardous or acutely hazardous materials, substances, or waste within 0.25-mile of the future on-site University facility is not required pursuant to CEQA. Rather, CEQA is focused on the proposed project's effects on the surrounding physical environment.[18]

[18] "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project." (Ballona Wetlands Land Trust v. Town of Los Angeles, (2011) 201 Cal.App.4th 455, 473 (Ballona).) The California Supreme Court recently held that "CEQA does not generally require

Nonetheless, it should be noted that while the proposed on-site uses could involve the use of common cleaning products, fertilizers, and herbicides, any of which could contain potentially hazardous chemicals, as previously discussed, such products would be expected to be used in accordance with label instructions. Due to the regulations governing use of such products and the amount anticipated to be used on the site, routine use of such products would not represent a substantial risk to public health or the environment. In addition, in the event that future operations associated with the proposed warehouses involve the routine use, transport, or disposal of hazardous materials, such materials would be safely managed in accordance with applicable regulations and would be subject to County review depending on the type or quantity of chemicals proposed for use. Policy PHS 7.6 of the General Plan would require businesses that use or store materials and wastes on-site to prepare Hazardous Materials Management Plans that map and inventory all hazardous materials and contain contingency plans for accidents, designate an individual or individuals as emergency coordinator(s), and ensure that all employees understand the potential for accidents and the appropriate response. Therefore, Specific Plan Buildout would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed off-site school.

Off-Site Improvements Study Area

Study Area #9, South Chrisman Road and West Linne Road, is located immediately adjacent to Jefferson School, and is therefore located within one quarter-mile of an existing school. However, as discussed above, all development within the Off-Site Improvements Study Area would be limited to improvements on existing roadways in order to address increased traffic in the vicinity as a result of the proposed project, and would not include operations that could emit hazardous emissions or include handling hazardous or acutely hazardous materials, substances, or waste. In addition, construction of the roadway improvements would be required to comply with all aforementioned regulations related the handling, storage, and transportation of hazardous and toxic materials, and development of the prospective roadway improvements would be subject to Mitigation Measure 4.7-2(f), related to potential soil contamination. Therefore, the off-site improvements would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

Conclusions

Based on the above information, the proposed project would not result in substantial adverse effects related to hazardous emissions or the handling of hazardous or acutely

an agency to consider the effects of existing environmental conditions on a proposed project's future users or residents. What CEQA does mandate… is an analysis of how a project might exacerbate existing environmental hazards." (California Building Industry Assn. v. Bay Area Air Quality Management Dist. (2015) 62 Cal.4th 369, 392; see also Mission Bay Alliance v. Office of Community Investment & Infrastructure (2016) 6 Cal.App.5th 160, 197 ["identifying the effects on the project and its users of locating the project in a particular environmental setting is neither consistent with CEQA's legislative purpose nor required by the CEQA statutes"], quoting Ballona, supra, 201 Cal.App.4th at p. 474.)

hazardous materials, substances, or waste within 0.25-mile of an existing or proposed school. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)
None required.

4.7-4 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. Based on the analysis below, the impact is *less than significant*.

The following discussion applies to the Initial Phase, Specific Plan Buildout, and the Off-Site Improvements Study Area.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area
As discussed above, the CalEPA has compiled a list of data resources that provide information regarding the facilities or sites identified as meeting the "Cortese List" requirements, pursuant to Government Code 65962.5. The components of the Cortese List include the DTSC Hazardous Waste and Substances Site List, the list of LUST sites from the SWRCB's GeoTracker database, the list of solid waste disposal sites identified by the SWRCB, and the list of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from the SWRCB. The project site and Off-Site Improvements Study Area are not included on any of the aforementioned data resources. Therefore, the proposed project would not create a significant hazard to the public or the environment related to being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)
None required.

4.7-5 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 or excessive noise for people residing or working in the project area. Based on the analysis below, the impact is *less than significant*.

Given that development of both the Initial Phase and Specific Plan Buildout would result in similar land uses, and that portions of both phases would be located within the Tracy Municipal Airport AIA, the following discussion applies to the potential for both phases of the overall proposed project to result in a safety hazard or excessive noise for people residing or working in the project area. A discussion of the off-site improvement areas is also provided separately below.

Initial Phase, Specific Plan Buildout

As discussed above, the nearest public airport to the project site is the Tracy Municipal Airport, located approximately 1.6 miles to the northwest of the project site. As a result, portions of the project site are located within the AIA, pursuant to the San Joaquin County ALUCP.[19] A discussion of noise-related impacts associated with the project site being located within the AIA is provided in Chapter 4.10, Noise, of this EIR. Therefore, the following discussion is focused on whether the proposed project would result in a safety hazard associated with the Tracy Municipal Airport for people working in the project area.

According to the San Joaquin County ALUCP, the western portion of the project site is within the AIA. Development within the AIA would include the VFW facility, the University campus, industrial uses, and commercial uses. As shown in Table 3A of the ALUCP, Safety Criteria Matrix, the uses proposed to be developed as part of the proposed project are allowable. The ALUCP does not require any of the land within the zone to be open or unused, and does not have a limit on dwelling units per acre, or the intensity of non-residential development. Airspace review would be required for structures over 100 feet tall. Architectural plans for the Initial Phase industrial uses, VFW facility, and University campus indicate that the maximum building elevations would be 56 feet, 22 feet, and 55 feet, respectively, and, therefore, such uses would not be subject to airspace review, and would not be considered a potential safety hazard. Industrial uses developed as part of Specific Plan Buildout would include standard industrial structures limited to 100 feet in height in areas within the AIA to ensure safety compatibility with the Tracy Municipal Airport, and industrial buildings would otherwise be limited to 120 feet in height outside of the AIA.

Land use development that may cause hazards to flight, such as land uses that may cause the attraction of birds or other wildlife hazards to increase, is also prohibited. Four park/retention basin joint use facilities would be developed on-site within the AIA, which could periodically result in standing water being present within the project site. However, Basins 1, 2, 3, and 4 would be sized to allow stormwater to percolate into the soils within two days of a storm event due to their proximity to the Tracy Municipal Airport, pursuant to FAA regulations. Basins 5, 6, and 7 would be required to percolate in 10 days after a 10-year, 48-hour storm event, pursuant to County standards. As such, permanent water features would not be included in the project design.

Off-Site Improvements Study Area

According to the San Joaquin County ALUCP, Intersection Study Areas #6, #7, and #8 are within the Tracy Municipal Airport AIA. Study Area #6 is within Zone 2, Study Area #7 is within Zone 7, and Study Area #8 is within Zone 8. However, all development within the off-site study areas would be limited to roadway improvements on existing roadways in order to address increased traffic in the vicinity as a result of the proposed project.

Zone 2, the Inner Approach/Departure Zone (IADZ), and Zone 7, the Traffic Pattern Zone (TPZ) include prohibited uses and limits regarding intensity; however, such requirements do not apply to the proposed roadway improvements. The roadway

[19] San Joaquin County. *Airport Land Use Compatibility Plan Update San Joaquin County Aviation System*. July 2009, Amended January 2018.

improvements would not involve development of structures or new land uses that could potentially cause safety hazards.

Conclusion

Based on the above, a ***less-than-significant*** impact could occur related to a safety hazard for people residing or working in the project area associated with the project being located within an airport land use plan or within two miles of a public airport or public use airport.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 6, Statutorily Required Sections, of this EIR.

4.7-6 Cumulative exposure to potential hazards and increases in the transport, storage, and use of hazardous materials. Based on the analysis below, the cumulative impact is *less than significant*.

As discussed, project-level impacts associated with hazardous materials related to implementation of the proposed project were found to be less than significant or less than significant with mitigation. Hazardous materials and other public health and safety issues are generally site-specific and/or project-specific, and would not be significantly affected by other development within the project area. Cumulative development projects would be subject to the same federal, State, and local hazardous materials management requirements as the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community. In addition, cumulative development projects would also be evaluated for consistency with the San Joaquin County ALUCP, as applicable. Therefore, cumulative impacts associated with potential hazards and increases in the transport, storage, and use of hazardous materials associated with implementation of past, present, and reasonably foreseeable future projects, as well as the proposed project, would be ***less than significant***.

Mitigation Measure(s)

None required.

4.8 Hydrology and Water Quality

4.8 HYDROLOGY AND WATER QUALITY

4.8.1 INTRODUCTION

The Hydrology and Water Quality chapter of the EIR describes existing drainage patterns on the project site, current stormwater flows, and stormwater infrastructure. The chapter also evaluates potential impacts of the proposed project with respect to increases in impervious surface area and associated stormwater flows, degradation of water quality, and increases in on- and off-site flooding. Information used for the chapter was primarily drawn from a Water Supply Assessment (WSA) by Todd Groundwater (see Appendix K)[1] and a Hydrology and Hydraulics Report by Schaaf and Wheeler (see Appendix L)[2] prepared for the proposed project. In addition, information was drawn from the Northern and Central Delta-Mendota Region Groundwater Sustainability Plan (GSP),[3] San Joaquin County General Plan,[4] the San Joaquin County General Plan Environmental Impact Report (EIR),[5] the Delta-Mendota Subbasin GSP,[6] and the Tracy Subbasin GSP.[7]

Issues associated with water supply availability are addressed in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR.

4.8.2 EXISTING ENVIRONMENTAL SETTING

The section below describes regional hydrology, the existing drainage patterns within the project site, including peak flows, existing water quality, and groundwater conditions.

Regional Hydrology

San Joaquin County is located entirely within California's Central Valley, also referred to as the Great Valley. Land use in this region includes a majority of the State's most productive agricultural operations. The valley stretches approximately 500 miles from about 100 miles south of the Oregon State border to the boundary between the counties of Kern and Los Angeles. The Central Valley is divided into three hydrologic regions, or surface water basins, including the Sacramento River Basin in the north, the San Joaquin River Basin in the center, and the Tulare Lake Basin to the south. Together, the Sacramento and San Joaquin River Basins cover over 30 percent of the irrigable land in the Central Valley.

The two main drainages within the Central Valley, the Sacramento and San Joaquin rivers, empty into the San Francisco Bay estuary system through an expanse of interconnected canals, streambeds, sloughs, marshes, and peat islands known as the Sacramento-San Joaquin Delta (the Delta). Four major rivers drain from the western slope of the Sierra Nevada: the Calaveras, Mokelumne, Stanislaus, and San Joaquin Rivers. The majority of the flow in the lower San

1 Todd Groundwater. *Water Supply Assessment, Pacific Gateway, San Joaquin County, California.* August 2025.
2 Schaaf and Wheeler. *Pacific Gateway Hydrology and Hydraulics Report.* September 19, 2025.
3 Northern and Central Delta-Mendota. *Groundwater Sustainability Plan for the Northern and Central Delta-Mendota Regions.* Adopted November 2019; Revised June 2022.
4 San Joaquin County. *San Joaquin County General Plan Policy Document.* December 2016.
5 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report.* October 2014.
6 Delta-Mendota Sustainable Groundwater Management Act. *Delta-Mendota Subbasin Groundwater Sustainability Plan.* July 2024.
7 San Joaquin County. *Tracy Subbasin Groundwater Sustainability Plan.* November 2021.

Joaquin River is derived from inflow from the Merced, Tuolumne, and Stanislaus rivers, as the upper San Joaquin River contributes hardly any inflow during the summer months. The San Joaquin River originates in the Sierra Nevada mountains and enters the San Joaquin Valley at Friant Dam, operated by the U.S. Bureau of Reclamation, before flowing in a southeast to northwest direction from the Sierra Nevada through San Joaquin County into the Delta, San Francisco Bay, and ultimately, the Pacific Ocean. Both the headwaters and ultimate destination of the San Joaquin River and associated tributaries are located outside of the San Joaquin County boundaries.

The Central Valley is divided into different hydrologic regions, including the Sacramento Hydrologic Region, the Tulare Lake Hydrologic Region, and the San Joaquin River Hydrologic Region. The San Joaquin River Hydrologic Region covers approximately 9.7 million acres, and is bound by the Delta to the north, the Sierra Nevada to the east, the Tehachapi Mountains to the south, and the Diablo Range to the west. The San Joaquin River Hydrologic Region is heavily reliant on groundwater supplies and accounts for approximately 18 percent of groundwater use for both agricultural and urban needs throughout the State. The San Joaquin River Hydrologic Region includes two groundwater basins (Yosemite Valley and Los Banos Creek Valley) and part of the San Joaquin Valley basin, which is made up of nine subbasins. The nine subbasins are recharged in the upland areas of Eastern San Joaquin County and adjacent foothill areas to the east and west, and discharge to the low-lying area of the Delta and the San Joaquin River. The Eastern San Joaquin Subbasin is the largest subbasin in the County and the Delta-Mendota Subbasin lies along the western margin of the San Joaquin Valley and shares a boundary with the Tracy Subbasin. The project site is located within the Tracy and Delta-Mendota Subbasins.

Project Site and Surrounding Area Drainage

The project site is located within a 15,590-acre watershed comprised of various drainage catchment areas based on underlying terrain and physical barriers, such as Interstate 580 (I-580), California Aqueduct, and Delta-Mendota Canal (see Figure 4.8-1). The watershed surrounding the project site is divided into two regions with varying rainfall characteristics: a mountain region west of I-580, and a valley region east of the highway. In the vicinity of the project site, the County's channel and culvert network extends from the existing highway culverts associated with I-580 to an area located downstream of existing development. Runoff from the mountain region accumulates at I-580 before flowing through a series of culverts to a region located southwest of the California Aqueduct. In the eastern portion of the project site, runoff also accumulates at Vernalis Road and State Route 132 within the canal region. Runoff is then conveyed via crossings or culverts past the California Aqueduct, where it mostly flows overland across existing farmland. The farmland properties between the California Aqueduct and Delta-Mendota Canal typically all have discharges to the Delta-Mendota Canal or crossings over the Delta-Mendota Canal, where runoff can overland across farm properties located northeast of the canal.

The project site is generally level and is located entirely within the region's valley rainfall area. The site is primarily comprised of commercial-scale almond and cherry orchards that have minimal drainage infrastructure, as well as an agricultural processing and manufacturing facility, separately operated by A. B. FAB, Inc. The Delta-Mendota Canal is located along the northern project site boundary, the Banta-Carbona Irrigation District Canal extends northeast away from the project site, and the California Aqueduct is located adjacent to the southern project site boundary (see Figure 4.8-2).

Figure 4.8-1
Existing Drainage Catchment Areas

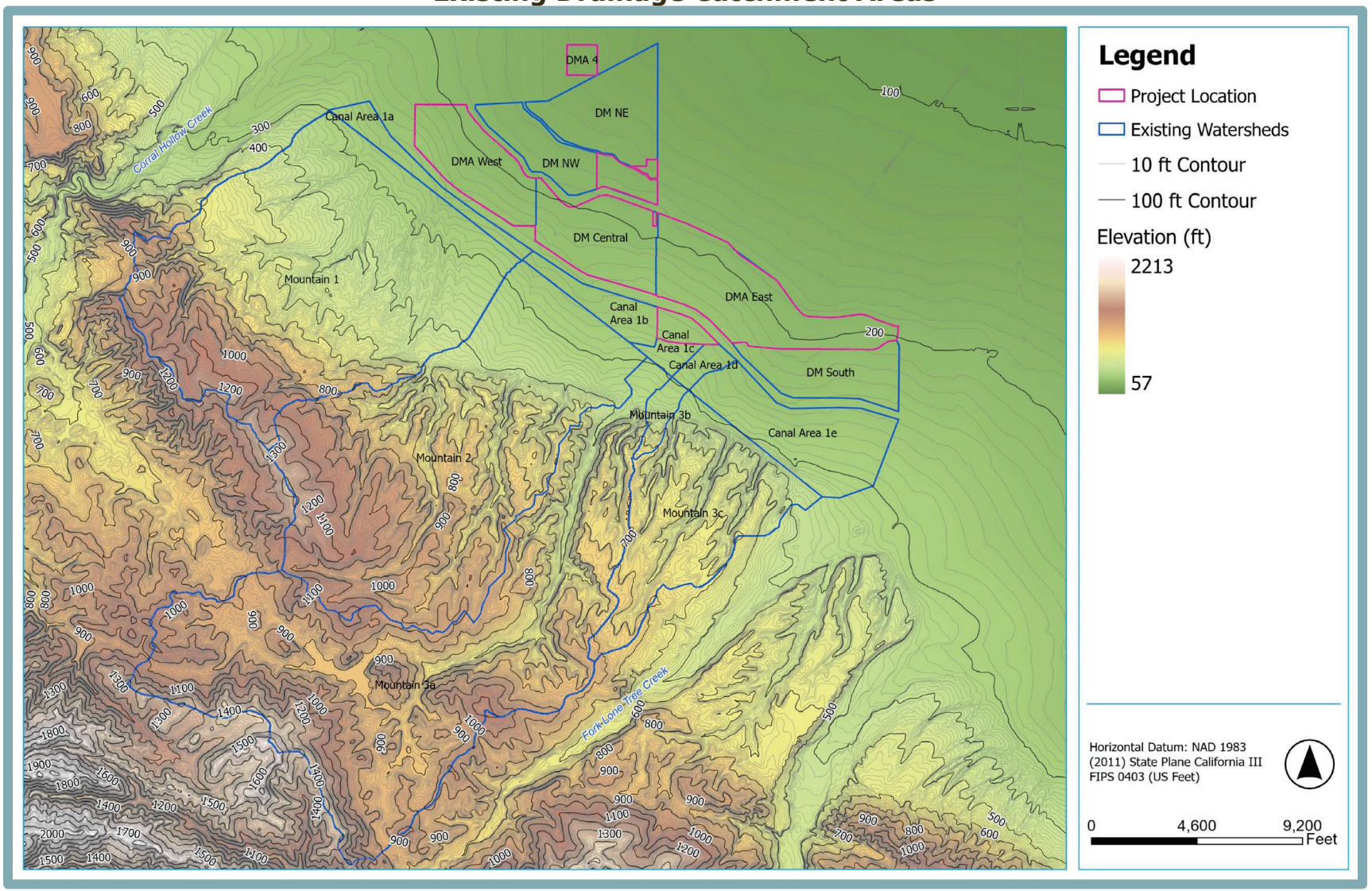


*Figure not OCR compatible.

Figure 4.8-2
Local Drainage Infrastructure

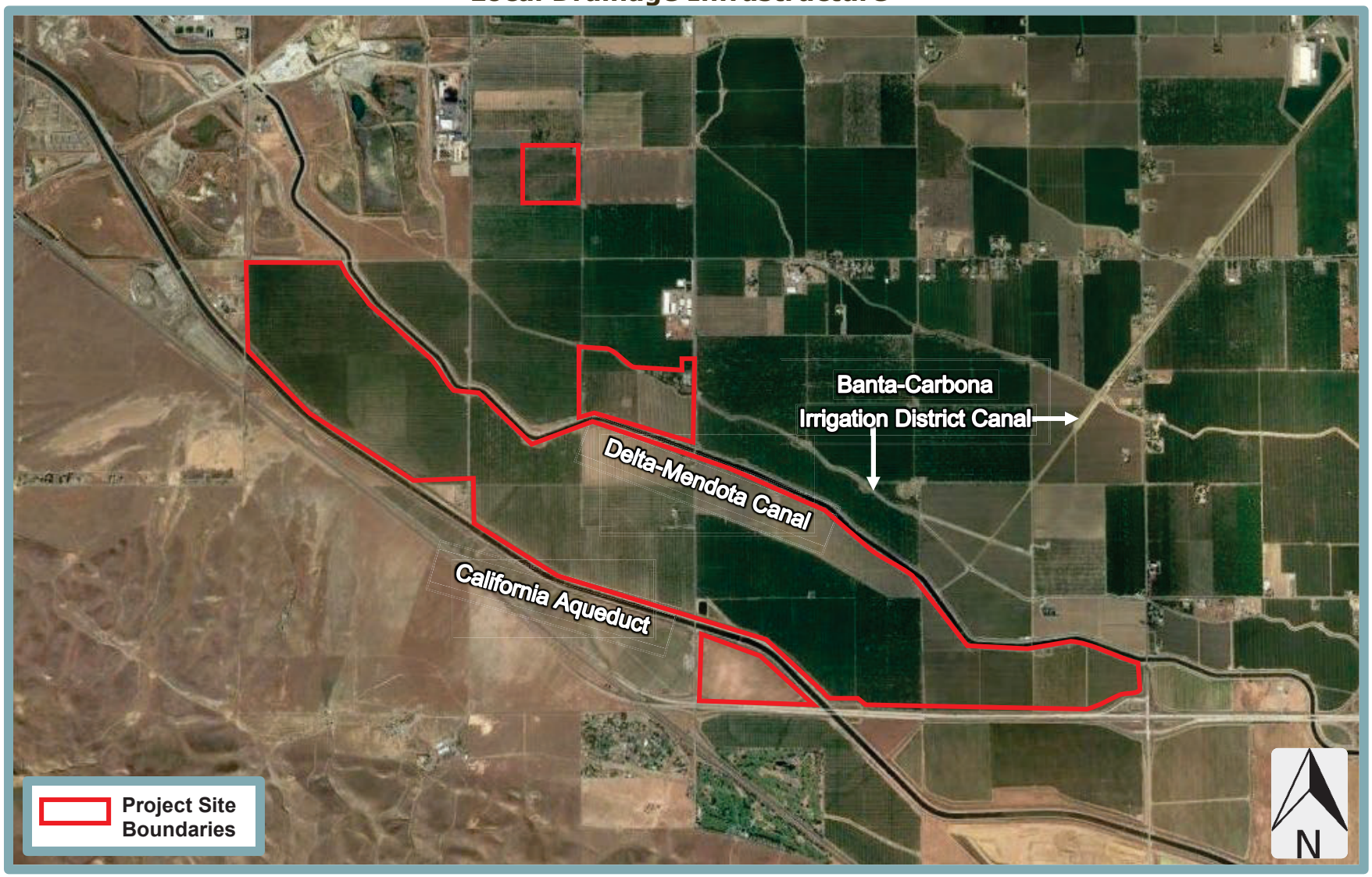


*Figure not OCR compatible.

The Federal Emergency Management Agency (FEMA) has designated the project site as an Area of Minimal Flood Hazard Zone (Zone X). For existing conditions, Schaaf and Wheeler modeled for the 100-year, 24-hour scenario (see Figure 4.8-3).

Water Quality

Activities and/or conditions that have the potential to degrade water quality include, but are not limited to, construction activities and stormwater runoff. Construction activities have the potential to cause erosion and sedimentation associated with ground-disturbing and clearing activities, which could cause destabilized soil to be washed or wind-blown into nearby surface waters. In addition, the use of heavy equipment during construction, especially during rainfall events, has the potential to cause petroleum products and/or other pollutants to enter nearby drainages.

Water quality degradation from stormwater runoff is primarily the result of runoff carrying pollutants from the land surface (e.g., streets, parking lots, etc.) to the receiving waters (e.g., streams and lakes). Pollutants typically found in urban runoff include facility maintenance and lawn-care/landscaping chemicals (insecticides, herbicides, fungicides and rodenticides), heavy metals (such as copper, zinc and cadmium), oils and greases from automobiles and other mechanical equipment, and nutrients (nitrogen and phosphorus). In addition, on April 10, 2024, the U.S. Environmental Protection Agency (USEPA) announced legally enforceable Maximum Contaminant Levels (MCLs) for six per- and polyfluoroalkyl substances (PFAS) compounds, which are widely used and long-lasting chemicals that break down very slowly over time. Scientific studies have shown that exposure to some PFAS may be linked to harmful health effects; therefore, elevated concentrations of PFAS could indicate impacted water quality.

Given the existing agricultural uses within and surrounding the project site, the potential exists for the contamination of the site and associated waterways through associated pollutants, such as pesticides, herbicides, and fertilizers from agricultural return water. A petroleum pipeline traverses the southern project site boundary parallel to the California Aqueduct, and a gas pipeline runs in a northwest-to-southeast direction through the project site.[8] However, accidents associated with the release of petroleum products or gas from the two on-site pipelines have not been reported.

Groundwater

The project site overlies portions of two groundwater subbasins, as defined by the State Department of Water Resources (DWR): the Delta-Mendota Subbasin (DWR No. 5-022.07) and the Tracy Subbasin (DWR No. 5-022.15) (see Figure 4.8-4). The Delta-Mendota and Tracy subbasins are characterized by an alluvial groundwater system with two major aquifers separated by low permeability Corcoran Clay. A semi-confined aquifer occurs above the Corcoran Clay layer (Upper Aquifer) and a confined aquifer occurs below the Corcoran Clay layer (Lower Aquifer). The Corcoran Clay layer inhibits vertical flow between the two aquifers and is generally pervasive throughout the Delta-Mendota Subbasin. The extent of the Corcoran Clay layer is not fully defined within the Tracy Subbasin and may be absent near the foothills and/or beneath the Delta islands.

The Delta-Mendota Subbasin has been designated as high priority and as critically overdrafted. The Tracy Subbasin has been assigned medium priority by DWR and is not overdrafted. Both subbasins are managed in accordance with the Sustainable Groundwater Management Act (SGMA). Local agencies in each subbasin have organized into Groundwater Sustainability Agencies (GSAs) and have adopted their respective GSPs.

[8] Cameron-Cole. *Phase I Environmental Site Assessment Pacific Gateway – Areas A and F*. December 17, 2021.

Figure 4.8-3
Existing Conditions Floodplain Modeling

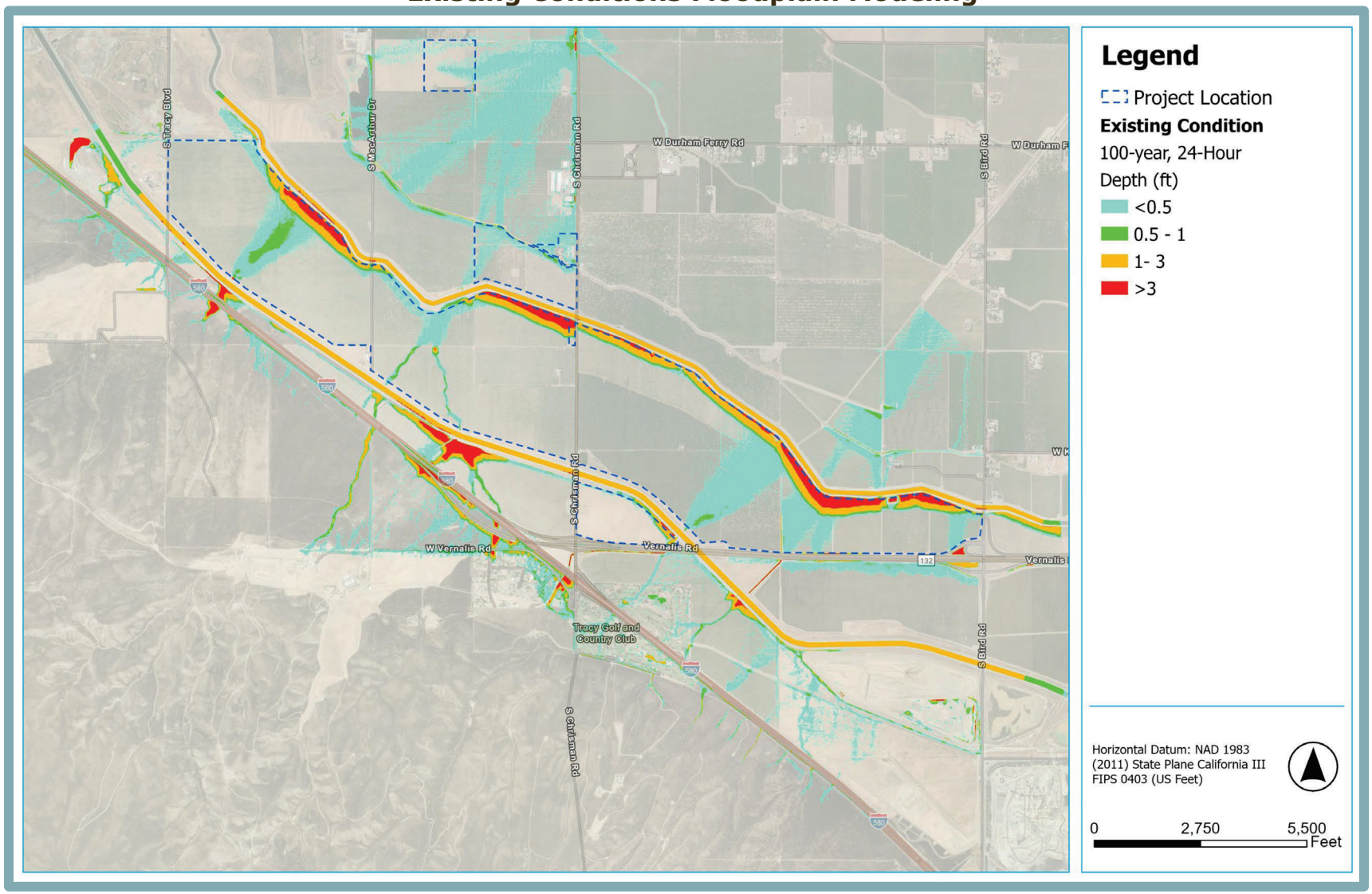


Figure 4.8-4
Regional Groundwater Basins

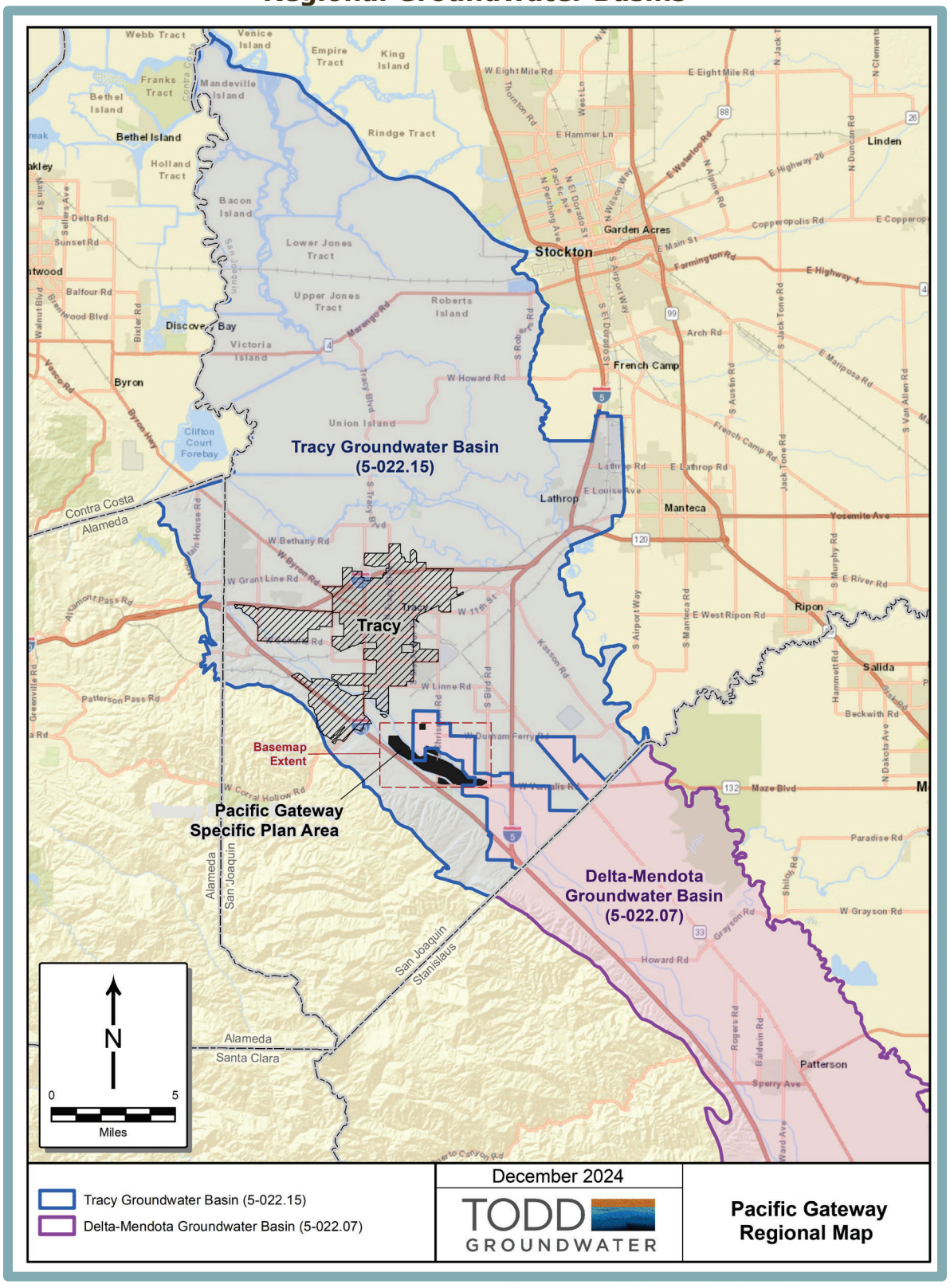


*Figure not OCR compatible.

As described in the Northern and Central Delta-Mendota Region GSP, groundwater levels show variable geographic patterns, with some areas showing declines and others indicating stable or increasing levels in recent years. Groundwater levels have also varied, affected by various factors including expansion of irrigated agriculture and increased pumping, importation of surface water, and drought. Currently, the on-site uses are supplied water through the use of groundwater. Groundwater is pumped from 18 wells with capacities ranging from 50 gallons per minute (gpm) to 1,500 gpm, seven of which are located on-site. The Northern and Central Delta-Mendota Region GSP provides groundwater level hydrographs for selected wells, the closest of which are two wells located south of State Route (SR) 132, which borders the project site to the south.

The GSP presents water budget analyses for the Upper Aquifer and Lower Aquifer for historical (2003 to 2012), current (2013), and projected periods (2014-2070). Under projected conditions, with climate change (but without projects and management actions), average annual change in storage is projected to persist at rates of -42,000 acre-foot per year (AFY) in the Upper Aquifer and -6,000 AFY in the Lower Aquifer. The GSP notes that average outflows are greater than inflows, meaning that overdraft conditions would persist.

As documented in the Tracy Subbasin GSP, groundwater levels have been generally stable and recover after periods of pumping with only a few areas indicating declining groundwater levels. While groundwater levels in most of the subbasin are stable or rising, the GSP identified five wells in the Non-Delta Management area with declining groundwater levels based on long-term records (from 1998 to 2020). Two of the declining wells are located east of the project site and south of the City of Tracy, and were constructed in both the Upper and Lower Aquifers. New replacement monitoring wells are planned to distinguish the aquifers and level trends.

As part of the Tracy Subbasin GSP, the changes in groundwater storage were estimated for the entire Tracy Subbasin using groundwater modeling. Cumulative changes in groundwater storage from 1975 through 2015 increased on average by about 3,000 AFY. Water budgets presented in the GSP for the non-Delta management area indicated a slight surplus for the historical water budget. The projected water budget, with climate change (but without projects or management actions) shows a slight deficit. The deficit, about 800 AFY, is occurring in the Upper Aquifer, with the lower Aquifer showing a slight surplus of about 100 AFY.

Additional information and analysis on groundwater supply and quality can be found in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR.

4.8.3 REGULATORY SETTING

A number of federal, State, and local policies provide the regulatory framework that guides the protection of water resources. The following discussion summarizes those laws that are most relevant to hydrology and water quality in the vicinity of the project site.

Federal Regulations

The following are the federal environmental laws and policies relevant to hydrology and water quality.

Federal Emergency Management Agency

FEMA is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers (USACE) studies. FEMA is also responsible for distributing the Flood

Insurance Rate Maps (FIRMs), which are used in the National Flood Insurance Program (NFIP). The FIRMs identify the locations of special flood hazard areas, including the 100-year floodplains.

FEMA allows non-residential development in the floodplain; however, construction activities are restricted within flood hazard areas, depending upon the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations (CFR). These standards are implemented at the State level through construction codes and local ordinances; however, the regulations only apply to residential and non-residential structure improvements. Although roadway construction or modification is not explicitly addressed in the FEMA regulations, the California Department of Transportation (Caltrans) has also adopted criteria and standards for roadway drainage systems and projects situated within designated floodplains. Standards that apply to floodplain issues are based on federal regulations (Title 23, Part 650 of the CFR). At the State level, roadway design must comply with drainage standards included in Chapters 800-890 of the Caltrans Highway Design Manual. CFR Section 60.3(c)(10) restricts cumulative development from increasing the water surface elevation of the base flood by more than one foot within the floodplain.

Federal Clean Water Act

The National Pollutant Discharge Elimination System (NPDES) permit system was established in the federal Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the U.S. Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that USEPA must consider in setting effluent limits for priority pollutants.

Nonpoint sources are diffuse and originate over a wide area rather than from a definable point. Nonpoint pollution often enters receiving water in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such nonpoint sources are generally exempt from federal NPDES permit program requirements. However, two types of nonpoint source discharges are controlled by the NPDES program – nonpoint source discharge caused by general construction activities, and the general quality of stormwater in municipal stormwater systems. The 1987 amendments to the CWA directed the federal USEPA to implement the stormwater program in two phases. Phase I addressed discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by USEPA that are not included in Phase I.

Section 402 of the CWA mandates that certain types of construction activities comply with the requirements of the NPDES stormwater program. The Phase II Rule, issued in 1999, requires that construction activities that disturb land equal to or greater than one acre require permitting under the NPDES program. In California, permitting occurs under the General Permit for Stormwater Discharges Associated with Construction Activity, issued to the State Water Resources Control Board (SWRCB), implemented and enforced by the nine Regional Water Quality Control Boards (RWQCBs).

As of July 1, 2010, all dischargers with projects that include clearing, grading or stockpiling activities expected to disturb one or more acres of soil are required to obtain compliance under the NPDES Construction General Permit Order 2009-0009-DWQ. The General Permit requires

all dischargers, where construction activity disturbs one or more acres, to take the following measures:

1. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to include a site map(s) of existing and proposed building and roadway footprints, drainage patterns and stormwater collection and discharge points, and pre- and post- project topography;
2. Describe types and placement of Best Management Practices (BMPs) in the SWPPP that will be used to protect stormwater quality;
3. Provide a visual and chemical (if non-visible pollutants are expected) monitoring program for implementation upon BMP failure; and
4. Provide a sediment monitoring plan if the area discharges directly to a water body listed on the 303(d) list for sediment.

To obtain coverage, a SWPPP must be submitted to the RWQCB electronically and a copy of the SWPPP must be submitted to the County. When project construction is completed, the landowner must file a Notice of Termination (NOT).

NPDES Small Municipal Separate Storm Sewer System General Permit

The NPDES Municipal Stormwater Permitting Program regulates stormwater discharges from separate storm sewer systems. NPDES Municipal Stormwater Permits are issued in two phases. Phase I regulates stormwater discharges from large- and medium-sized municipal separate storm sewer systems (MS4) (those serving more than 100,000 persons). Most Phase I permits are issued to a group of co-permittees encompassing an entire metropolitan area. Phase II provides coverage for smaller municipalities, including nontraditional small storm sewer systems, which include governmental facilities such as military bases, public campuses, and prison and hospital complexes. The NPDES Municipal Stormwater Permits require the discharger to develop and implement a Stormwater Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable.

The Central Valley RWQCB (CVRWQCB) issued the NPDES General Permit No. CAS000004 Waste Discharge Requirements for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems, which became effective on July 1, 2013. An “MS4” is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) designed or used for collecting or conveying stormwater; (ii) which is not a combined sewer; and (iii) which is not part of a Publicly Owned Treatment Works (POTW). San Joaquin County is a Phase I MS4 permittee. Regulated Projects that create and/or replace one or more acres of impervious surface are considered regulated hydromodification management projects. The proposed project would create more than one acre of impervious area and, thus, is considered a Regulated Project subject to Phase I MS4 NPDES permit post-construction stormwater treatment requirements.

Regulated Projects are required to divide the project area into drainage management areas (DMAs) and implement and direct water to appropriately sized Site Design Measures (SDMs) and Baseline Hydromodification Measures to each DMA to the Maximum Extent Practicable (MEP). Regulated Projects must additionally include Source-Control BMPs where possible. SDMs and Baseline Hydromodification Measures include, but are not limited to, the following:

- Rooftop and impervious area disconnection;
- Porous pavement;

- Rain barrels and cisterns;
- Vegetated swales;
- Bio-retention facilities;
- Green roofs; or
- Other equivalent measures.

PFAS National Primary Drinking Water Regulation

In March 2023, USEPA proposed and requested comment on the National Primary Drinking Water Regulation (NPDWR) and health-based Maximum Contaminant Level Goals (MCLGs) for six PFAS. After consideration of public comment and consistent with the provisions set forth under the Safe Drinking Water Act (SDWA), USEPA finalized MCLGs and MCLs for all six PFAS. The final rule on the PFAS National Primary Drinking Water Regulation (40 CFR Parts 141 and 142) became effective on June 25, 2024.

State Regulations

The following are the State environmental laws and policies relevant to hydrology and water quality.

State Water Resources Control Board

The SWRCB and the RWQCBs are responsible for ensuring implementation and compliance with the provisions of the federal CWA and California's Porter-Cologne Water Quality Control Act. The project site is situated within the jurisdiction of the CVRWQCB (Region 5). The CVRWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within their jurisdiction.

Industrial Stormwater Program

The Statewide General Permit for Stormwater Discharges Associated with Industrial Activities, Order 2014-0057-DWQ (Industrial General Permit) regulates industrial storm water discharges and authorized non-storm water discharges from industrial facilities in California. The SWRCB and the RWQCBs implement and enforce the Industrial General Permit. The Industrial General Permit regulates discharges associated with nine federally defined categories of industrial activities including:

- Facilities subject to federal Storm Water Effluent Limitations Guidelines, New Source Performance Standards, or Toxic Pollutant Effluent Standards;
- Manufacturing Facilities;
- Oil and Gas/Mining Facilities;
- Landfills, Land Application Sites, and Open Dumps;
- Recycling Facilities;
- Steam Electric Power Generating Facilities;
- Transportation Facilities; and
- Sewage or Wastewater Treatment Facilities.

Industrial facilities are required to submit permit registration documents using the Storm Water Multiple Application and Report Tracking System (SMARTS) program at least seven days prior to the commencement of industrial activities to obtain coverage under the Industrial General Permit.

Central Valley Regional Water Quality Control Board

As authorized by the Porter-Cologne Water Quality Control Act, the CVRWQCB's primary function is to protect the quality of the waters within its jurisdiction for all beneficial uses. State law defines beneficial uses of California's waters that may be protected against quality degradation to include, but not be limited to, the following: domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

The CVRWQCB implements water quality protection measures by formulating and adopting water quality control plans (referred to as basin plans, as discussed below) for specific groundwater and surface water basins, and by prescribing and enforcing requirements on all agricultural, domestic, and industrial waste discharges. The CVRWQCB oversees many programs to support and provide benefit to water quality, including the following major programs: Agricultural Regulatory; Above-Ground Tanks; Basin Planning; CALFED; Confined Animal Facilities; Landfills and Mining; Non-Point Source; Spills, Leaks, Investigations, and Cleanups (SLIC); Stormwater; Total Maximum Daily Load (TMDL); Underground Storage Tanks (UST), Wastewater Discharges (including the NPDES); Water Quality Certification; and Watershed Management.

The CVRWQCB is responsible for issuing permits for a number of varying activities. Activities subject to the CVRWQCB permitting requirements include stormwater, wastewater, and industrial water discharge, disturbance of wetlands, and dewatering. Permits issued and/or enforced by the CVRWQCB include, but are not limited to, the NPDES Construction General Permit, NPDES Municipal Stormwater Permits, Industrial Stormwater General Permits, CWA Section 401 and 404 Permits, and Dewatering Permits.

Basin Plans and Water Quality Objectives

The Porter-Cologne Water Quality Control Act provides for the development and periodic review of water quality control plans (basin plans) that are prepared by the RWQCBs. Basin plans designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a water body (i.e., the reasons why the water body is considered valuable), while water quality objectives represent the standards necessary to protect and support the beneficial uses. Basin plans are primarily implemented through the NPDES permitting system and by issuing waste discharge regulations to ensure that water quality objectives are met.

Basin plans provide the technical basis for determining waste discharge requirements and taking regulatory enforcement actions if deemed necessary. The project site is located within the jurisdiction of the CVRWQCB, as well as within the plan area of the Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin (Basin Plan).[9]

The Basin Plan sets water quality objectives for the surface waters in its region for the following substances and parameters: bacteria, bioaccumulation, biostimulatory substances, color, dissolved oxygen, floating material, oil and grease, population and community ecology, pH, radioactivity, salinity, sediment, settleable material, suspended material, sulfide, taste and odor, temperature, toxicity, turbidity, and un-ionized ammonia. For groundwater, water quality objectives applicable to all groundwater have been set for bacteria, chemical constituents, radioactivity, taste, odors, and toxicity.

[9] Central Valley Regional Water Quality Control Board. *The Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin.* Revised February 2019.

Senate Bill 5

In 2007, the State of California set the 200-year event as the Urban Level of Flood Protection (ULOP) for the State through a series of laws included in Senate Bill (SB) 5. Along with other related legislation, SB 5 established a mandate for local governments to amend their general plans and zoning codes to be consistent with State law on floodplain management. Specifically, SB 5 required all cities and counties within the Sacramento-San Joaquin Valley, as defined in California Government Code Sections 65007(h) and (j), to make findings related to a ULOP or the national FEMA standard of flood protection before: (1) entering into a development agreement for any property that is located within a flood hazard zone; (2) approving a discretionary permit or other discretionary entitlement, or a ministerial permit that would result in the construction of a new residence, for a project that is located within a flood hazard zone; or (3) approving a tentative map, or a parcel map for which a tentative map was not required, for any subdivision that is located within a flood hazard zone. The primary purpose of the law is to ensure that appropriate flood protection is provided in urban and urbanizing areas.

A project would be subject to the requirements of SB 5 if the project would meet all of the following five criteria:

1. Located within an urban area that is a developed area, as defined by CFR Title 44, Section 59.1, with 10,000 residents or more, or an urbanizing area that is a developed area or an area outside a developed area that is planned or anticipated to have 10,000 residents or more within the next 10 years.
2. Located within a flood hazard zone that is mapped as either a special hazard area or an area of moderate hazard on FEMA's official (i.e., effective) FIRM for the NFIP.
3. Located within the Sacramento-San Joaquin Valley.
4. Located within an area with a potential flood depth above 3.0 feet, from sources of flooding other than localized conditions that may occur anywhere in a community, such as localized rainfall, water from stormwater and drainage problems, and water from temporary water and wastewater distribution system failure.
5. Located within a watershed with a contributing area of more than 10 square miles.

As discussed above, the project site is within Zone X, which is designated by FEMA as an Area of Minimal Flood Hazard. Therefore, the proposed project is not subject to SB 5 legislation.

Sustainable Groundwater Management Act

Groundwater management is outlined in the California Water Code Sections 10750 through 10755.4. The Groundwater Management Act was first introduced in 1992 as Assembly Bill (AB) 3030 and has since been modified by SB 1938 in 2002, AB 359 in 2011, and the SGMA (SB 1168, SB 1319, and AB 1739) in 2014. The intent of the SGMA is to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions and to provide a methodology for developing a Groundwater Management Plan.

The SGMA became law on January 1, 2015 and applies to all groundwater basins in the State (Water Code Section 10720.3). By enacting the SGMA, the Legislature intended to provide local agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater within their jurisdiction (Water Code Section 10720.1).

The SGMA outlines four basic requirements: (1) development of a Groundwater Sustainability Agency; (2) development of a GSP or development of an Alternative Submittal; (3) implementation

of the specific plan and management to meet quantifiable sustainability objectives; and (4) reporting of the implementation activities.

Local Groundwater Sustainability Plans

Six GSPs were prepared for the Delta-Mendota Subbasin prior to adoption of the current single GSP. Of the six GSPs prepared for the Delta-Mendota Subbasin, the GSP relevant to the project area is the Northern and Central Delta-Mendota Region GSP.[10] The GSP relevant to the Tracy Subbasin within the project area is the Tracy Subbasin GSP.[11]

Because of the critically overdrafted status of the Delta-Mendota Subbasin, completion of the six GSPs was mandated for submittal to DWR by January 2020. GSPs are reviewed by DWR for consistency with SGMA on a subbasin-wide basis, so all six Delta-Mendota GSPs were reviewed jointly. DWR's initial review of the Delta-Mendota GSPs identified deficiencies primarily concerned with a lack of documentation for coordinated and consistent data, methodologies, definitions, and criteria. The GSPs were revised and resubmitted in June and July 2022. In March 2023, DWR informed the GSPs that the actions taken to correct the deficiencies were not sufficient and that the Delta-Mendota Subbasin GSPs remained inadequate.

According to SGMA, once DWR determines that a GSP is inadequate, primary jurisdiction shifts from DWR to the SWRCB, which may designate the basin as probationary and intervene with an interim plan that potentially includes restrictions on groundwater extractions (Water Code Section 10735.8). As such, the Delta-Mendota Subbasin Coordination Committee recommended that all 23 GSAs within the subbasin adopt a new, single GSP. The new GSP would address the deficiencies identified by DWR in March 2023 and would replace the six previous GSPs that were deemed "inadequate." According to the Delta-Mendota SGMA, the single GSP and the Subbasin's potentially probationary status will be evaluated by the SWRCB during a probationary hearing in early 2025.

The Tracy Subbasin GSP was due and submitted to DWR by the end of January 2022. The DWR had up to two years to review the GSP. On February 9, 2024, the San Joaquin County Public Works Department announced that DWR approved the Tracy Subbasin GSP without comment.[12]

Assembly Bills 347 and 2515

AB 347 and AB 2515 (September 2024) allow the Department of Toxic Substances Control (DTSC) to monitor and regulate PFAS in consumer products. Specifically, the bills directed the DTSC to adopt regulations and publish acceptable testing methods for PFAS. AB 347 amends existing PFAS law to provide enforcement mechanisms for PFAS bans and labeling requirements as applied to "covered products," including juvenile products, textile articles and food packaging, while AB 2515 forbids manufacturers from manufacturing, selling or distributing menstrual products containing regulated PFAS. Manufacturers of the foregoing products are required to register with DTSC, pay a registration fee, and provide compliance certification.

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10 Delta-Mendota Sustainable Groundwater Management Act. *Delta-Mendota Subbasin Groundwater Sustainability Plan.* July 2024.

11 Tracy Subbasin. *Tracy Subbasin Groundwater Sustainability Plan.* November 2021.

12 Tracy Subbasin. *DWR Approves Tracy Subbasin Groundwater Sustainability Plan.* Available at: https://tracysubbasin.org/2024/02/14/dwr-approves-tracy-subbasin-groundwater-sustainability-plan/. Accessed January 2025.

Local Regulations

The following are the local government environmental goals and policies related to hydrology and water quality relevant to the CEQA review process for the proposed project.

San Joaquin County General Plan

The San Joaquin County General Plan identifies the following goals and policies related to hydrology and water quality.

Public Facilities and Services Element

Policy IS-4.9 **Groundwater Management.** The County shall continue to support cooperative, regional groundwater management planning by local water agencies, water users, and other affected parties to ensure a sustainable, adequate, safe, and economically viable groundwater supply for existing and future uses within the County.

Policy IS-4.10 **Groundwater Monitoring Program.** The County shall continue to evaluate the quantity and quality of groundwater.

Policy IS-4.13 **Water Quality Standards.** The County shall require that water supplies serving new development meet State water quality standards. If necessary, the County shall require that water be treated to meet State standards and that a water quality monitoring program be in place prior to issuance of building permits.

Policy IS-4.15 **Test Wells.** Prior to issuing building permits for new development that will rely on groundwater, the County shall require confirmation for existing wells or test wells for new wells to ensure that water quality and quantity are adequate to meet the needs of existing, proposed, and planned future development.

Policy IS-4.18 **Graywater and Rainwater Systems.** The County shall encourage homeowners, businesses, and developers to install graywater systems and rainwater harvest systems, consistent with local and State guidelines, regulations, and standards, in order to reduce consumption of potable water.

Goal IS-7 To manage stormwater from existing and future development using methods that reduce potential flooding, maintain natural water quality, enhance percolation for groundwater recharge, and provide opportunities for reuse.

Policy IS-7.1 **Adequate Stormwater Facilities.** The County shall require that stormwater drainage facilities are properly designed, sited, constructed, and maintained to efficiently capture and dispose of runoff and minimize impacts to water quality.

Policy IS-7.2 **Stormwater Drainage System Standards.** The County shall require the minimum standards for stormwater drainage system improvements provided in Table IS-3 (recreated as Table 4.8-1) for the approval of tentative maps and zone reclassifications.

Table 4.8-1
Stormwater Drainage Supply

General Plan Area	Minimum Standards
Urban Communities	Public drainage system, with terminal drainage unless a Master Drainage/Special Purpose Plan permits retention ponds. On-site drainage may be permitted in Rural Residential and Warehouse Industrial designations if parcels are two acres or greater in size.
Rural Communities	Public drainage system. On-site drainage may be permitted if parcels are two acres or more.
Freeway Service Areas Outside of Communities	Public drainage system serving at least each side of the freeway.
Industrial Areas Outside of Communities	Public drainage system serving the entire planned area. On-site drainage may be permitted in the Truck Terminals and Warehouse Industrial designation.
Commercial Recreation Areas Outside of Communities	Public drainage system serving the entire planned area. On-site drainage may be permitted if parcels are two acres or greater in size.
Agricultural Areas	On-site drainage.

Public Health and Safety Element

Goal PHS-2 To protect people and property from flood hazards.

Policy PHS-2.1 **Restrict Uses in Designated Floodways.** The County shall restrict uses in designated floodways except those that do not adversely affect flood elevations or velocities, and are tolerant of occasional flooding in accordance with the County's Floodplain Management Ordinance.

Policy PHS-2.3 **Evaluation of Flood Protection for New Development.** The County shall require evaluation of potential flood hazards prior to approval of new development projects to determine whether the proposed development is reasonably safe from flooding, and shall approve such development consistent with applicable State and Federal laws.

Policy PHS-2.6 **Use Best Available Information.** The County should consider the best available flood hazard information and mapping from regional, State, and Federal agencies, and use this information to inform land use and public facilities investment decisions.

Policy PHS-2.7 **Preservation of Floodway and Floodplains.** The County shall preserve floodways and floodplains for non-urban uses in an effort to maintain existing flood carrying capacities, except that development may be allowed in floodplains with mitigation measures that are in conformance with the County's floodplain management ordinance.

Policy PHS-2.8 **Levee Setbacks and Easements for New Development.** The County shall require setbacks and easements for access to levees and channels, where feasible, from new development. On County-owned land, the County shall also provide unobstructed access, where feasible, to levees for maintenance and flood fighting purposes.

Policy PHS-2.15 **Seismic Impacts to Flood Control Facilities.** The County shall comply with state and federal requirements to improve and maintain flood control facilities to withstand seismic and geologic impacts.

Policy PHS-2.18 **Collaborate to Develop Funding Mechanisms.** The County shall collaborate with State and local flood management agencies and other interested parties to develop funding mechanisms to finance local share of flood management responsibilities.

Policy PHS-2.19 **Countywide Dam Failure and Flood Plans.** The County shall maintain and implement the following emergency management plans for the safe evacuation of people from areas subject to inundation from levee and dam failure:

- San Joaquin County Flood Evacuation Plan, and
- Dam Failure Plan.

Policy PHS-2.20 **Flood Evacuation Maps.** The County shall continue maintain and make available to the public, as appropriate, community flood evacuation maps.

Policy PHS-2.23 **Flood Mapping Information Program.** The County shall continue to provide the public with information related to Federal Emergency Management Agency (FEMA) floodplain and Flood Insurance Rate Maps.

Policy PHS-3.1 **Erosion Control.** The County shall encourage the planting of vegetation to decrease loss of soil by erosion.

Natural and Cultural Resources Element

Goal NCR-3 To ensure the quality of water for municipal and industrial uses, agriculture, recreation, and fish and wildlife.

Policy NCR-3.1 **Preserve Groundwater Recharge Areas.** The County shall strive to ensure that substantial groundwater recharge areas are maintained as open space.

Policy NCR-3.2 **Groundwater Recharge Projects.** The County shall encourage the development of groundwater recharge projects

of all scales within the County and cities to increase groundwater supplies.

Policy NCR-3.3 **Multi-Jurisdictional Groundwater Management Evaluation.** The County shall support multi-jurisdictional groundwater management that involves adjacent groundwater basins.

Policy NCR-3.4 **Eliminate Pollution.** The County shall support efforts to eliminate sources of pollution and clean up the County's waterways and groundwater.

Policy NCR-3.5 **Low Impact Development.** The County shall require new development to minimize or eliminate stormwater quality and hydro-modification impacts through site design, source controls, runoff reduction measures, best management practices (BMPs), and Low Impact Development (LID).

Policy NCR-3.6 **Prohibit Discharge of Sewage Sludge.** The County shall prohibit the discharge of sewage sludge or septage to surface waters or surface water drainage sources, including wetlands and waterways.

Policy NCR-3.7 **Septic Tank Regulation.** The County shall enforce its septic tank and onsite system regulations consistent with Central Valley Regional Water Quality Control Board policy that recognizes the County as the responsible agency to protect the water quality of surface water and groundwater.

Policy NCR-3.9 **Require Water Projects to Mitigate Impacts.** The County shall require water projects to incorporate safeguards for fish and wildlife and mitigate erosion and seepage to adjacent lands.

The Delta Element

Goal D-6 To protect Delta water supplies for agricultural uses and ecosystems enhancement and improve overall Delta water quality.

Policy D-6.1 **Delta Water Quality Improvement Projects.** The County shall support projects that protect and improve the quality and quantity of water in the Delta region for local agricultural, municipal, and industrial uses and maintain appropriate outflow for a healthy estuary.

Stormwater Quality Control Criteria Plan

The 2020 Stormwater Quality Control Criteria Plan (SWQCCP) for the City of Stockton and San Joaquin County is an update to the 2009 SWQCCP.[13] The 2009 SWQCCP merged the City and County documents into one combined SWQCCP and identified how new development and significant redevelopment could meet RWQCB requirements through a combination of Volume

[13] Larry Walker and Associates. *City of Stockton and County of San Joaquin Stormwater Quality Control Criteria Plan*. August 2020. Revised March 2025.

Reduction Measures (VRMs) (e.g., rain barrels) and LID Treatment Controls (e.g., bioretention areas) to maintain the runoff volume at or below pre-project runoff volumes. The 2020 SWQCCP, which was revised in March 2025, reflects the most recent Phase I municipal stormwater NPDES standards and new statewide trash control requirements.

According to the SWQCCP, San Joaquin County enrolled under the regional NPDES Permit in 2016 (Order No. R5-2016-0040) and was subsequently issued Order No. R5-2016-0040-003. The SWQCCP has been modified to ensure consistency with the regional NPDES Permit and, as such, minimizes the short- and long-term impacts on receiving water quality from new development and redevelopment.

San Joaquin County Municipal Code

The applicable ordinances within the San Joaquin County Municipal Code associated with hydrology and water quality are discussed in further detail below.

Title 5, Division 10, Stormwater Management and Discharge Control

Division 10, Stormwater Management and Discharge Control, of Title 5 within the San Joaquin County Municipal Code establishes uniform requirements for the protection of the County waters consistent with the CWA and County NPDES Permit. The division includes chapters related to discharge regulations, spill prevention and procedures, inspection and enforcement, and coordination with other programs, including hazardous material programs. In particular, County Code Section 5-10110 within Division 10 establishes that the County's Director of Public Works may require BMPs for new industrial development and Section 5-10109 prohibits littering and requires the regular cleaning of structures, including paved roads.

Title 9, Chapter 606, Storm Drainage

Chapter 606, Storm Drainage, of Title 9 within the San Joaquin County Municipal Code establishes the drainage requirements for development projects. Projects seeking Limited Industrial zoning are required to be served by a public drainage system with terminal drainage. However, the project is proposing to utilize retention basins instead of discharging into a terminal drain. This can be accomplished by preparing a specific plan that is consistent with the General Plan drainage policies and establishes retention basin standard. To ensure the retention basins can manage multiple storms, the Pacific Gateway Specific Plan established a retention basin sizing criteria for the 100-year 10-day storm for developed volumes. Offsite drainages passing through the development are intended to traverse the development in a similar manner.

4.8.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hydrology and water quality. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would result in any of the following:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;

- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
    - Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The proposed project's impacts associated with water supply availability are addressed in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR. Similarly, the proposed project's impacts associated with erosion and siltation are further addressed in Chapter 4.6, Geology and Soils, of this EIR.

Method of Analysis

The impact analysis for this chapter is based primarily on the Hydrology and Hydraulics Report prepared for the proposed project by Schaaf and Wheeler. Further information was sourced from the WSA prepared for the proposed project by Todd Groundwater, as well as the County's General Plan, General Plan EIR, and the Delta-Mendota and Tracy Subbasin GSPs.

As part of the Hydrology and Hydraulics Report (Appendix L), to assess whether development of the proposed project would have any impact on the floodplain or hydrologic impacts, the report included hydrologic modeling for the existing conditions on-site and the proposed project using the Hydraulic Engineering Center (HEC) computer program. In particular, Schaaf and Wheeler used a combination of the HEC Hydrologic Modeling System (HEC-HMS) and Hydrologic Engineering Center's River Analysis System (HEC-RAS) software programs. Existing culverts were obtained from survey, California Aqueduct as-builts, and Caltrans as-builts. Only the 100-year, 24-hour rainfall event was modeled in HEC-RAS, to determine flow paths in the existing conditions based on the underlying terrain and where stage-storage curves were necessary to develop for the proposed 100-year, 10-day analysis in HMS, and to model the conveyance piping in the proposed conditions. For the project modeling, proposed catchments are shown in Figure 4.8-5.

The Hydrology and Hydraulics Report gives full consideration to the development of the proposed project and acknowledges physical changes to the existing setting. Impacts to the existing environment of the project area are determined by the contrast between the local hydrology before and after project buildout. The standards of significance listed above are used to delineate the significance of any hydrological alterations of the site, including alterations that would substantially degrade water quality or substantially alter the existing drainage patterns of the site or area.

Figure 4.8-5
Proposed Catchments

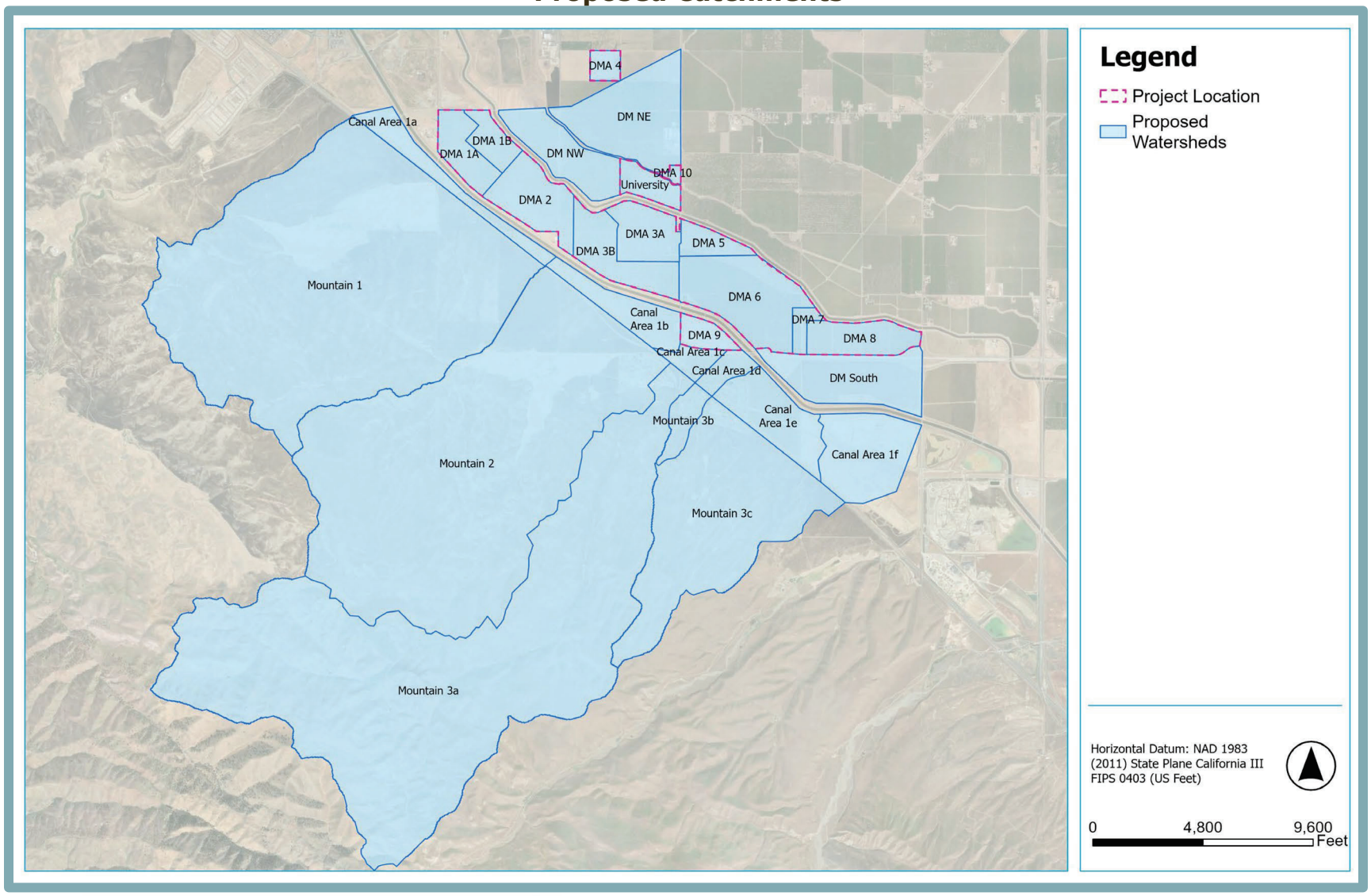


*Figure not OCR compatible.

The County has received the technical analysis prepared for the proposed project and agrees with drainage standards applied by Schaaf & Wheeler.

In addition, the WSA prepared for the proposed project assumed that the existing on-site agricultural uses rely on groundwater wells and on surface water deliveries from two irrigation districts, and included estimates for both. The WSA assumes three acre-feet per acre per year (AFY/ac) is used for irrigation water. Groundwater pumping is not metered, and the three AFY/ac rate is considered a reasonable estimate based on the expected consumptive use of the crop, applied surface water, and irrigation efficiency. With respect to the proposed development, the WSA estimated a reasonable demand of 726 gallons per day per acre (gpd/ac) for light industrial uses, 2,000 gpd/ac for commercial uses, and 80 gpd per student. The WSA also assumed 15 percent of the entire project site would be landscaped.[14] Overall, the total water use for the proposed project was estimated to be 957 AFY.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

4.8-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction. Based on the analysis below and with implementation of mitigation, this impact would be *less than significant*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase, Specific Plan Buildout

Development of the proposed project would result in the conversion of agricultural land to implement the Pacific Gateway Specific Plan, which would include limited industrial, general commercial, and industrial park uses, as well as a university, a Veterans of Foreign Wars (VFW) post, and various public uses including parks, a new fire station, and a new wastewater treatment facility (WWTP). Therefore, the proposed project would result in new impervious surfaces, which would create additional runoff generated during storm events as compared to existing conditions. The project would require grading, excavation, and other construction-related activities that could cause soil erosion at an accelerated rate during storm events. Such activities would potentially affect water quality and contribute to localized violations of water quality standards if stormwater runoff from construction activities entered receiving waters.

Construction activities associated with the proposed project would include grading, excavation, trenching for utilities, and other construction-related activities that could cause soil erosion at an accelerated rate during storm events. All such activities could have the potential to affect water quality and contribute to localized violations of water quality standards if impacted stormwater runoff from construction activities enters downstream waterways. For example, increased on-site erosion due to construction

[14] Schaaf and Wheeler. *Pacific Gateway – Water and Sewer Demands and System Requirements*. August 21, 2025.

activities could then lead to sediment discharge into the Delta-Mendota Canal, negatively affecting the water quality.

Soils exposed by the aforementioned types of construction activities have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. However, in general, impacts from construction-related activities would generally be short-term and of limited duration.

Because the proposed area of disturbance is greater than one acre for both the Initial Phase and Specific Plan Buildout, the project applicant would be subject to the most current NPDES Construction General Permit requirements during construction of the proposed project. As part of compliance, a project-specific SWPPP would be prepared, including the site map, drainage patterns, stormwater collection and discharge points, proposed BMPs, and a monitoring and reporting framework for implementation of BMPs, as necessary. In addition, a Notice of Intent (NOI) would be filed with CVRWQCB.

Non-stormwater management and material management controls reduce non-sediment-related pollutants from potentially leaving the construction site to the extent practicable. The NPDES Construction General Permit prohibits the discharge of materials other than stormwater and authorized non-stormwater discharges (such as irrigation waters and pipe flushing and testing). Non-stormwater BMPs tend to be management practices intended to prevent stormwater runoff flows from encountering potential pollutants. Examples of non-stormwater BMPs include preventing illicit discharges and implementing good practices for all vehicle and equipment maintenance and fueling operations (e.g., using drip pans under vehicles). Waste and materials management BMPs include implementing practices and procedures to prevent pollution from various polluting materials used on construction sites. Examples of materials management BMPs include, but are not limited to, the following:

- Good housekeeping activities, such as keeping stockpiled materials covered and/or contained and elevated off the ground in a central location;
- Securely locating portable toilets away from the storm drainage system and performing routine maintenance;
- Providing a central location for concrete washout and performing routine maintenance; and
- Providing several dumpsters and trash cans throughout the construction site for litter/floatable management.

While the final materials management BMPs to be used during construction of the proposed project are currently unknown, the project would likely include a combination of the BMP examples listed above. Final BMPs for project construction would be chosen in consultation with the applicable San Joaquin County SWQCCP and implemented by the project contractor. In addition, San Joaquin County Code of Ordinances Section 5-10110 establishes that the County's Director of Public Works may require BMPs for new development.

In accordance with the Construction General Permit, the project site would also be inspected during construction before and after storm events, as well as every 24 hours during extended storm events in order to identify maintenance requirements for the implemented BMPs and to determine the effectiveness of the implemented BMPs. As a "living document," the site-specific SWPPP would be modified as construction activities progress. A Qualified SWPPP Practitioner (QSP) would ensure compliance with the SWPPP through regular monitoring and visual inspections during construction activities. The QSP for the project would amend the SWPPP and revise project BMPs, as determined necessary through field inspections, to protect against substantial erosion or siltation on- or off-site.

Compliance with the NPDES Construction General Permit and San Joaquin County Code, as described above, would minimize the potential degradation of stormwater quality and downstream surface water associated with construction of the proposed project. In addition, BMPs would be required to be designed in accordance with the San Joaquin County SWQCCP. However, because a SWPPP has not yet been prepared for the proposed project, proper compliance with the aforementioned regulations cannot be ensured at this time, and the proposed project's construction activities could violate water quality standards or waste discharge requirements or otherwise degrade water quality. As a result, the proposed project could result in a significant impact related to short-term construction-related water quality.

Off-Site Improvements Study Area

The proposed project includes potential future intersection and roadway improvements that would be triggered by full project buildout in the Off-Site Improvements Study Area, which is generally located north of the project site.

During construction, the disturbance areas of some identified intersections would amount to more than one acre. For example, the intersection of South Chrisman Road and SR 132 includes the westbound and eastbound on- and off-ramps, as well as sections of South Chrisman Road to the north and south of the ramps. Based on the area of disturbance for each site, construction of the future off-site roadway improvements could be subject to the most current NPDES Construction General Permit requirements if such improvements would disturb one acre or greater. Therefore, similar to the proposed project, a SWPPP would be prepared as part of compliance with the Construction General Permit, including a site map, drainage patterns, stormwater collection and discharge points, BMPs, and a monitoring and reporting framework for implementation of BMPs, as necessary. In addition, an NOI would be filed with SWRCB.

Off-site improvement intersections with disturbance areas less than one acre would not be subject to the Construction General Permit. However, construction of the intersection improvements would be required to comply with the applicable provisions of the San Joaquin County Storm Water Management and Discharge Control Ordinance. For example, Section 5-10109 of the County Code prohibits littering and requires the regular cleaning of structures, including paved roads. In addition, County Code Section 5-10110 establishes that the County's Director of Public Works may require BMPs for new development. Appropriate BMPs to prevent discharges include: waste disposal, and drainage from materials storage; erosion and sediment control practices; and the prohibition of specific activities, practices, and procedures to prevent stormwater pollution. Additionally, a number of the potential intersection improvements would be located within the City of Tracy. Therefore, the proposed improvements to such intersections would be required to comply with all applicable sections of the City's Municipal Code. In particular, Section 11.34.220 establishes construction activity stormwater measures for applicants applying to the City for grading or building permits.

Based on the above, compliance with the standards established by City and County ordinances would ensure that construction of the off-site improvements do not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. However, because construction BMPs and permits have not yet been prepared for the proposed project, proper compliance with the applicable regulations cannot be ensured and construction of the off-site improvements could violate water quality standards or waste discharge requirements or otherwise degrade water quality. As a result, a significant impact related to short-term construction-related water quality could occur.

Conclusion

Based on the above, construction of the proposed project would be required to comply with all applicable federal, State, and local regulations to ensure violations of water quality standards or waste discharge requirements or substantial degradation of surface water or groundwater quality would not occur. However, without verification of compliance with the necessary permits, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.8-1 dictates the components of the SWPPP to reduce the likelihood of water quality violations or degradation of water quality during project construction. Implementation of the following mitigation measure would therefore reduce the above potential impacts to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

4.8-1 *Prior to issuance of grading permits for each component of the proposed project, including off-site improvements, the project applicant shall prepare and submit to the Central Valley RWQCB a SWPPP detailing measures to control soil erosion and waste discharges during construction. Each SWPPP shall include an erosion control and restoration plan, a water quality monitoring plan, a hazardous materials management plan, and post-construction BMPs. Specific BMPs shall*

be determined during the final states of project design. However, each SWPPP shall include specific practices to minimize the potential that pollutants will leave the site during construction. Such practices include, but are not limited to, establishing designated equipment staging and washing areas, protecting spoils and soil stockpile areas, and identifying equipment exclusion zones. The BMPs shall be maintained until all areas disturbed during construction have been adequately stabilized.

Prior to commencement of construction activities for each component of the proposed project, including off-site improvements within study areas greater than one acre, such as grading, the project applicant shall submit a Notice of Intent (NOI) to the SWRCB for coverage under the General Construction Permit.

4.8-2 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operation. Based on the analysis below and with implementation of mitigation, this impact would be *less than significant*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as potential impacts associated with the off-site improvements.

Initial Phase

Development of the proposed project would result in the conversion of agricultural land to implement the Pacific Gateway Specific Plan. The Initial Phase development would include four industrial buildings located east of South Chrisman Road, the university facility within the University Center area, the VFW facility, and the necessary backbone infrastructure to serve the proposed Initial Phase development, including the proposed WWTP, storm drain mainlines along South Chrisman Road, and portions of the proposed internal streets.

Pollutants associated with the operational phase of the proposed project could include nutrients, oil and grease, metals, organics, pesticides, bacteria, sediment, trash, and other debris. Nutrients that could be present in post-construction stormwater include nitrogen and phosphorous resulting from fertilizers applied to landscaping. Excess nutrients could affect water quality by promoting excessive and/or a rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides, which are toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish, can potentially enter stormwater after application to landscaped areas within the project site. Oil and grease could enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals could enter stormwater as surfaces corrode, decay, or leach. Clippings associated with landscape maintenance and street litter could be carried into storm drainage systems. Pathogens (from wildlife and human activities) have the potential to affect downstream water quality. The proposed industrial facilities could also result in the release of PFAS contaminants into

the environment during operation, as such chemicals can be included in cleaning products, paint, pesticides, waxes and polishes, etc.

In addition, development of the proposed project could also increase polluted non-stormwater runoff (e.g., wash water and landscape irrigation runoff). Such non-stormwater runoff could flow down sidewalks, parking areas, and streets, and pick up additional pollutants deposited on impervious surfaces prior to discharge into the storm drain system and surface waters. Discharge of polluted stormwater or non-stormwater runoff could violate waste discharge requirements.

Proposed Storm Drain System

As shown in Figure 4.8-6 through Figure 4.8-8, stormwater runoff from on-site impervious surfaces associated with the Initial Phase would be directed through storm drain lines installed during the Initial Phase to various detention basins for temporary storage and water quality treatment before draining into retention basins. The storm drainage lines are estimated to include 15-inch lines within South Chrisman Road, 18-inch lines within A and B Streets, 24-inch lines within B Street, and a 30-inch line within the portion of A Street that runs along the Delta-Mendota Canal.

All basins would be sized and located to independently serve each land use district within each phase of the project and would collectively provide stormwater management service for full project buildout. Pursuant to the Specific Plan, all basins would be designed to comply with all applicable safety factors required by the County Code.

Project-related stormwater discharges would be subject to all applicable requirements of the San Joaquin County's MS4 Permit pursuant to the NPDES Phase I program. Specifically, regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately sized SDMs and Baseline Hydromodification Measures to each DMA. Additionally, as specified in the Pacific Gateway Specific Plan, the proposed project would be required to incorporate treatment-control BMPs and LID source and treatment control measures. The following treatment-control BMPs could also be incorporated into the final project design:

1. Incorporation or land use planning measures to minimize water quality impacts within the final project design, including stream buffers and restoration activities;
2. Reduction of the site's impervious surfaces, conservation of natural resources and areas, maintenance and use of natural drainage courses in the stormwater conveyance system, and minimization of clearing and grading;
3. When landscaping is required or proposed, provision of runoff storage measures dispersed uniformly throughout the site's landscape with the use of a variety of detention, retention, and runoff practices;
4. Implementation of on-site hydrologically functioning landscape design and management practices; and
5. Minimization of directly connected impervious areas.

Figure 4.8-6
Initial Phase Industrial Drainage System

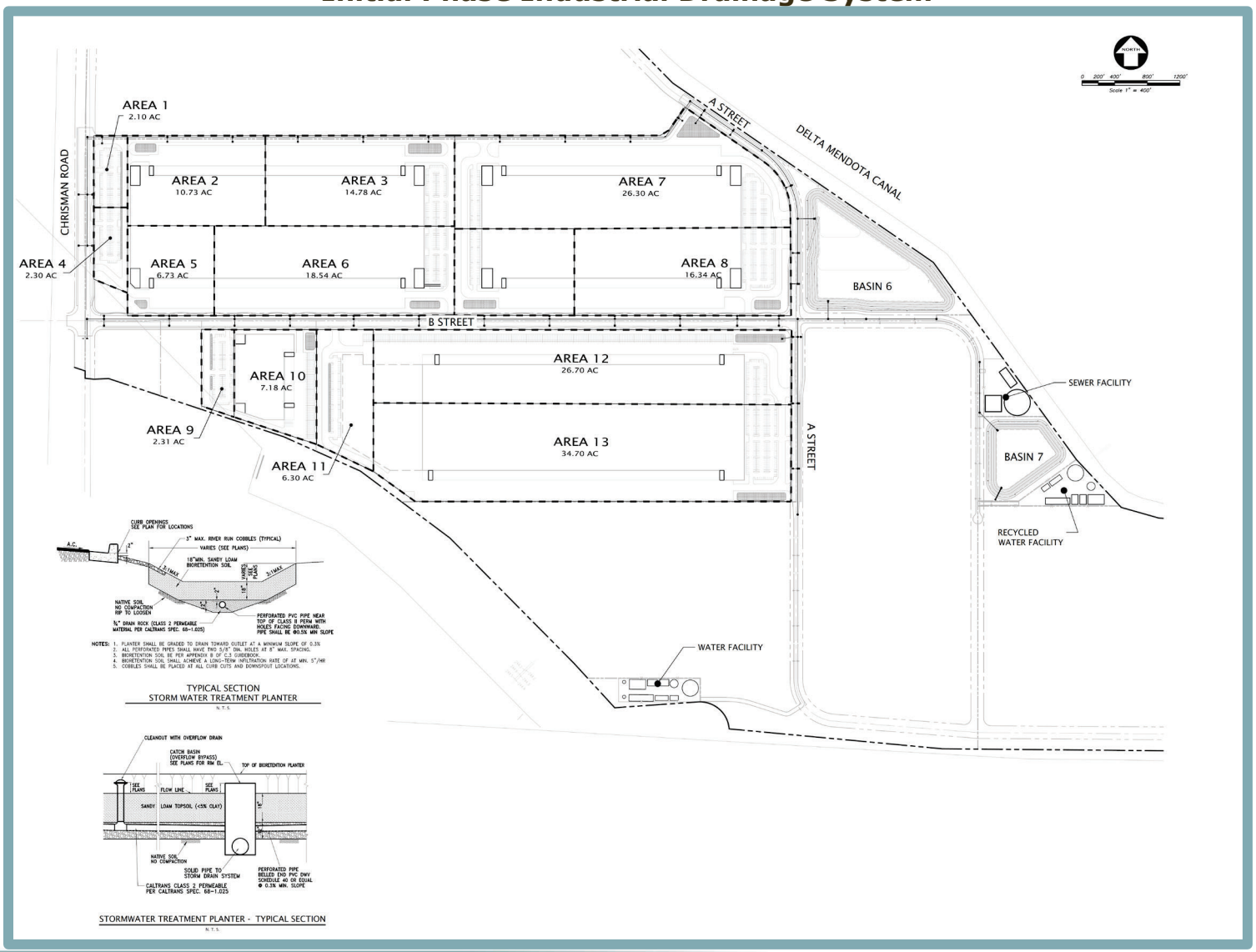


*Figure not OCR compatible.

Figure 4.8-7
Initial Phase University Drainage System

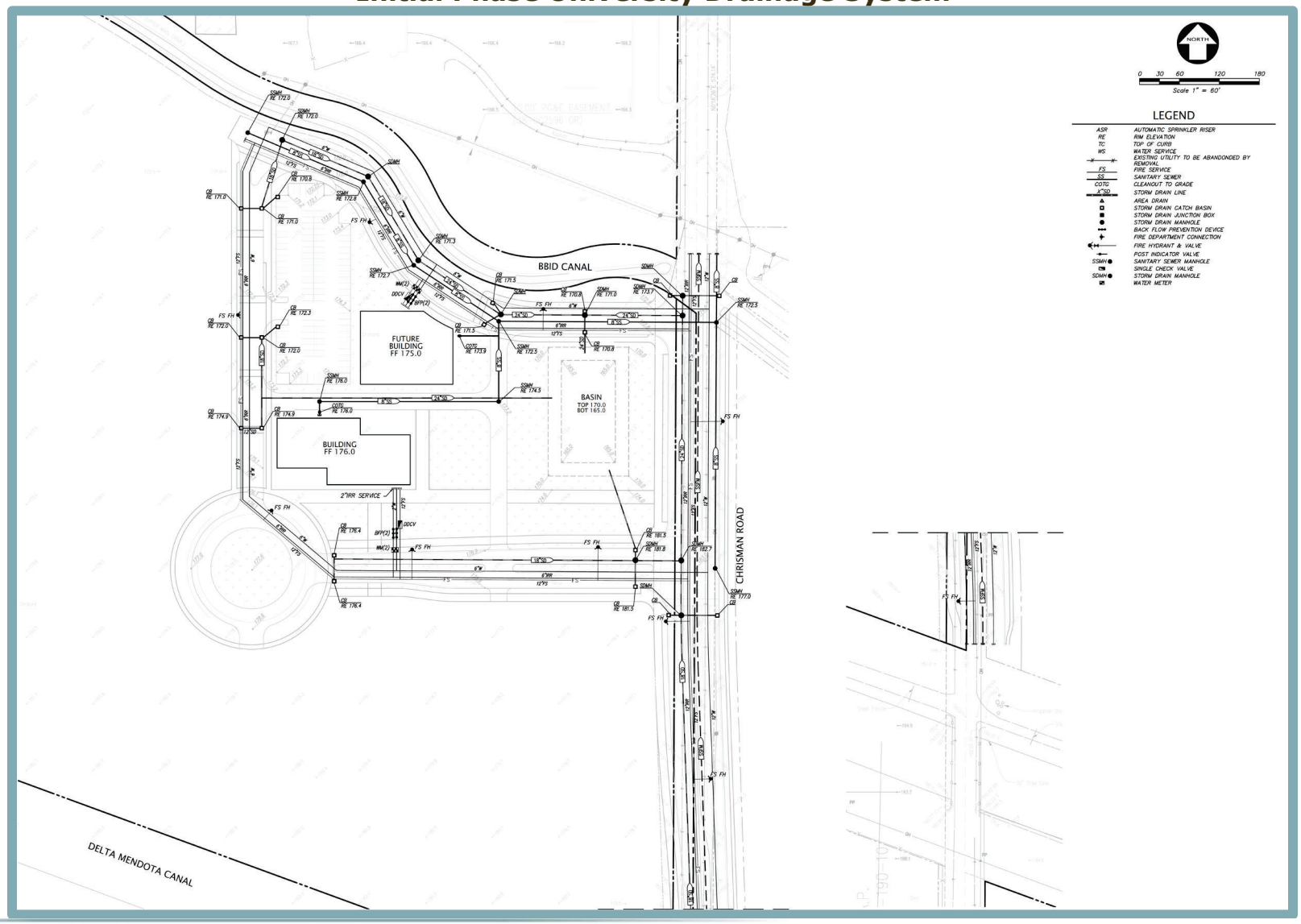


*Figure not OCR compatible.

Figure 4.8-8
Veterans of Foreign Wars Building Drainage System

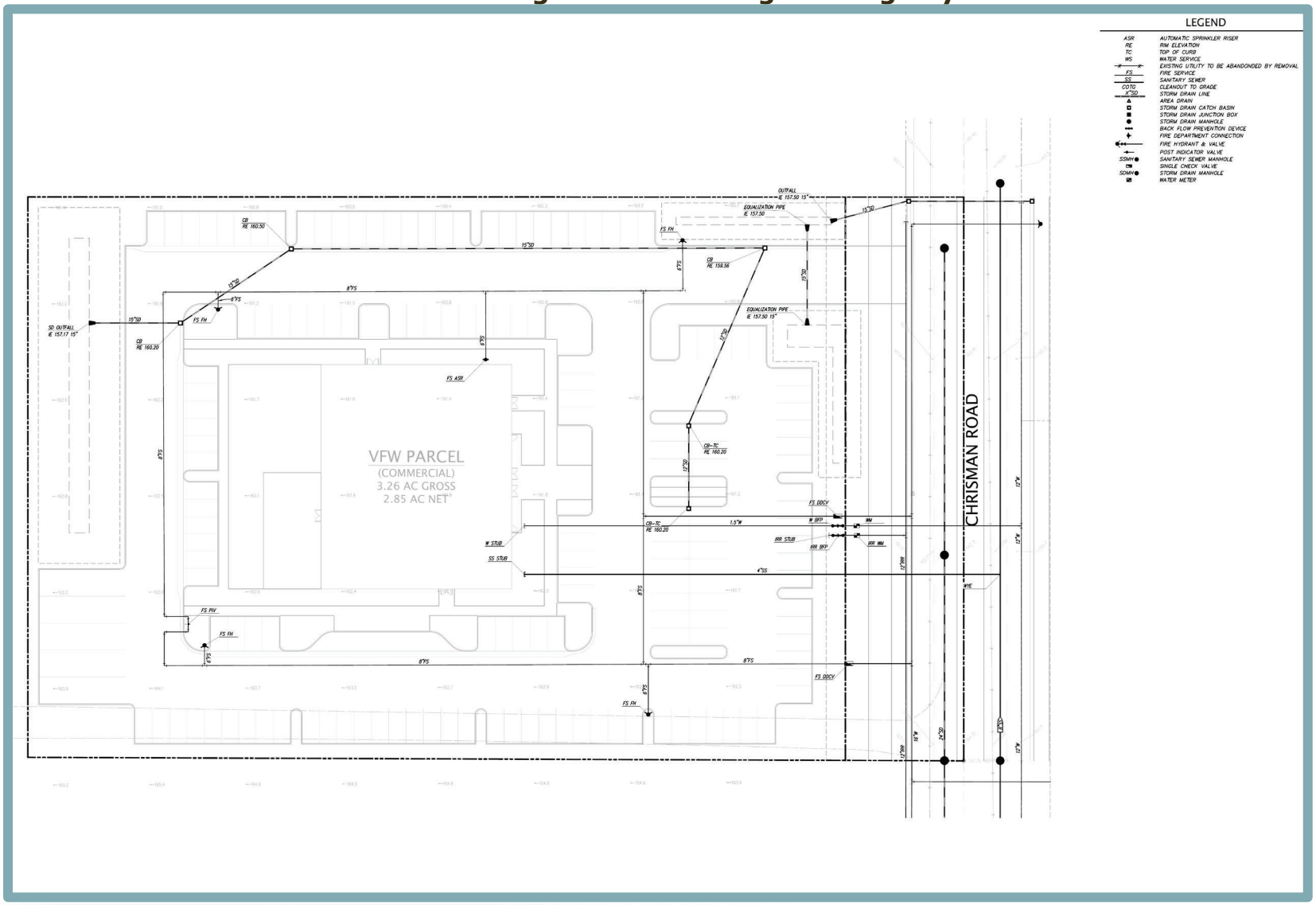


*Figure not OCR compatible.

The proposed project would also be subject to source-control measures, which must be designed for pollutant-generating activities or sources consistent with recommendations from the San Joaquin County SWQCCP and must be shown on the Improvement Plans. Source-control measures could include, but not be limited to, the proper storage of all project materials, use of environmentally friendly materials for indoor pest control, and compliance with manufacturer recommendations and regulations related to pesticide use.

Development of the SWPPP would include plans to treat stormwater runoff in accordance with the standards of the San Joaquin County SWQCCP. The plan would include drainage design from all paved surfaces, including streets, parking lots, driveways, and roofs, as well as landscaping.

The proposed stormwater system would be sized to treat the first flush, which includes a majority of the larger pollutants (sand, soil, silt, grease and trash) as well as smaller pollutants (sediment, nutrient, metals, pesticides and organics). Thus, compliance with the NPDES Phase I MS4 permit would ensure that project runoff is properly treated, prior to discharging.

In addition, in order to ensure continued operation of the proposed stormwater control features, a detailed site-specific inspection and maintenance procedures plan for the proposed drainage system would be required as part of the SWPPP. For example, plants and vegetation within the retention basins should be inspected monthly, and the basins should be inspected for the presence of standing water between 48 to 72 hours after rain events. Required maintenance activity would include, but not necessarily be limited to, removal of debris from basins and removal of debris from outlets of basins. Without implementation of such measures, the basins and other BMPs, SDMs, Baseline Hydromodification Measures, and/or LID measures could fail to ensure that polluted runoff would not enter downstream water bodies during the operation of the project.

With respect to the proposed WWTP, a new Waste Discharge Requirements (WDR) Permit from the SWRCB would be required for WWTP operation. The proposed on-site wastewater treatment system would also be required to adhere to all requirements included in Section 5-10110 of the San Joaquin County Code, which would ensure compliance with applicable standards, laws, and guidelines as adopted, and/or modified by the SWRCB and CVRWQCB. Compliance with the aforementioned standards and permit requirements would ensure that the proposed on-site wastewater treatment system would not violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations.

Furthermore, the industrial activities associated with the proposed project, including manufacturing activities, transportation, vehicle maintenance, and operation of the WWTP would require approval of individual industrial general permits from the County. The industrial general permits would require preparation of industrial SWPPPs to address any activities that would have the potential to release pollutants to stormwater, including material and chemical storage; vehicle operation and maintenance; and material handling and transport. In general, stormwater runoff from industrial areas would be routed to the proposed retention basins for water quality and infiltration

purposes, as further discussed in Impact 4.8-4 below. The new restrictions established by AB 347 and AB 2515 would also require the proposed industrial facilities to eliminate PFAS use and implement industrial BMPs at each site. Therefore, the possibility of PFAS contamination from the proposed project would be limited.

Based on the above, the Initial Phase includes site design measures to ensure that stormwater runoff is properly treated prior to discharge. Thus, urban pollutants entering and potentially degrading local water quality would not be expected to occur as a result of the project. However, because a final BMP and water quality maintenance plan has not been prepared, the incorporation of proper source control measures cannot be ensured. Should the project applicant fail to prepare and implement such documentation, the proposed project could result in a significant impact related to a violation of water quality standards or waste discharge requirements or otherwise substantial degradation of surface or ground water quality during operations.

Specific Plan Buildout

Full project buildout would include additional limited industrial, general commercial, and industrial park uses, as well as parks and a fire station. Such new land uses could result in new stormwater pollutants being introduced to the project area.

Similar to operation of the Initial Phase components discussed above, project-related stormwater discharges from full project buildout would be subject to all applicable requirements of the NPDES Phase I MS4 General Permit and would therefore be required to implement appropriately sized SDMs and Baseline Hydromodification Measures within each DMA to detain and treat runoff. Source control measures would be designed for pollutant-generating activities or sources consistent with recommendations from the San Joaquin County SWQCCP, or equivalent manual, and would be required to be shown on the longer-range component improvement plans. Compliance with the Phase I MS4 General Permit during operation would primarily be achieved through the installation of inlets, new storm drain lines, and retention basins to allow for treatment and percolation into underlying soils.

The new on-site storm drain and retention infrastructure that would be constructed as part of Specific Plan Buildout would be required to be designed to accommodate storage for runoff retention consistent with the standards set forth by the CVRWQCB and the applicable provisions of Section 5-10110 of the San Joaquin County Code. In addition, similar to the above, in order to ensure continued operation of the proposed stormwater control features, a detailed site-specific inspection and maintenance procedures plan for the proposed drainage system would be required. Such control features would ensure that polluted runoff would not enter downstream water bodies during the operation of the project.

Based on the above, full project buildout would include site design measures to ensure that stormwater runoff is properly treated prior to discharge. Thus, urban pollutants entering and potentially degrading local water quality would not be expected to occur. However, because a final BMP and water quality maintenance plan has not been prepared, the incorporation of proper source control measures cannot be ensured. Should the project applicant fail to prepare and implement such documentation, the

proposed project could result in a significant impact related to a violation of water quality standards or waste discharge requirements or otherwise substantial degradation of surface or ground water quality during operations.

Off-Site Improvements Study Area

During operations, some roadways would have incorporated connections to existing drainage facilities as part of the proposed improvements. Such improvements would be anticipated to occur at the intersections located in more urbanized areas, such as at the intersection of West Linne Road and South Tracy Boulevard in the City of Tracy. However, because some of the identified intersections are located outside of the City and are located in unincorporated areas of San Joaquin County where stormwater runoff traditionally pools in the gravel shoulders at the roadside or overland flows into undeveloped lands, existing drainage facilities may not be present at all identified intersections. At intersections such as West Lehman Road and South Bird Road, for example, stormwater on one side of the road generally flows off the roadway into adjacent agricultural fields, while other flows are anticipated to run into an irrigation canal located between the shoulder of the existing roadway and agricultural land. All improved portions of the roadways would be maintained according to Section 5-10109 of the County Code, which prohibits littering and requires the regular cleaning of structures, including paved roads.

Because the extent of the off-site improvements is currently unknown, the associated stormwater drainage facilities are similarly unknown. Therefore, without final improvement designs to manage drainage and water quality, a potentially significant impact could occur.

Conclusion

Based on the above, operations of the proposed project would be required to comply with all applicable federal, State, and local regulations to ensure violations of water quality standards or waste discharge requirements or substantial degradation of surface water or groundwater quality would not occur. However, without verification of compliance with the necessary permits, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.8-2 requires a storm water quality control plan satisfying the applicable standards of the controlling jurisdiction to protect quality of the water supply and prevent water quality violations. Implementation of the following mitigation measures would therefore reduce the above potential impacts to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

4.8-2 *Prior to approval of any grading, building or encroachment permit, the project applicant shall submit a Storm Water Quality Control Plan (SWQCP) to the San Joaquin County Public Works Department for review and approval, or for roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. The SWQCP for the project and any off-site*

improvements within San Joaquin County, shall meet the standards of the San Joaquin County Storm Water Quality Control Criteria Plan (SWQCCP). If located in another jurisdiction, the SWQCP shall meet other applicable standards, such as the San Joaquin County SWQCCP. Site-design measures, source-control measures, hydromodification management, and Low-Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the improvement plans.

4.8-3 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Based on the analysis below, the impact is considered *less than significant*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase, Specific Plan Buildout

The following discussions analyze the proposed project's potential impact to groundwater supplies and groundwater recharge.

Groundwater Supplies

As detailed throughout this EIR chapter, as part of obtaining authorizations to proceed with implementation of the proposed project, the project would be required to comply with various regulations at the federal, State, and local level that exist to protect against environmental impacts to water quality and groundwater sustainability. Regulations with which the project would be required to adhere would include requirements established by the SWRCB's NPDES Construction General Permit. Compliance with the aforementioned regulations would ensure the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Groundwater is currently provided to the project site through 18 on-site wells for agricultural uses, which pump groundwater from two subbasins, the Delta-Mendota Subbasin, and the Tracy Subbasin. As previously discussed, the GSP for the Tracy Subbasin establishes that groundwater levels have generally been stable and recover after periods of pumping with only a few areas indicating declining groundwater levels, and the Northern and Central Delta-Mendota Region GSP establishes variable groundwater levels with increases from about 1997 to 2015. According to the WSA prepared for the proposed project, the current average estimated annual groundwater use for the project site from the Tracy and Delta-Mendota Subbasins was 2,101 AFY and 279 AFY, respectively, for a total on-site groundwater use of 2,380 AFY. The

reported average annual surface water use on-site was 2,158 AFY.[15] Therefore, the total existing on-site water use is 4,538 AFY (2,380 AFY groundwater + 2,158 AFY surface water = 4,538 AFY).

According to the project-specific WSA, and as discussed further in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, the proposed project would primarily use surface water supply from the Byron-Bethany Irrigation District (BBID), supplemented by groundwater as needed. As such, development of the proposed project would result in a significant reduction in groundwater pumping within the Tracy and Delta-Mendota Subbasins. The proposed project would also include water conservation measures, leading to the water demand remaining constant during dry and multiple dry years. Outdoor irrigation demands would be primarily met by recycled water, which would not be affected by drought conditions. According to the WSA, the projected future water demand (not including recycled water) is 801 AFY, which is below the current demand of existing on-site uses of 4,538 AFY and below the total existing groundwater use within the project site of 2,380 AFY.

The conversion of existing agricultural land to the proposed industrial uses would lessen the amount of groundwater pumped from the Tracy and Delta-Mendota Subbasins, which would contribute to (and thereby improve) the long-term sustainability of the subbasins. The proposed project's maximum groundwater use would be within the sustainable yield estimates under both adopted GSPs. Given that the proposed project would use less surface water than is currently being used for on-site agricultural uses, additional surface water supplies may be available to serve other off-site growers currently relying on groundwater in both basins. Groundwater pumping from the Delta-Mendota Subbasin would need to comply with any restrictions on groundwater extractions imposed by the GSAs or by the SWRCB, unless specifically excluded. Neither GSP currently limits groundwater pumping for municipal and industrial uses. The currently proposed supply well is located within the Delta-Mendota Subbasin; however, the project applicant is assessing an existing well location in the Tracy Subbasin pending water quality testing. If the water supply well for the proposed project relies on the Delta-Mendota Subbasin, steps would be taken to reduce existing water demand in the Subbasin so that there is no net increase in groundwater demand. Three existing wells in the Delta-Mendota Subbasin would become curtailment wells and pumping would be reduced, as needed (see Appendix B to the WSA). Accordingly, adequate groundwater is available to supply the project, even if surface water is unavailable, as long as the existing pumping in the Delta-Mendota Subbasin is, pursuant to regulations, decreased to allow for no net increase.

Based on the above, the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin, and a less-than-significant impact would occur related to groundwater supplies.

Groundwater Recharge

Groundwater recharge occurs by percolation of rainwater through permeable surfaces. When development occurs, groundwater recharge can be reduced. The project site is currently composed of agricultural land; therefore, development of the proposed

[15] Todd Groundwater. *Water Supply Assessment, Pacific Gateway, San Joaquin County, California.* August 2025.

project would result in an increase in impervious surfaces. However, full project buildout would also include 51.7 acres of parks and detention basins (i.e., permeable ground), as well as landscaping areas throughout the site where some recharge could occur. Nevertheless, the proposed project would result in a reduction in the amount of natural soil surfaces available for potential infiltration of rainfall and runoff to the underlying aquifers.

Due to the lack of streams or alluvial fan conditions at the project site, notable groundwater recharge areas are not identified. Groundwater recharge does occur during the irrigation of agricultural lands, including the agricultural lands currently located on-site. However, the majority of runoff from the developed project site would be conveyed to the proposed retention basins, where treated runoff would eventually infiltrate soils and contribute to aquifer recharge. In addition, percolation tests were conducted as part of the Hydrology and Hydraulics report prepared for the proposed project. Consistent with San Joaquin County standards, the basins would be sized to drawdown in either two days (Basins 1a, 1b, 2, 3a, 3b, and 4 only) or 10 days (remaining basins) after the 10-year 48-hour capacity. Basins 1a, 1b, 2, 3a, 3b, and 4 would be required to percolate in two days due to their proximity to the Tracy Municipal Airport, pursuant to Federal Aviation Administration (FAA) regulations related to development that may cause hazards to flight, such as standing water that could attract flocks of birds. Therefore, because the proposed basins would allow captured runoff to percolate and restore groundwater supplies, development of the proposed project would not substantially interfere with groundwater recharge.

Off-Site Improvements Study Area

The off-site improvement areas are located at existing roadways and/or intersections. Because groundwater recharge occurs by percolation of rainwater through permeable surfaces, notable groundwater recharge areas are not anticipated to occur at any of the off-site improvement areas. Therefore, development of the off-site roadway improvements triggered by the proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge. In addition, any water required during construction would be provided through the use of water trucks, and demand for water during roadway operation would not occur.

Conclusion

Based on the above information, the proposed project would not substantially decrease groundwater supplies or interfere with groundwater recharge such that the project may impede sustainable groundwater management of the basins and impacts would be ***less than significant***.

Mitigation Measure(s)

None required.

4.8-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Based on the analysis below and with implementation of mitigation, the impact is considered *less than significant*.

Given that both the Initial Phase and Specific Plan Buildout would result in the development of similar land uses on contiguous parcels, the following discussion applies to the potential for both project components to substantially alter the drainage pattern of the site or area, or increase the rate or amount of surface runoff within the project area. Therefore, the following discussions include a combined analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase

The project site does not contain any streams or other water features. While the project site's current setting includes relatively little impervious surfaces and is dominated by agricultural orchards, urbanization of the project site would result in a mix of industrial structures, a university campus, and the VFW building. Such development would include new impervious surfaces, such as building rooftops and parking lots. Additionally, the proposed project would include the development of new internal streets and infrastructure improvements, which would create even more impervious surfaces. All runoff from the on-site project components and proposed roadways would be collected by catch basins (i.e., a curb, gutter, etc.) constructed to collect and direct runoff to the underground pipelines. The proposed pipeline network would convey flows to discharge into the retention basins, which would allow treated stormwater to infiltrate underlying soils. The proposed stormwater system would be a self-contained system, which would ensure downstream flows are not increased.

The Initial Phase of the project would install two retention basins (Basins 6 and 7) within the Pacific Gateway East development area, which encompasses DMAs 5 through 8, as well as a storm drainage pipe network to route flows to the two retention basins (see Figure 4.8-6). The Pacific Gateway East development area is designed to function independently of the other development areas. In addition, the VFW and proposed university would convey flows through stormwater drainage pipes estimated to range between 12 and 24 inches. The stormwater drainage lines associated with the VFW would outfall west of the proposed facility, while the stormwater collected within the University Center area would be conveyed to a retention basin located in the eastern portion of the development area (see Figure 4.8-7 and Figure 4.8-8). The 100-year 10-day storm volume that is not captured in the retention basins would be stored on-site in streets, parking lots, and common areas; or in conjunction with temporary retention basins.

Specific Plan Buildout

Full project buildout would include a mix of light industrial structures, commercial development, a university campus, and parks supported by internal roadways and infrastructure improvements. Similar to the Initial Phase, such development would introduce new impervious surfaces to the project site. All runoff from the project components and proposed roadways would be collected by catch basins and directed through the underground pipelines to discharge into the proposed retention basins located throughout the project site, which would allow treated stormwater to infiltrate underlying soils. The proposed stormwater system would be a self-contained system, which would ensure downstream flows are not increased.

An estimated 11 retention basins would be built at full project buildout, including one off-site retention basin located north of Durham Ferry Road and west of Chrisman Road (Basin 4) (see Figure 4.8-9). After the Initial Phase and prior to approval of additional entitlements, each subsequent phase will prepare a detailed hydrology and hydraulic study of off-site and on-site drainage conveyance, stormwater quality designs, and retention basin sizing. The retention basins would be located to independently serve each of the 11 on-site DMAs. The Pacific Gateway West, Pacific Gateway Central, and University development areas would also be served by linked retention basins.

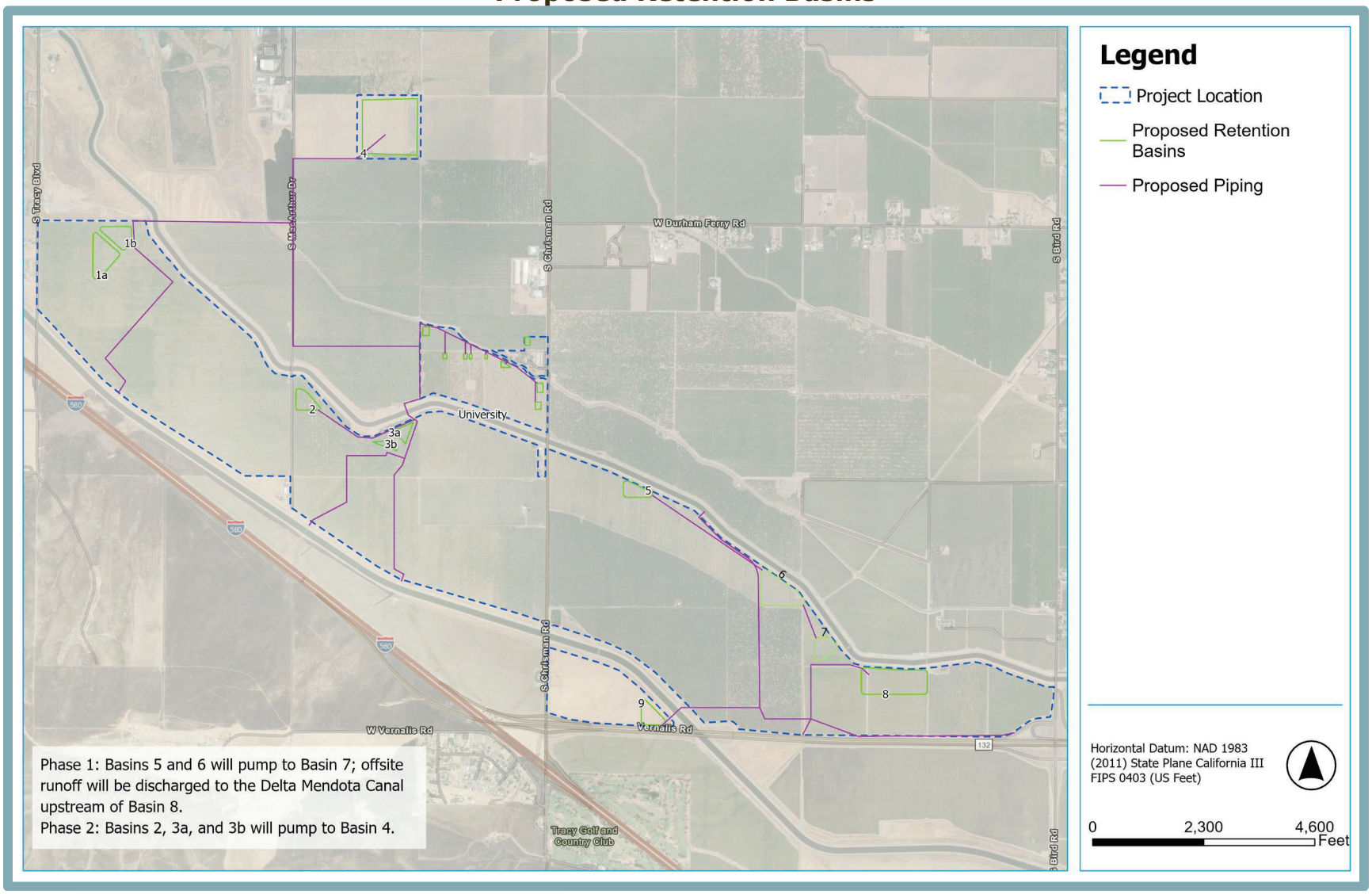
Once the capacity of the linked basins is met, the off-site Basin 4 would be constructed. Following construction of Basin 4, Basins 2, 3a, and 3b would pump to Basin 4. Basin 4 would also receive runoff from off-site mountain catchments to the west. Off-site runoff would need to be intercepted at seven areas where culverts discharge onto the project site; in total, at least 12 pipes are proposed by the project. Off-site flows are proposed to be routed to Basins 4 and 8 to allow for groundwater recharge in the region. Pipe flow routing necessary to contain off-site flows east of South Chrisman Road, and Basin 8, would be required to be constructed prior to the complete development east of Chrisman Road. Pipe flow routing necessary to contain off-site flows west of South Chrisman Road, and Basin 4, would be required to be constructed prior to the complete development west of Chrisman Road. The retention basins would be sized for the 100-year, 10-day storm, and all off-site drainage conveyances would be sized for the 100-year, 24-hour storm event.

Based on the above, the proposed project would not substantially alter the drainage pattern of the site or area or increase the rate or amount of surface runoff such that off-site flooding would be induced. However, because a Final Drainage Report has not yet been prepared for the proposed project, development of the proposed project could create or contribute runoff water that would exceed the existing on-site storm drainage system's capacity, provide substantial sources of polluted runoff, or redirect flood flows. As a result, the proposed project could result in a significant impact.

Off-Site Improvements Study Area

The prospective off-site intersection and roadway improvements triggered by full project buildout would occur at existing roads and intersections. The feasibility of the off-site roadway improvements is currently unknown for various reasons (e.g., in many cases, other approval authority would be required) and, thus, the extent of the alterations to existing drainage patterns is also unknown.

Figure 4.8-9
Proposed Retention Basins



As previously discussed, existing drainage facilities may not be present at all identified intersections. All improved portions of the roadways would be maintained according to Section 5-10109 of the County Code. Nonetheless, because the extent of the off-site improvements is currently unknown, the associated stormwater drainage facilities are similarly unknown.

Therefore, without final improvement designs to ensure the off-site improvements do not substantially alter the existing drainage pattern and create substantial erosion, siltation, or excessive runoff, a potentially significant impact could occur.

Conclusion

Based on the above, the development of the project site would not result in an increase in off-site peak runoff flows relative to existing conditions. However, a final drainage report would be required with the project Improvement Plans to substantiate the preliminary drainage design and address the off-site improvements triggered by project development. Therefore, without approval of a final drainage report, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impacts to a *less-than-significant* level.

Initial Phase

4.8-4(a) *As part of the Improvement Plan submittal process for the Initial Phase of the proposed project, a Final Drainage Report shall be submitted to the San Joaquin County Public Works Department. The Final Drainage Report shall require more detail than that provided in the preliminary report, and shall be reviewed in concert with the Improvement Plans to confirm conformity between the two. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: written text addressing existing conditions; watershed maps; changes in flows and patterns effected by the proposed improvements; all appropriate calculations; and proposed on- and off-site improvements to accommodate post-development flows in the 100-year, 10-day storm event for retention basin sizing; and the 100-year, 24-hour storm to convey off-site flows through the project site. The final drainage report shall be prepared in conformance with the requirements set forth by San Joaquin County at the time of Improvement Plan submittal and shall be approved by the San Joaquin County Public Works Department.*

Specific Plan Buildout, Off-Site Improvements Study Area

4.8-4(b) *In conjunction with submittal of any subsequent development applications within the proposed Specific Plan area, or any off-site roadway improvement plans related to the proposed project, the project applicant shall submit, for review and approval, a design-level drainage report to the San Joaquin County Public Works Department, or for roadway improvement projects, the agency (e.g., Caltrans, City of Tracy) within whose jurisdiction the improvement areas are located.*

The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: written text addressing existing conditions; watershed maps; changes in flows and patterns effected by the proposed improvements; all appropriate calculations; and proposed on- and off-site improvements to accommodate post-development flows in the 100-year, 10-day storm event for retention basin sizing; and the 100-year, 24-hour storm to convey off-site flows through the project site, unless a different design storm is specified by the agency with review/approval authority. The final drainage report shall be prepared in conformance with the requirements set forth by San Joaquin County, or for roadway improvements within another jurisdiction, the respective jurisdiction's applicable stormwater standards.

4.8-5 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows, or in flood hazard, tsunami, or seiche zone, risk release of pollutants due to project inundation. Based on the analysis below, the impact is considered *less than significant*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase, Specific Plan Buildout

The project site is not located in a tsunami or seiche zone. Therefore, impacts related to tsunamis and seiches are not discussed further. Rather, the following discussion is focused on potential impacts related to flooding and flood hazards.

In general, the primary flood hazard in the County is the San Joaquin River and associated tributaries, which are located approximately 5.80 miles east of the project site. FEMA designates the project site as Zone X, which is not considered a Special Flood Hazard Area (SFHA).

Following development of the project site, the proposed project would result in an increase in impervious surfaces as compared to current on-site conditions, which could potentially increase the rate and volume of runoff from the site during storm events. However, the proposed project would include the development of at least 11 retention basins throughout the project site, which would temporarily detain and treat captured runoff, before releasing flows to percolate into the surrounding soils. The proposed retention basins are designed to retain the 100-year, 10-day total volume from on-site and non-diverted upstream areas. Therefore, although the project site includes some potentially flood-prone areas around the existing canals, the proposed stormwater drainage system would be sized to capture all flows. Overall, the proposed project would not increase the rate or amount of runoff leaving the project site during the design storm event.

All drainage and flood control components of the proposed project are outside of the 100-year and 500-year floodplains of Corral Hollow Creek, which flows north of the project. The closest component of the development to the floodplain is Basin 4. The limit of the FEMA study on Corral Hollow Creek is at South Chrisman Road, north of Durham Ferry Road. San Joaquin County provided a Flood Risk Reduction Reconnaissance Study of Corral Hollow Creek, which was prepared for the County of San Joaquin by R&F Engineering, and dated February 7, 2024. The observed flooding extents during the winter of 2023 from that study, which extended beyond the mapped FEMA flood zone limits, were also overlaid with the proposed basins in Figure 4.8-10. Basin 4 is outside of the observed flooding during winter 2023. Therefore, the project is unlikely to adversely affect that floodplain.

With respect to risking release of pollutants due to project inundation, while the future tenants of the proposed industrial buildings are not currently known, operations associated with the proposed industrial uses are anticipated to be typical of other warehouse uses within the County. In addition, as discussed in Chapter 4.7, Hazards and Hazardous Materials, of this EIR, while not currently anticipated, in the event that future operations associated with the proposed project, including the industrial warehouses, involve the routine use, transport, or disposal of hazardous materials, such materials would be safely managed in accordance with applicable regulations. Furthermore, all on-site stormwater flows would be directed to the proposed stormwater quality features to ensure that any pollutants entrained within stormwater from the project site are removed prior to percolation.

Based on the above, the proposed project is not anticipated to impede or redirect flood flows such that on- or off-site structures would be exposed to flood risk.

Off-Site Improvements Study Area

The feasibility of the off-site roadway improvements is currently unknown for various reasons. Although the extent of the alterations to existing drainage patterns is currently unknown, the identified improvement areas are located at existing intersections and roadways and are not within close proximity to bodies of water or the coast. The majority of the off-site improvement areas are not located within SFHAs, as designated by FEMA. However, according to FEMA FIRM 06077C0615F, the intersection of Kasson Road, Grant Line Road, and 11th Street is located immediately adjacent to Zone AE, a SFHA with a 24-foot Base Flood Elevation (BFE) (see Figure 4.8-11). Because the full extent of the off-site improvement areas is currently unknown, the required improvements could occur within the SFHA. As part of a development permit application, development projects within a SFHA with a BFE are required to show that all buildings located within the SFHA would be raised above the applicable BFE. However, the proposed off-site improvements would not include the construction of any structures. Therefore, even if off-site improvements to the roadway at the Kasson Road/Grant Line Road/11th Street intersection occurred within the SFHA, impacts would be less than significant.

Based on the above, the off-site improvements would not result in flooding on- or off-site, nor impede or redirect flood flows.

Figure 4.8-10
Proposed Basins Overlaid with FEMA Mapped Floodplain for Corral Hollow Creek

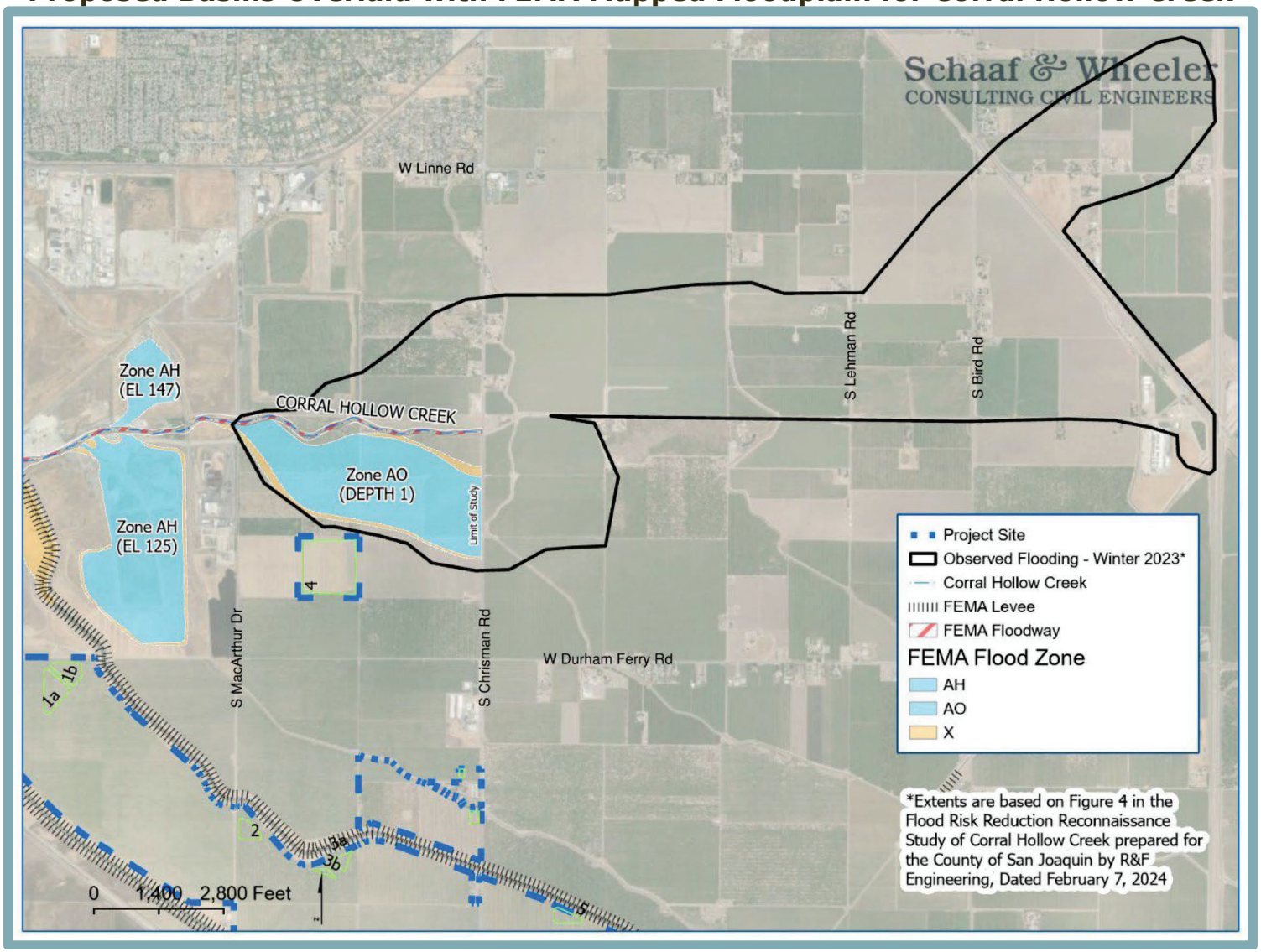


*Figure not OCR compatible.

Figure 4.8-11
FEMA FIRM 06077C0615F

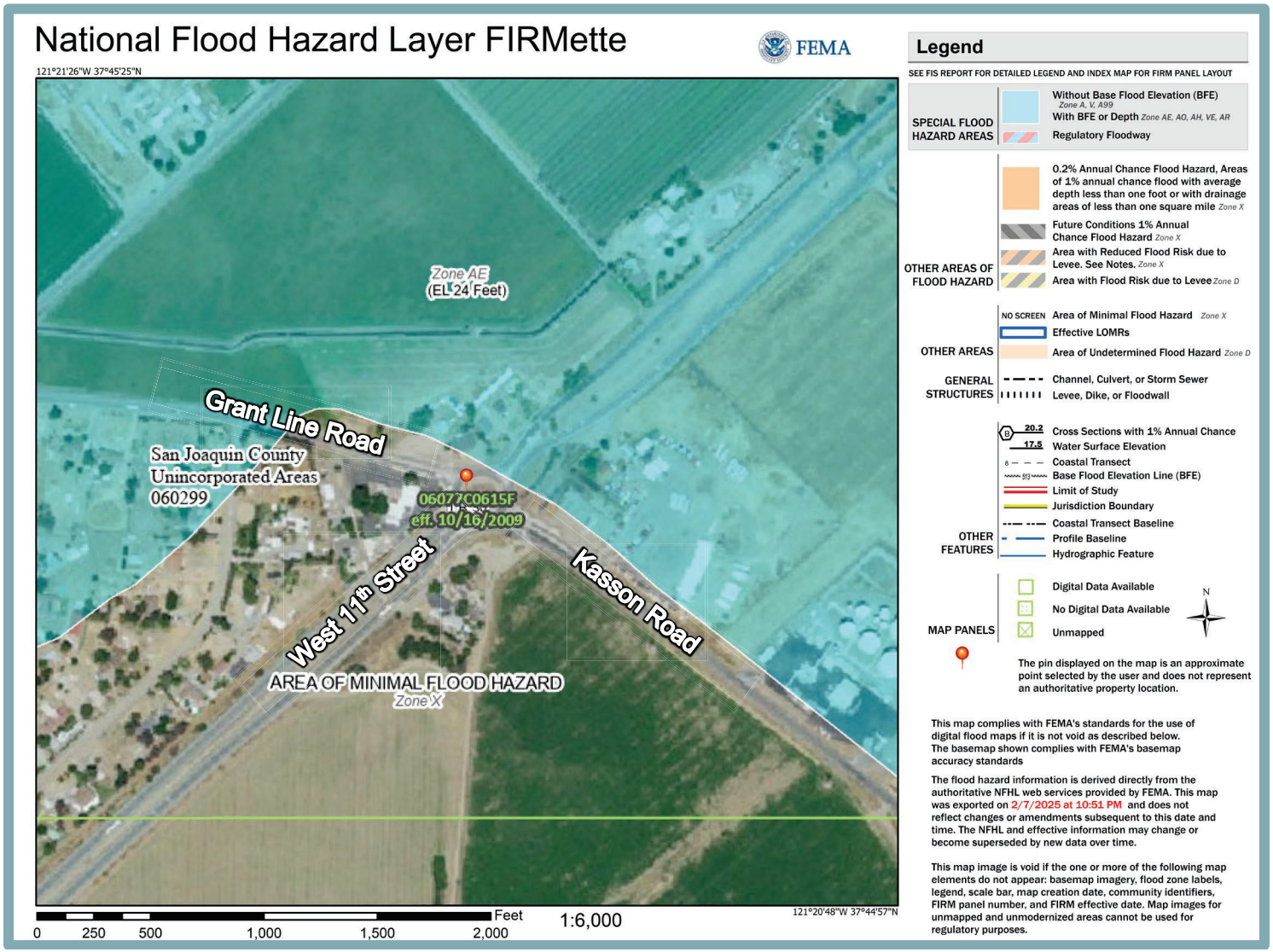


*Figure not OCR compatible.

Conclusion

Based on the above information, although the proposed project would alter the site with new impervious surfaces, the project would not substantially alter the existing drainage pattern of the site or area in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site, impede or redirect flood flows, or risk release of pollutants due to project inundation. Therefore, the impact would be ***less than significant***.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The cumulative setting for impacts related to hydrology and water quality encompasses the 15,590-acre watershed area shown in Figure 4.8-1. Additional detail regarding the cumulative project setting within the County and surrounding areas can be found in Chapter 6, Statutorily Required Sections, of this EIR, as well as within Appendix Q, the Cumulative Projects List, to this EIR. It should be noted that none of the cumulative projects are located within the 15,590-acre watershed area.

4.8-6 Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns. Based on the analysis below, the project's contribution to the significant cumulative impact is *less than cumulatively considerable*.

Based on the nature of the cumulative analysis, the following discussions include an analysis of potential cumulative impacts associated with development of the full project buildout and off-site improvement areas.

Specific Plan Buildout, Off-Site Improvements Study Area

Impacts related to stormwater quality, groundwater, and drainage patterns are discussed separately below.

Stormwater Quality

Construction activities have the potential to affect water quality and contribute to localized violations of water quality standards if stormwater runoff from construction activities enters receiving waters. Runoff from additional construction sites within the project area could also carry sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products,

which could result in water quality degradation if runoff containing such sediment or contaminants should enter receiving waters in sufficient quantities. Thus, construction activities associated with the proposed project, in combination with construction activities associated with other development projects within the area, could result in potentially significant cumulative impacts related to water quality. However, all construction projects resulting in disturbance of more than one acre of land are required to comply with the most current provisions of the NPDES Construction General Permit requirements. Conformance with the Construction General Permit would require preparation of SWPPPs for all such projects and subsequent implementation of BMPs to prevent the discharge of pollutants. Considering the existing permitting requirements for construction activity in the project area, cumulative construction within the area would be heavily regulated and impacts related to the degradation of water quality would be less than cumulatively significant.

Similar to the proposed project, cumulative development would also be subject to NPDES Phase I Small MS4 General Permit requirements, including source control and treatment control features. Specifically, regulated projects are required to divide the project area into Drainage Management Areas or DMAs and implement and direct water to appropriately sized SDMs and Baseline Hydromodification Measures within each DMA. Source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the San Joaquin County SWQCCP, or equivalent manual, and must be shown on improvement plans (prior to building permits ever getting issued).

Based on the conceptual stormwater design, during operations, stormwater runoff from the proposed project would be properly treated prior to discharge, thereby preventing urban pollutants from entering and potentially polluting the local drainage system. Prior to approval of future development projects in the area, a final drainage report would be required with submittal of the improvement plans for County review and approval to substantiate preliminary LID sizing calculations. In addition, pursuant to Phase I Small MS4 General Permit requirements, a Post-Construction Stormwater Control Plan would be required for the proposed project and future development projects. The project would be subject to Construction General Permit requirements, including implementation of BMPs and preparation of a site-specific SWPPP like all other developments within the drainage shed. Future industrial development projects would also be subject to the requirements of the SWRCB's Industrial General Permit and prepare industrial SWPPPs to address any activities that would potentially release pollutants into stormwater. Compliance with the foregoing regulations would ensure that impacts related to the alteration of drainage patterns, the discharge of pollutants, and flooding would be less than cumulatively significant.

Groundwater Recharge

Cumulative development within the project region would result in increased amounts of impervious surfaces, which would reduce the infiltration of groundwater within the project region. Nevertheless, while cumulative development would increase the number of impervious surfaces in the project region, new stormwater drainage infrastructure would be required to be implemented as part of new development, which would ensure that runoff continues to be discharged or retained and infiltrated as appropriate and ultimately conveyed to the San Joaquin River, where the majority of

recharge to the subbasin occurs. In addition, as previously discussed under Impact 4.8-3, development of the proposed project would not substantially interfere with groundwater recharge and would not conflict or obstruct implementation of an adopted sustainable groundwater management plan.

Drainage Patterns

Concurrent development of the proposed project and cumulative development within the surrounding area would result in changes to the drainage patterns of the project area. Changes in drainage patterns would primarily be attributed to the development of currently undeveloped areas within the drainage shed shown in Figure 4.8-1, which would result in the conversion of pervious surfaces to impervious surfaces. However, none of the projects discussed in the cumulative project list included in Chapter 6, Statutorily Required Sections, of this EIR and listed in Appendix Q are located within the drainage areas surrounding the proposed project. In addition, future development projects would be required to adhere to federal, State, and local requirements. Compliance with regulations would ensure cumulative development would not substantially alter existing drainage patterns so as to result in substantial erosion or siltation on- or off-site or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Through compliance with existing NPDES Phase I Small MS4 General Permit requirements, as well as compliance with County Code standards and implementation of source-control measures consistent with recommendations from San Joaquin County SWQCCP, cumulative development would incorporate applicable storm drainage features, such as detention and retention basins to manage flows during storm events, which would ensure cumulative development does not result in an increase in the rate and volume of runoff, relative to existing conditions. Overall, compliance would ensure cumulative development would not result in alterations to drainage patterns to the extent that such alteration would result in flooding on- or off-site or impede or redirect flood flows.

Conclusion

Given the analysis presented in this chapter, and the highly regulated nature of cumulative development in the project region, the proposed project's cumulative impact related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns would be ***less than cumulatively significant***.

Mitigation Measure(s)

None required.

4.9 Land Use and Planning

4.9 LAND USE AND PLANNING

4.9.1 INTRODUCTION

The purpose of the Land Use and Planning chapter is to examine the proposed project's compatibility with existing land uses in the area and to assess any potential project inconsistencies with applicable land use plans, policies and regulations adopted by the County for the purpose of avoiding environmental effects, including but not limited to the San Joaquin County General Plan[1] and the San Joaquin County Code of Ordinances.

In addition, the reader is referred to the various environmental resource evaluations presented in the other technical chapters of this EIR for a discussion of potential physical/environmental effects that may result from land use changes.

4.9.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing land uses on the project site, at the time the Notice of Preparation (NOP) was published on December 20, 2024, as well as the existing plans and policies that guide the development of the project.

Project Site Characteristics and Surrounding Land Uses

The project site is generally bound by Bird Road to the east; the Delta-Mendota Canal to the north; and Tracy Boulevard to the west. The southern project site boundary is formed by the California Aqueduct to the west of South Chrisman Road, and State Route (SR) 132 to the east of South Chrisman Road. South Chrisman Road, a designated Surface Transportation Assistance Act (STAA) Truck Route, provides north-to-south circulation access through the area. East/west access is limited to private, unimproved farm roads. The project site is currently developed with active agricultural land, primarily almond and cherry orchards, and an agricultural machinery manufacturing facility (A.B. FAB, Inc.).

The project site is approximately 0.83-mile south of the City of Tracy and generally located in an existing agricultural area with agricultural uses located to the north (e.g., orchards, Crown Nut almond processing plant), to the south between the California Aqueduct and Interstate 580 (I-580), and to the east of Bird Road.

Several established surface mining operations are located to the northwest of the project site. Finally, within the project site, two existing single-family homes front South Chrisman Road and one parcel with three homes front on MacArthur Drive. The Tracy Municipal Airport is located approximately one mile northwest of the project site.

In addition, the County's General Plan identifies several Rural Communities, defined as generally more than 50 acres in size and with a population between 100 and 1,000. Through General Plan policies, the County seeks to maintain the character of rural communities and ensure a quality living environment by improving the current state of the community. The nearest Rural Community to the project site is Chrisman, located immediately south of I-580, west of the SR 132/I-580

[1] San Joaquin County. *San Joaquin County General Plan Policy Document.* December 2016.

intersection. The community includes the Tracy Golf and Country Club and the adjacent subdivisions of Par Country Estates and Hillside Greens. Par Country Estates contains 36 homes on lots averaging 1.5 acres in size. Hillside Greens contains 14 new homes, built on 6,000 square-foot (sf) lots. The Chrisman community boundary includes about 225 acres with a population of 184 people.

Land Use Designations and Zoning Districts

The County's General Plan designates the majority of the project site as General Agriculture (A/G). In addition, Assessor's Parcel Number (APN) 253-290-130, which represents approximately 19 acres located at the furthest eastern point of the project site, is designated Resource Conservation (OS/RC), and a 1.09-acre parcel in the southernmost portion of the site (APN 253-260-050), along South Chrisman Road, is designated Rural Service Commercial (C/RS) (see Figure 4.9-1). The project site is zoned by the County as General Agriculture-40-acres (AG-40), with the exception of APN 253-260-050, which is zoned Rural Service Commercial (C-RS) (see Figure 4.9-2).

The majority of the land surrounding the project site is designated as A/G and zoned AG-40. In addition, parcels located to the north, west, and east are designated OS/RC; to the south, parcels are designated and zoned C/RS and C-RS, respectively. In addition, parcels southwest of the project site, across the California Aqueduct and I-580, are zoned AG-160.

Each of the General Plan land use and zoning designations listed above are described in further detail within the following sections.

Land Use Designation Definitions

The following section provides definitions of the land use designations noted above, as summarized from the San Joaquin County General Plan.

General Agriculture

The A/G land use designation provides for large-scale agricultural production and associated processing, sales, and support uses. According to the County's General Plan, the A/G land use designation generally applies to areas outside other areas planned for urban development. Generally, A/G areas have soils capable of producing a wide variety of crops and/or capable of supporting grazing. Typical building types include low-intensity structures associated with farming and agricultural processing and sales, although allowed uses also include single-family detached dwellings and compatible public, quasi-public, and special uses.

Resource Conservation

The OS/RC land use designation provides for areas with significant natural resources that should remain in open space, used for recreation, or preserved and used for resource production (e.g., mining). The designation may be applicable to any area that is essentially unimproved and planned to either remain open or be improved for recreational uses, managed in the production of resources, protected from development-related impacts, or restricted from access for the protection of the community (e.g., floodplains). Allowed uses within OS/RC areas include public and quasi-public uses, such as riparian areas, parks, and open space easements.

Figure 4.9-1
Existing Project Site General Plan Land Use Designations

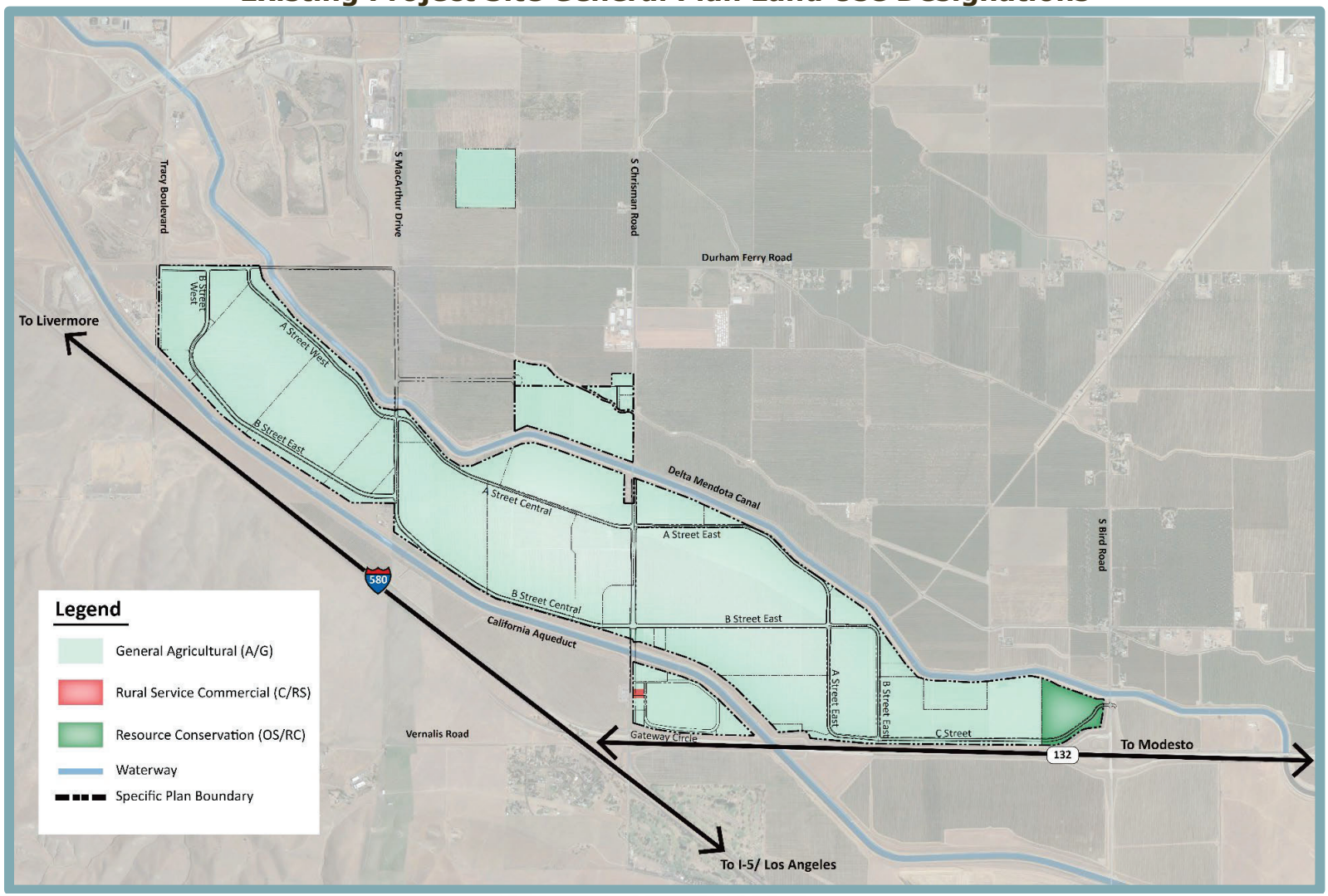


*Figure not OCR compatible.

Figure 4.9-2
Existing Project Site Zoning Designations

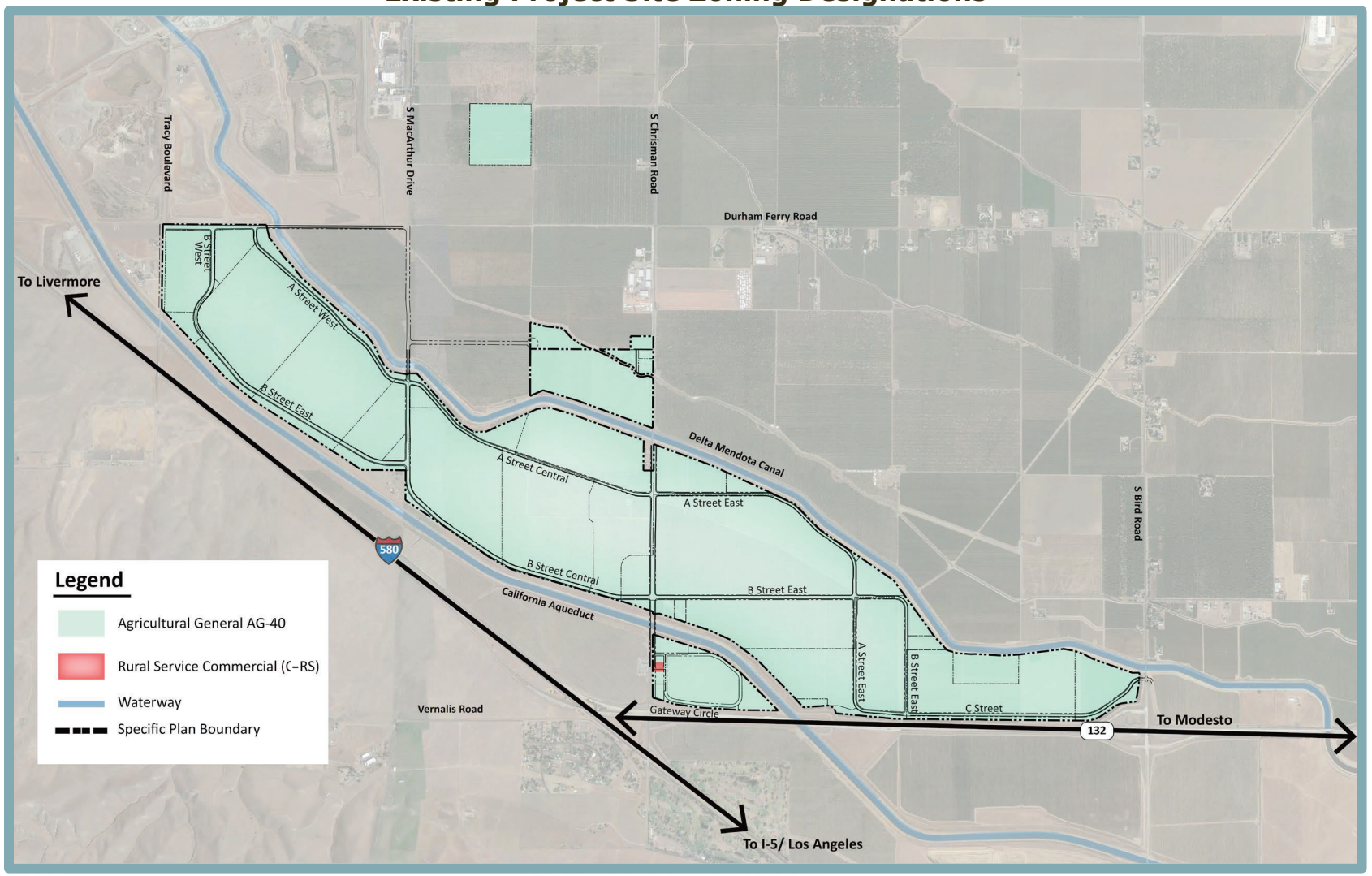


*Figure not OCR compatible.

Rural Service Commercial

The C/RS land use designation provides for a mix of retail and service uses typically needed by residents in rural areas and employed at the surrounding agricultural operations. The C/RS designation is only allowed in rural communities and may include a mix of uses, as a separation of land uses is not typically practical in rural areas. According to the County's General Plan, developments shall be located on roadways classified as Collector or higher and may include pedestrian and bicycle facilities. Typical building types include one- to two-story commercial structures, although allowed uses within C/RS areas include medical and office uses, as well as central public gathering places.

Zoning District Definitions

The following section provides definitions of the zoning districts noted above, as summarized from the San Joaquin County Code of Ordinances.

Agricultural Zones

Pursuant to Section 9-203.010 of the County Code of Ordinances, the AG zoning designation implements the A/G land use designation of the General Plan and is intended to preserve agricultural lands for use as commercial agricultural enterprises. Section 9-203.030 establishes the development standards for the AG zoning districts, including minimum lot sizes as denoted by the number appended to the zoning designation. As such, areas zoned AG-40 are required to include lots a minimum of 40 acres in size and AG-160 parcels are required to include lots a minimum of 160 acres in size.

Table 9-203.020-1 establishes the permitted and conditional uses in San Joaquin County agricultural zones. Permitted uses include, but are not limited to, single-unit residences, general animal raising uses, community gardens, produce stands, and crop production.

Rural Service Commercial

Pursuant to Section 9-201.010 of the County Code, the C-RS zoning designation is intended to provide for retail and service uses within rural communities frequently required by rural residents and the surrounding agricultural community. The zone provides for a mix of retail uses, professional offices, and commercial services, and generally implements the Rural Service Commercial land use designation of the General Plan.

Table 9-201.020-1 establishes the permitted and conditional uses in San Joaquin County commercial zones. Permitted uses include, but are not limited to, community gardens, crop production, produce stands, and small-scale solar energy systems.

4.9.3 REGULATORY CONTEXT

The following is a description of environmental laws and policies that are relevant to the CEQA review process concerning land use and planning.

State Regulations

The following are applicable State regulations related to land use and planning.

Title 14 California Code of Regulations Section 15131

Title 14, California Code of Regulations (CCR) Section 15131 provides that economic or social information may be included in an EIR, but those economic or social effects shall not be

considered significant effects on the environment. In an EIR, the lead agency is responsible for researching economic or social changes resulting from a project, which may eventually lead to physical changes in the environment. Such economic or social changes can be used to determine the significance of physical changes on the environment.

Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Section 56000 *et seq*.)

In California, the establishment and revision of local government boundaries is governed by the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (CKH). The CKH was a comprehensive revision of the Cortese-Knox Local Government Reorganization Act of 1985, which was itself a consolidation of three major laws governing boundary changes. The three laws that governed changes in the boundaries and organization of cities and special districts prior to 1986 were:

- The Knox-Nisbet Act of 1963, which established Local Agency Formation Commissions (LAFCos) with regulatory authority over local agency boundary changes.
- The District Reorganization Act of 1965 (DRA), which combined separate laws governing special district boundaries into a single law.
- The Municipal Organization Act of 1977 (MORGA), which consolidated various laws on city incorporation and annexation into one law.

CKH established procedures for local government changes of organization, including City incorporations, annexations to a City, and special district consolidations. LAFCos have numerous powers under CKH, the most significant of which is the power to act on local agency boundary changes and to adopt SOIs for local agencies. Secondary purposes of LAFCos include the discouragement of urban sprawl and the encouragement of the orderly formation and development of local agencies.

Local Regulations

The following are the local regulations and standards relevant to the CEQA review process with respect to land use and planning. Specific goals and policies from the San Joaquin County General Plan are listed in Table 4.9-1 at the end of this chapter.

San Joaquin Council of Governments

The San Joaquin Council of Governments (SJCOG) was created in 1968 as a joint-powers authority comprised of San Joaquin County and the eight cities of Stockton, Lodi, Manteca, Mountain House, Tracy, Ripon, Escalon and Lathrop. SJCOG acts as the planning, financing and coordinating agency for the San Joaquin region and oversees transportation, housing, and habitat conservation. Specifically, SJCOG's range of responsibilities include managing transportation sales taxes, collecting County demographic and economic data, airport land use planning as the San Joaquin Airport Land Use Commission (SJALUC), regional air quality, and assigning each city and the County a fair share of affordable housing.

Regional Transportation Plan/Sustainable Communities Strategy

Federal and state regulations require every region in California to adopt a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) in order for transportation projects to qualify for federal and state funding. On August 25, 2022, the SJCOG Board of Directors approved the final 2022 RTP/SCS. The 2022 RTP/SCS is a long-range vision and investment plan that provides a comprehensive look at future transportation needs in San Joaquin County through the year

2046. Through the 2022 RTP/SCS, the County considers how to integrate transportation and land uses with respect to future population growth and housing needs, as well as economic, environmental, and public health goals.

San Joaquin County Local Agency Formation Commission

The San Joaquin County LAFCo is an independent agency empowered to review, approve, or deny various changes in local governmental boundaries, including: annexations and detachments of territory; incorporations of cities; formations of special districts; and consolidations, mergers, and dissolutions of districts. LAFCo also reviews the reorganization, simplification, and streamlining of governmental structure, as well as service agreements between property owners and service providers. As discussed above, the LAFCo function is outlined in Government Code, Section 56000 et seq., known as the CKH.

The Commission also is charged with developing and updating spheres of influence (SOIs) for each City and special district within the County. SOIs are used to provide guidance for individual proposals involving jurisdictional changes and are intended to encourage efficient provision of community services and prevent duplication of service delivery.

San Joaquin County Local Agency Formation Commission Standards of Evaluation

The San Joaquin County LAFCo's service review process evaluates the agency's ability to provide services. The CKH Act requires LAFCo to make written evaluations on various categories. The following is a brief description of the standards under which annexations and detachments are reviewed:

1. Spheres and Municipal Service Reviews. The annexation or detachment must be consistent with the internal planning horizon of the sphere of influence. The land subject to annexation shall normally lie within the first planning increment (5-10 year) boundary. The annexation must also consider the applicable Municipal Service Review. An annexation shall be approved only if the Municipal Services Review and the Sphere of Influence Plan demonstrates that adequate services can be provided with the timeframe needed by the inhabitants of the annexed area. If detachment occurs, the sphere will be modified.

   LAFCo generally will not allow spheres of influence to be amended concurrently with annexation proposals.

   Proposed annexations of land that lie outside of the first planning horizon (5-10 year) are presumed to be inconsistent with the Sphere Plan. In such a case the agency must first request LAFCo to consider a sphere amendment pursuant to the above policies. If the amendment is approved, the agency may then proceed with the annexation proposal. A change of organization or reorganization will not be approved solely because an area falls within the SOI of any agency.

   As an exception to the presumed inconsistency mentioned above, Master Plan and Specific Plan developments may span several planning horizons of the SOI. Annexation of the entire project area may be desirable in order to comprehensively plan and finance infrastructure and provide for amenity-based improvements. In these cases, no

amendment of the planning horizon is necessary provided project phasing is recognized in the Sphere of Influence Plan.

2. Plan for Services. Every proposal must include a Plan for Services that addresses the items identified in Section 56653 of the Government Code. The Plan for Services must be consistent with the Municipal Service Review of the Agency.
   Proponents must demonstrate that the city or special district is capable of meeting the need for services.
3. Contiguity. Territory proposed to be annexed to a city must be contiguous to the annexing city or district unless specifically allowed by statute. Territory is not contiguous if the only connection is a strip of land more than 300 feet long and less than 200 wide, that width to be exclusive of highways. The boundaries of a proposed annexation or reorganization must not create or result in areas that are difficult to serve.
4. Development within Jurisdiction. Development of existing vacant or non-prime agricultural lands for urban uses within the existing jurisdiction or within the SOI should be encouraged before any proposal is approved which would allow for or lead to the development of existing open space lands for non-open space uses which are outside of the existing jurisdiction of the local agency or outside of the existing SOI of the local agency.
5. Progressive Urban Pattern. Annexations to agencies providing urban services shall be progressive steps toward filling in the territory designated by the affected agency's adopted SOI. Proposed growth shall be from inner toward outer areas.
6. Piecemeal Annexation Prohibited. LAFCo requires annexations and detachments to be consistent with the schedule for annexation that is contained in the agency's Sphere of Influence Plan. LAFCo will modify small piece-meal or irregular annexations, to include additional territory in order to promote orderly annexation and logical boundaries, while maintaining a viable proposal. In such cases, detailed development plans may not be required for those additional areas but compliance with CEQA is required.
7. Annexations to Eliminate Islands. Proposals to annex islands or to otherwise correct illogical distortion of boundaries will normally be approved unless they would violate another provision of these standards. In order to avoid the creation of an island or to encourage the elimination an existing island, detailed development plans may not be required for the remnant areas.
8. Annexations that Create Islands. An annexation will not be approved if it will result in the creation of an island of unincorporated territory of otherwise cause or further the distortion of existing boundaries. The Commission may nevertheless approve such an annexation where it finds that the application of this policy would be detrimental to the orderly development of the community and that a reasonable effort has been made to include the island in the annexation but that inclusion is not feasible at this time.
9. Substantially Surrounded. For the purpose of applying the provisions of the CKH Act regarding island annexation without protest hearings (Section 56375.5), the subject territory of an annexation proposal shall be deemed "substantially surrounded" if it is within the SOI of the affected city and two-thirds (66-2/3%) of its boundary is surrounded by the affected city.
10. Definite and Certain Boundaries. All boundaries shall be definite and certain and conform to lines of assessment or ownership. The Commission's approval of boundary change proposals containing split parcels will typically be subject to a condition requiring the recordation of a parcel map, lot line adjustment or other instrument to avoid creating remnants of legal lots.

11. Service Requirements. An annexation shall not be approved merely to facilitate the delivery of one or a few services to the determent of the delivery of a larger number of services or service more basic to public health and welfare.
12. Adverse Impact of Annexation on Other Agencies. LAFCo will consider any significant adverse effects upon other service recipients or other agencies serving the area and may condition any approval to mitigate such impacts. Significant adverse effects shall include the effect of proposals that negatively impact special districts' budgets or services or require the continuation of services without the provision of adequate funding. LAFCo will not approve detachments from special districts or annexations that fail to provide adequate mitigation of the adverse impact on the district. LAFCo may determine an appropriate temporary mitigation, if any, and impose that temporary mitigation to the extent it is within its powers. If the needed mitigation is not within LAFCo's authority and approval would, in the opinion of the Commission, seriously impair the District's operation, the Commission may choose to deny the application.

San Joaquin County General Plan

The applicable County General Plan policies and standards adopted for the purpose of avoiding or mitigating an environmental effect are presented below in Table 4.9-1.

San Joaquin County Code of Ordinances

The County of San Joaquin Code of Ordinances provides various development regulations, which are discussed in the applicable chapters of this EIR. For example, Chapter 9-701, Agricultural Mitigation, of the County Code of Ordinances is discussed within Chapter 4.2, Agricultural Resources, of this EIR, and the applicable sections of Chapter 9-407, Performance Standards, are discussed in Chapter 4.10, Noise. Please refer to the Regulatory Context sections of Chapters 4.1 through 4.14 of this EIR.

4.9.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to land use and planning. In addition, a discussion of the potential impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would result in any of the following:

- Physically divide an established community; or
- 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.

Method of Analysis

This chapter analyzes the compatibility of the proposed project with surrounding land uses and compliance of the proposed project with adopted plans and policies. Physical environmental impacts resulting from development of the proposed project are discussed in the environmental resource sections of the various technical chapters within this EIR. The following discussion complies with Section 15125(d) of the CEQA Guidelines, which requires EIRs to discuss

inconsistencies with general plans and regional plans as part of the environmental setting. The ultimate determination of consistency will be made by the San Joaquin County Board of Supervisors.

Methods Related to Evaluating Potential Division of an Established Community

This EIR evaluates whether the proposed project has the potential to physically divide an established community. The evaluation considers the existing type and intensity of uses in the project vicinity and those proposed for the project site. The analysis assumes the construction and implementation of the proposed project within the existing environment to determine if the project would divide an established community surrounding the project site.

Consistency with the Applicable Land Use Regulations

The proposed project is examined for consistency with the San Joaquin County General Plan and Code of Ordinances based on the relevant policies adopted for the purpose of avoiding or mitigating an environmental effect. As previously discussed, the applicable County General Plan policies and Code of Ordinances sections related to the physical environment are presented below in Table 4.9-1.

Project-Specific Impacts and Mitigation Measures

The following discussion of land use and planning impacts is based on development of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.9-1 Cause a significant environmental impact due to physically dividing an established community. Based on the analysis below, the impact is *less than significant*.

A project risks dividing an established community if the project would introduce infrastructure or alter land uses so as to change the land use conditions in the surrounding community, or isolate an existing land use. The project site is currently comprised of active agricultural land, primarily almond and cherry orchards, and an agricultural machinery manufacturing facility (A.B. FAB, Inc.). The project site is generally located in an existing agricultural area with agricultural uses located to the north, to the south between the California Aqueduct and I-580, and to the east of Bird Road. Surrounding existing land uses in the project area also include several established surface mining operations to the northwest, the Crown Nut almond processing plant to the north, and existing single-family homes along South Chrisman Road and South MacArthur Drive. The Tracy Municipal Airport is located approximately one mile northwest of the project site.

Given that both the Initial Phase and full project buildout would result in the development of similar land uses on contiguous parcels, the following discussion applies to the potential for both project components to physically divide an established community. In addition, the analysis includes a programmatic evaluation of the off-site roadway improvements triggered by the proposed project.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

Development of the proposed project would result in the conversion of agricultural land to implement the Pacific Gateway Specific Plan, which would include limited industrial, general commercial, and industrial park uses, as well as a university, a Veterans of Foreign Wars (VFW) post, and various public uses including parks, a new fire station, and a new wastewater treatment facility (WWTP).

The nearest Rural Community to the project site is Chrisman, located southwest of I-580. The project site is located entirely north of the Rural Community and, thus, would not divide that community. The nearest urban community is the City of Tracy. As previously discussed, the project site is located approximately 0.83-mile from the City's southernmost boundary and, thus, would not divide that community. Furthermore, the proposed project would not cut off any existing or proposed transportation route that provides connectivity in the area, including South Chrisman Road, a designated STAA Truck Route. Finally, although the proposed project would include modifications to existing roadways, the proposed improvements would not change the land use conditions in the surrounding communities or isolate an existing land use.

Based on the above, the proposed project would not physically divide an established community, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.9-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the impact is *less than significant*.

The following discussion includes an analysis of potential impacts related to conflicts with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect associated with development of the proposed project. Because the off-site improvements triggered by the full buildout of the Specific Plan would not require land use changes but would preserve the function of the study areas as roadways, the off-site improvements study areas are not discussed further. The Initial Phase and full project buildout would be developed with similar uses within the same overall site boundaries, and request similar approvals from San Joaquin County; therefore, the below discussion applies to both project components.

Initial Phase, Specific Plan Buildout

The General Plan Guidelines published by the State Office of Land Use and Climate Innovation (LCI) define consistency as follows, "An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." Therefore, the standard for analysis used in this EIR is in general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context).

The determination that the project is consistent or inconsistent with the San Joaquin County General Plan policies or other plans and policies is ultimately the decision of the County's Board of Supervisors. Furthermore, although CEQA analysis may identify some areas of general consistency with County policies, the County has the ability to impose additional requirements or conditions of approval on a project, at the time of its approval, to bring a project into more complete conformance with existing policies. A discussion of the project's general agreement with policy language and furtherance of policy intent is provided in further detail below.

General Plan Amendments

The proposed project would require amendments to the County's existing General Plan to support the proposed land uses. The proposed project would include a General Plan Map Amendment to change the land use designations of the site's 1,556.61 acres of A/G, 19 acres of OS/RC, and 1.09 acres of C/RS to land use designations consistent with the proposed zoning. Specifically, the project site would include approximately 1,387.35 acres of Limited Industrial (I/L), 18.54 acres of General Commercial (C/G), 86.13 acres of Public Facilities (P/F), 28.91 acres of Parks and Recreation (OS/PR), and 40 acres of A/G, with the remaining acreage allocated to roads (see Figure 4.9-3). The C/G designation provides for a variety of retail commercial uses and business services designed to serve those working and learning within the Specific Plan area, with priority given to restaurants, goods and services that support those using the industrial and warehouse facilities, and the university. The I/L designation is intended to provide for limited industrial uses requiring large format buildings, as well as buildings that accommodate manufacturing uses. The P/F designation applies to a variety of land uses that would serve the Specific Plan area or the greater public. The OS/PR designation provides for improved parks and recreation facilities and associated recreation activities. Finally, the A/G designation provides for large-scale agricultural production and associated processing, sales, and support uses.

In addition, the project is requesting General Plan Text Amendments to support the project. Specifically, the requested General Plan text amendments pertain to the Community Development Element of the General Plan, with proposed revisions to (existing) Land Use Policy 2.15 and the proposed addition of a new policy, Policy ED-3.8. The proposed addition to Policy LU-2.15 is shown in double underline, as follows:

Policy LU-2.15 **Agricultural Conversions.** When reviewing proposed General Plan amendments to change a land use diagram or zoning reclassification to change from an agricultural use to non-agricultural use, the County shall consider the following:

- potential for the project to create development pressure on surrounding agricultural lands;
- potential for the premature conversion of prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, and confined animal agriculture;
- potential for impacts on surrounding farming operations and practices;

Figure 4.9-3
General Plan Amendment Exhibit

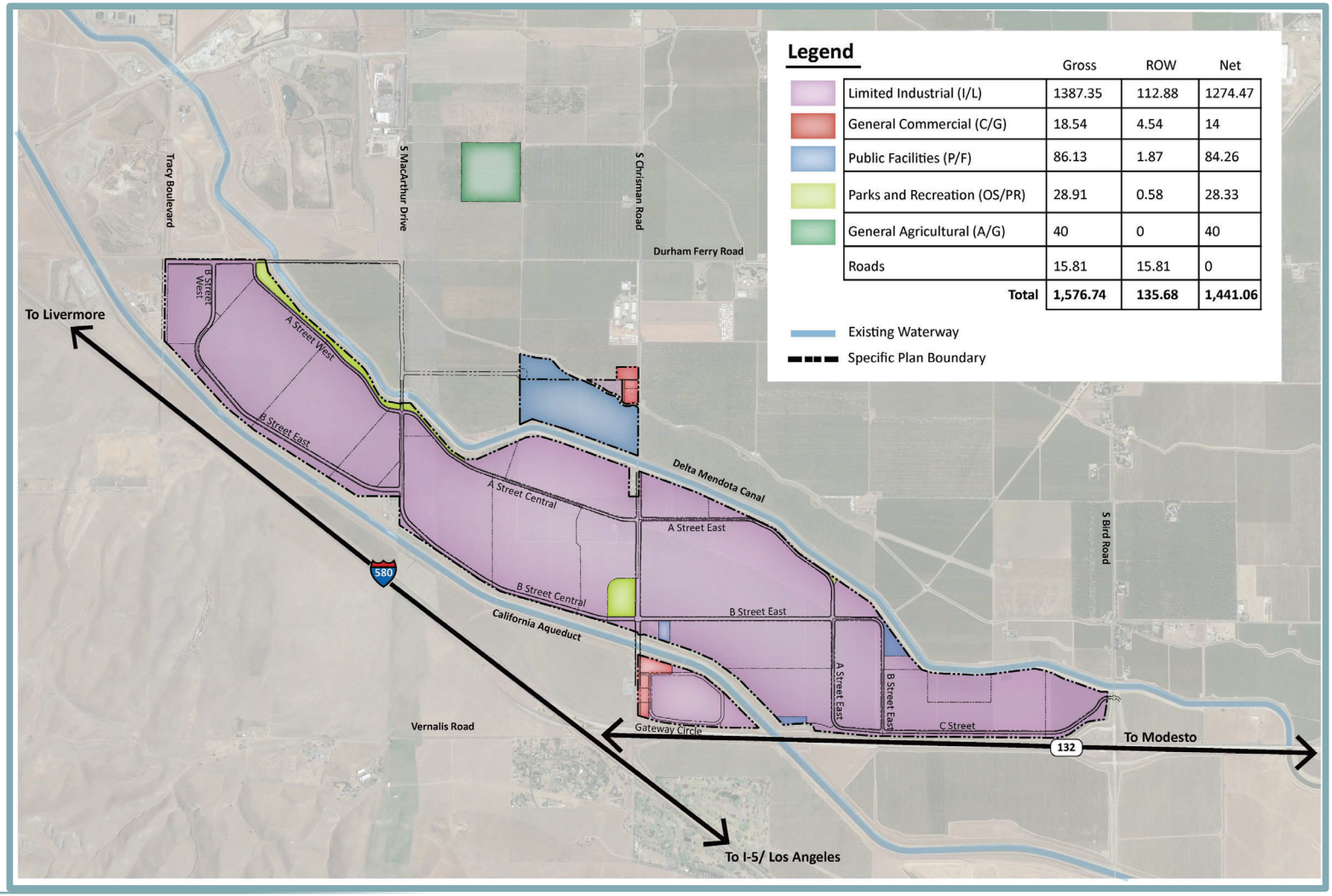


*Figure not OCR compatible.

- potential for economic development opportunities in supply chain corridors in south San Joaquin County in the areas proximate to Interstate 580, Interstate 5, and State Route 132 that are served by an existing STAA Route;
- provision of infrastructure and services to the new use and the potential impact of
- service demands or on the surrounding area; and
- protecting habitat restoration opportunities.

In addition, the new Policy ED-3.8 would read as follows:

Policy ED-3.8 **Supply Chain Corridor.** The County may consider supply chain corridors when reviewing proposed non-agricultural industrial development applications in south San Joaquin County in the areas proximate to Interstate 580, Interstate 5, and State Route 132 that are served by an existing STAA Route, which support the efficient movement of goods to and from the Port of Oakland, Port of Stockton, the Stockton Airport, and throughout the Sacramento-San Joaquin Valley.

Rezone

Corresponding with the site's current land use designation, the project site is zoned by San Joaquin County as AG-40 and C-RS. As part of the proposed project, the site would be rezoned to various zoning designations to ensure conformance with the amended General Plan land use designations as described above (see Figure 4.9-4).

Policy Discussion

As noted above, the ultimate determination of project consistency with particular General Plan policies lies with the County's Board of Supervisors.

Case law interpreting the Planning and Zoning Law (Gov. Code, Section 65000 *et seq.)* makes it clear that: (i) the ultimate meaning of General Plan policies is to be determined by the elected legislative body or a lower tier decision-making body such as a planning commission, as opposed to EIR consultants, applicants, or members of the public; and (ii) the decision-making body's interpretations of such policies will prevail in court (if challenged) if the interpretations are "reasonable," even though other reasonable interpretations are also possible (see *No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal.App.3d 223, 245-246, 249). Courts also have recognized that, because general plans often contain numerous policies adopted to address differing or competing legislative goals, a development project may be "consistent" with a general plan, taken as a whole, even though the project appears to be inconsistent or is arguably inconsistent with some specific policies within a given general plan (*Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 719). Furthermore, courts strive to "reconcile" or harmonize seemingly disparate general plan policies to the extent reasonably possible (*No Oil*, *supra*, 196 Cal.App.3d at p. 244).

Figure 4.9-4
Land Use/Zoning Plan

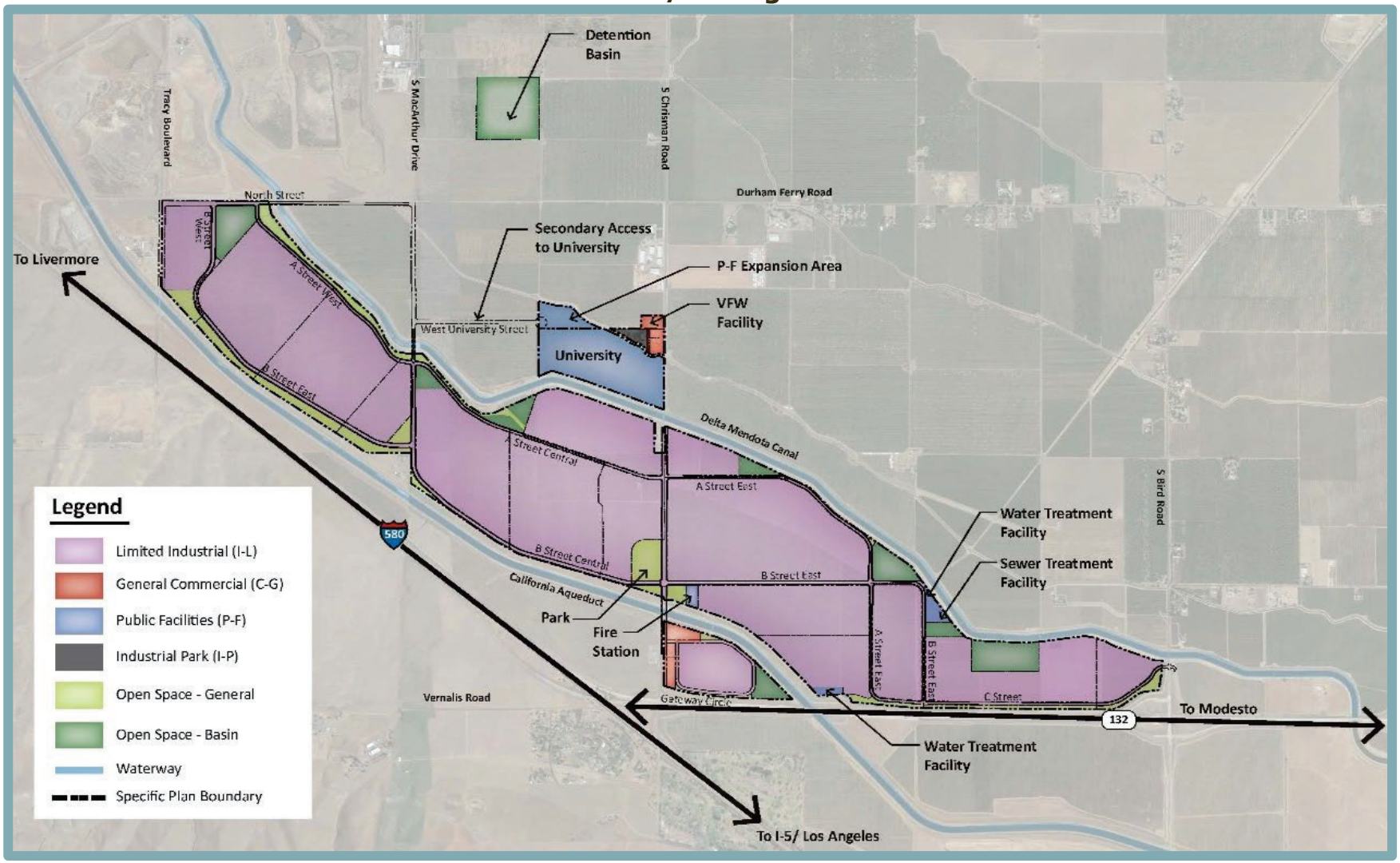


*Figure not OCR compatible.

Some policies, in fact, may be irreconcilable. As the courts have said, "it is beyond cavil that no project could completely satisfy every policy stated in the [General Plan], and that state law does not impose such a requirement" (*Sequoyah, supra*, 23 Cal.App.4th 704, 719, citing *Greenebaum v. City of Los Angeles* (1984) 153 Cal.App.3d 391, 406-407 and 59 Ops.Cal.Atty.Gen. 129, 131 (1976)). "A general plan must try to accommodate a wide range of competing interests—including those of developers, neighboring homeowners, prospective homebuyers, environmentalists, current and prospective business owners, jobseekers, taxpayers, and providers and recipients of all types of city-provided services—and to present a clear and comprehensive set of principles to guide development decisions. Once a general plan is in place, it is the province of elected [city] officials to examine the specifics of a proposed project to determine whether it would be 'in harmony' with the policies stated in the plan" (*Sequoyah*, *supra*, 23 Cal.App.4th at p. 719, citing *Greenebaum*, *supra*, 153 Cal.App.3d at p. 406). Nevertheless, proposed projects are required to be consistent with all General Plan policies that are "fundamental, mandatory, and clear" (*Families Unafraid to Uphold Rural El Dorado County v. El Dorado County Bd. of Supervisors* (1998) 62 Cal.App.4th 1332, 1341-1342; *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 782 ["[a] project is inconsistent if it conflicts with a general plan policy that is fundamental, mandatory, and clear"]).

Should the Board of Supervisors approve the proposed project, the Board may rely on the analysis in Table 4.9-1 as support for a conclusion that the development, which includes General Plan amendments, is substantially consistent with the General Plan, as amended. Certification of the Final EIR will be indicative of agreement with the conclusions in the table.

Approval of the aforementioned entitlements for the proposed project are discretionary actions subject to approval by the San Joaquin County Board of Supervisors. Should the Board of Supervisors approve the requested entitlements, the proposed development would be rendered consistent with the project site's new land use and zoning designations and, thus, would be substantially consistent with the County's General Plan and zoning standards.

From a policy perspective, Table 4.9-1 at the end of this chapter sets forth the reasoning for determination that the proposed project would be substantially consistent with the applicable policies in the San Joaquin County General Plan adopted for the purpose of avoiding or mitigating an environmental effect.

San Joaquin County LAFCo Consistency Discussion

The proposed project could include the annexation of the project site into County Service Area 16 (CSA-16), if it is feasible to administratively consolidate with that existing system. CSA-16 is a Special District solely administered by the San Joaquin County Department of Public Works. CSA-16 provides domestic water service to a residential and golf course community immediately west of I-580; thus, consolidation with CSA-16 would require annexation into the CSA-16 service area to include the project, or enter into an out-of-District service agreement, which are subject to San Joaquin LAFCo approval.

CSA-16 is the closest existing public water system to the project site. Consistent with State policy that discourages the formation of new small public water systems when service may be obtained through an existing public water system, the proposed project considers the potential need to annex to the service area of CSA-16. The proposed project's water system would be constructed by the developer and could be added to the CSA-16 public water system permit upon approval by the San Joaquin County Department of Environmental Health.

Annexing the proposed project to CSA-16 could permit delivery of surface water to existing uses within CSA-16 currently served by groundwater, resulting in higher quality water for existing CSA-16 customers and a reduction in existing groundwater pumping for CSA-16. Connecting the proposed project to CSA-16 would require a new water pipeline that could be installed wholly within existing right-of-way, which would minimize environmental impacts.

Conclusion

Based on the above, the proposed project would not cause a significant environmental impact due to conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (including the policies discussed in Table 4.9-1), and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For more details regarding the cumulative setting, refer to Chapter 6, Statutorily Required Sections, of this EIR.

4.9-3 Cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the cumulative impact is *less than significant*.

A cumulative analysis of land use is not included because land use plans or policies and zoning generally do not combine to result in cumulative impacts. The determination of significance for impacts is whether a development project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Conflicts are site-specific, and thus, are only addressed on a project-by-project

basis. As shown in Table 4.9-1 below, the proposed project would be substantially consistent with relevant policies in the County's General Plan.

Therefore, the proposed project would not cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and the cumulative impact would be ***less than significant***.

Mitigation Measure(s)

None required.

Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
Community Development		
Policy LU-2.1	**Compatible and Complimentary Development**. The County shall ensure that new development is compatible with adjacent uses and complements the surrounding natural or agricultural setting.	The project area includes very limited adjacent uses containing sensitive receptors. Furthermore, the site is buffered from surrounding agricultural uses by the Delta-Mendota Canal to the north and by the California Aqueduct and SR 132 along much of southern boundary. In addition, as discussed in Chapter 3, Project Description, of this EIR, the proposed project consists of implementation of the Pacific Gateway Specific Plan (Specific Plan No. PA-2400365). The design guidelines established in Chapter 4 of the Pacific Gateway Specific Plan apply to site planning, architecture, and landscaping for each of the zoning designations proposed within the project with which all future development associated with the proposed project would be required to comply. The guidelines are intended to be used in conjunction with the Development Standards established in Chapter 3 of the Specific Plan, which provide standards for building and landscape setbacks, building height, intensity of development, and permitted and conditionally permitted uses. Finally, Chapter 8 outlines the Development Review process that the County would complete, as the guidelines would be used to evaluate development applications.
Policy LU-2.8	**Environmental Assessments and Mitigation**. The County shall evaluate proposed new development projects for their potential environmental impacts and shall require all feasible mitigation of identified significant impacts. The County shall require, as appropriate, that projects for which an EIR is prepared the consideration of infill locations for new development in the alternatives evaluation.	As discussed in Chapter 1, Introduction, this EIR has been prepared in accordance with CEQA, as amended, as well as with the Guidelines for Implementation of the California Environmental Quality Act, CCR Title 14, Section 15000-15387. Chapters 4.1 through 4.14 analyze the changes in the environment that would result from development of the proposed project, including planning, construction, and operation. Feasible mitigation measures are identified throughout and summarized in Table 2-1 in Chapter 2, Executive Summary, of this EIR. With respect to alternatives, which are discussed in Chapter 7, Alternatives Analysis, of this EIR, infill locations of sufficient size do not exist in the vicinity to accommodate the proposed project.
Policy LU-2.9	**Preliminary Soils Report**. The County shall require a preliminary soils report for new development projects in areas with shallow or unstable soils or slopes in excess of 15 percent. If the preliminary soil report indicates soil conditions could be unstable, the County shall require a detailed geological report by a	The analysis presented in Chapter 4.6, Geology and Soils, of this EIR, is primarily drawn from a Geotechnical Feasibility Report (GFR) prepared by ENGEO, Inc. (see Appendix I of this EIR). The GFR included an evaluation of the stability of soils within the project site and the off-site improvements study areas, and identified potential hazards related to subsidence associated with non-engineered and undocumented fill. As such, Mitigation Measure 4.6-3(a)



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
	registered geologist and registered civil engineer or a registered engineering geologist that demonstrates the suitability of any proposed or additional development.	requires a final geotechnical engineering report of the project site to make design-level recommendations for development. In addition, Mitigation Measure 4.6-3(b) requires a site-specific, design-level geotechnical report to be prepared prior to any development within the off-site improvements study area.
Policy LU-2.11	**Suitability for Development with Onsite Sewage Disposal System**. The County shall ensure that new development that uses onsite sewage disposal meets the requirements of the State Water Resources Control Board (SWRCB) Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems (OWTS Policy) and local health and water quality standards.	As discussed in Chapter 3, Project Description, of this EIR, the proposed wastewater system for the project would be self-contained and not require service from an outside agency. Wastewater produced by the proposed project would be treated and disposed of on-site at a WWTP located in the Pacific Gateway East development area. An operating permit issued by the Central Valley Regional Water Quality Control Board (RWQCB) would establish operating, performance, and reporting requirements for on-site treatment and disposal facilities. Issuance of the operating permit would be contingent upon the proposed wastewater system being consistent with all applicable requirements, including those implemented by the SWRCB.
Policy LU-2.12	**Soil Suitability and Nitrate Loading Studies**. The County shall require soil suitability and nitrate loading studies when needed to demonstrate that site conditions can safely accept wastewater in conformance with the State Water Resources Control Board Onsite Wastewater Treatment Systems Policy and local health and water quality standards.	The WWTP would treat wastewater to tertiary standards, allowing treated wastewater to be used throughout the project site for landscape irrigation. Generally, the WWTP would use membrane bioreactor (MBR) technology in above-ground steel tank systems to produce treated wastewater suitable for irrigation and waste activated sludge suitable for landfill disposal. As such, on-site wastewater treatment would not impact on-site soils.
Policy LU-2.14	**General Plan Land Use Amendments**. When reviewing proposed General Plan amendments to change or modify land use designations or the land use diagram or a zoning reclassification, the County shall consider the following: • consistency of the proposal with the Vision and Guiding Principles and the goals and policies of the General Plan; • new physical, social, or economic factors that were not present when the time of General Plan was adopted;	The proposed project would include a General Plan Map Amendment to redesignate the site from 1,556.61 acres of A/G, 19 acres of OS/RC, and 1.09 acres of C/RS to 18.54 acres of C/G; 1,387.35 acres of Limited Industrial (I/L); 86.13 acres of P/F; 28.91 acres of OS/PR; and 40 acres of A/G. The physical environmental impacts of the proposed project, including consistency with applicable standards and plans, as well as potential economic impacts, are addressed throughout the technical chapters of this EIR, as applicable. All potential impacts of the proposed project are either less than significant or mitigated to the maximum extent feasible. Where mitigation measures are not feasible or would not fully mitigate an impact, such impacts are appropriately identified within this EIR as significant and unavoidable. As discussed in Chapter 7, Alternatives Analysis, reasonable alternative sites in the vicinity that are already planned for the proposed uses do not exist.



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
	• reasonable alternative sites in the vicinity that are already planned for the use and can accommodate the proposal; • potential for an undesirable, growth-inducing precedent or premature conversion of agricultural land; • the availability of infrastructure and services; and • the effect on the fiscal health of the County.	Potential for growth-inducement is addressed in Chapter 6, Statutorily Required Sections.
Policy LU-3.1	**Contextual and Compatible Design**. The County shall ensure that new development respects San Joaquin County's heritage by requiring that new development respond to its context, be compatible with the traditions and character of each community, and develop in an orderly fashion which is compatible with the scale of surrounding structures.	As previously discussed, the nearest community to the project site identified in the General Plan is the Rural Community of Chrisman, which is located immediately south of the project site. The project is located on the other side of I-580 from the Rural Community of Chrisman and would not affect its character. Further, community character is not a CEQA issue. There are also a limited number of structures surrounding the project site. These are limited to the Crown Nut Co. manufacturing facility north of the project site, 76 gas station west of the project site, and single-family residences to the north and northwest.
Policy LU-3.7	**Development Along Freeways and Highways**. The County shall ensure new development located along freeways and highways protects the public from the adverse effects of vehicle-generated air emissions, noise, and vibration, by using such techniques as: • Requiring extensive landscaping and trees along the freeway fronting elevation; and • Include design elements that reduce noise and provide for proper filtering, ventilation, and exhaust of vehicle air emissions.	See Policy NRC-7.2 below.
Policy LU-3.10	**Visual Access**. The County shall encourage new development to maintain views of hillsides, creeks, and other distinctive natural areas by regulating building orientation, height, and bulk.	Based on the surrounding environment of the project area, the only applicable item within the policy is hillside views (i.e., creeks and other distinctive natural areas are not located in the project area). Potential visual impacts of the project are addressed throughout Chapter 4.1, Aesthetics, of this EIR, and the Pacific Gateway Specific Plan includes development standards related to height and



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
		bulk. In addition, any blocking of hillside views by the project is not necessarily in direct conflict with Policy LU-3.10 due to the policy's generalized encouragement of such priorities, rather than mandatory requirements of such regulations. The office areas of most industrial buildings orient to the mountains southwest of I-580. University buildings also consider this same viewshed.
Policy LU-7.1	**Protect Agricultural Land**. The County shall protect agricultural lands needed for the continuation of viable commercial agricultural production and other agricultural enterprises.	As discussed in Chapter 4.2, Agricultural Resources, of this EIR, while the project would convert approximately 1,454 acres of Prime Farmland, Mitigation Measure 4.2-1 would reduce the impact by requiring payment for a farmland conservation easement and payment of administrative fees, or payment of an in-lieu fee. As discussed further within Chapter 4.2, Agricultural Resources, of this EIR, because mitigation measures would not fully mitigate the significant impact, the impact is considered significant and unavoidable. In addition, while the proposed project would convert approximately 1,576 acres of agricultural land, sufficient agricultural lands remain within San Joaquin County to ensure continuation of viable commercial agricultural production.
Policy LU-7.2	**Agricultural Support Uses**. The County shall require new agricultural support development and non-farm activities to be compatible with surrounding agricultural operations. New developments shall be required to demonstrate that they are locating in an agricultural area because of unique site area requirements, operational characteristics, resource orientation, or because it is providing a service to the surrounding agricultural area. The operational characteristics of the use may not have a detrimental impact on the operation or use of surrounding agricultural properties. Developments must be sited to avoid any disruption to the surrounding agricultural operations.	As discussed under Impact 4.2-2 in Chapter 4.2, Agricultural Resources, of this EIR, the proposed project would not involve changes in the existing environment which could result in the conversion of off-site farmland to non-agricultural use. The proposed project would be required to comply with the County's Right to Farm Ordinance as defined in Title 6, Division 9, of the County's Code of Ordinances, which would ensure that such agricultural uses would be protected from conflicts with non-agricultural land uses within the project vicinity. While operations of surrounding agricultural uses could include the use of pesticides, some of which may be harmful to sensitive receptors, due to the industrial and commercial nature of the majority of the proposed project, such on-site uses would not be considered incompatible with such operations. In addition, consistent with General Plan Policy LU-7.7, the majority of the project site is buffered from surrounding agricultural operations by the Delta-Mendota Canal and the California Aqueduct. While the proposed university campus would not be a compatible use with the surrounding existing agricultural operations, the campus would be adequately buffered from the adjacent agricultural uses by a canal to the north and the Delta-Mendota Canal to the south. Furthermore, as



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
		shown in Figure 3-10, Initial Phase University Site Plan, of this EIR, the proposed university campus would be bordered on all sides by a 36.5-foot-wide roadway. Therefore, development of the proposed project would not preclude the use of the surrounding parcels for agricultural purposes and, thus, would not induce conversion of adjacent agricultural lands to non-agricultural uses. Compliance with the foregoing policies and ordinance would further ensure that the proposed project would not involve changes in the existing environment which could result in the conversion of off-site Farmland to non-agricultural use.
Policy LU-7.7	**Agricultural Buffers**. The County shall ensure non-agricultural land uses at the edge of agricultural areas incorporate adequate buffers (e.g., fences and setbacks) to limit conflicts with adjoining agricultural operations.	As discussed under Impact 4.2-2 in Chapter 4.2, Agricultural Resources, of this EIR, the majority of the project site is buffered from surrounding agricultural operations by the Delta-Mendota Canal and the California Aqueduct. While the proposed university campus would not be a compatible use with the surrounding existing agricultural operations, the campus would be adequately buffered from the adjacent agricultural uses by the Banta-Carbona Irrigation District Canal to the north and the Delta-Mendota Canal to the south. Furthermore, as shown in Figure 3-10, Initial Phase University Site Plan, of this EIR, the proposed university campus would be bordered on all sides by a 36.5-foot-wide roadway.
Policy LU-7.10	**Agricultural Mitigation Program**. The County shall continue to require agricultural mitigation for projects that convert agricultural lands to urban uses.	As discussed under Impact 4.2-1 in Chapter 4.2, Agricultural Resources, of this EIR, the proposed project would result in the conversion of approximately 1,454 acres of Prime Farmland and 65 acres of Farmland of Local Importance to non-agricultural use. The loss and/or conversion of the on-site Prime Farmland would be considered a significant impact under CEQA Guidelines. However, Mitigation Measure 4.2-1 requires compliance with the County's Agricultural Mitigation Ordinance.
Policy LU-7.11	**Agricultural Land Preservation Mechanisms**. The County shall support regulatory, incentive-based, and financial mechanisms for the preservation of agricultural land.	See Policy LU-7.10 above.
Policy LU-8.1	**Open Space Preservation**. The County shall limit, to the extent feasible, the conversion of open space and agricultural lands to urban uses, and place a high priority on preserving open space lands for recreation, habitat protection and enhancement, flood	The proposed project would convert the site from agricultural uses to urban. However, the proposed project would also include 51.7 acres of open space areas and community amenities, as well as recreational and park facilities throughout the project site (see Figure 3-5 within Chapter 3, Project Description, of this EIR). Stormwater management basins would be strategically located to provide flood control and stormwater treatment and infiltration. The parks and



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Policy		Project Consistency
	hazard management, public safety, water resource protection, and overall community benefit.	open spaces would be integrated throughout the project site and would be connected by way of the proposed pedestrian and bicycle networks. Potential impacts to habitat are addressed in Chapter 4.4, Biological Resources, of this EIR; as discussed therein, any indirect impacts to special-status species habitat could be mitigated to a less-than-significant level through participation in the San Joaquin County Multi-Species Habitat Conservation Plan (SJMSCP). Pursuant to section 5.5.3(C) of the SJMSCP, stepping stone refugia for San Joaquin kit foxes would be provided for projects located between the Delta-Mendota Canal and the California Aqueduct, so that kit foxes may traverse between the northern Corral-Lower San Joaquin Wildlife Corridor within the Southwest/Central transition zone to the southern Corral-Lower San Joaquin Wildlife Corridor within the Southwest zone (where the Southwest Zone Preserve area is located). The SJMSCP explains that "stepping stone" refugia should be two to five acres at approximately 0.5-mile intervals west of the Delta-Mendota Canal. In order to implement this requirement, the project would retain native grassland and shrubland habitat along the southern and northeastern edges of the project site adjacent to the California Aqueduct and Delta-Mendota Canal, respectively, that could support San Joaquin kit foxes.
Policy LU-8.2	**Open Space Character**. The County shall require new development in Resource Conservation designated areas to be planned and designed to maintain the scenic open space character of the surrounding area, including view corridors from highways. New development should use natural landforms and vegetation in the least visually disruptive manner possible, and use design, construction, and maintenance techniques that minimize the visibility of structures.	Approximately 19 acres located at the furthest eastern point of the project site are currently designated OS/RC. As part of the proposed project, the portion of the site designated as OS/RC would be amended to a Limited Industrial land use designation. Following project approval, the OS/RC land use designation would not apply to the project site and, thus, the proposed project would not be subject to requirements associated with the designation. As shown in Figure 3-5, Conceptual Location of Public Parks, in Chapter 3, Project Description, of this EIR, the proposed project includes approximately 51.7 acres dedicated to open space and parks.
Economic Development		
Policy ED-3.2	**Considerations for New Commercial and Industrial Development**. The County shall consider	The project is situated near major transportation corridors with primary access off of South Chrisman Road, a State-designated STAA route.[2] South Chrisman

[2] STAA Truck Routes allow larger trucks to operate on certain primary routes collectively known as the National Network. STAA trucks are longer than California legal trucks and therefore have a larger turning radius than most local roads can accommodate.

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Policy	Project Consistency
the following factors when reviewing proposed non-agricultural commercial and industrial development applications: • Access. New developments should have ready access to major transportation corridors (i.e., freeways and State highways) to limit additional County-funded roadway development and maintenance. • Water. New developments must have long-term water supplies to meet the ultimate demand of the development and surrounding area and ensure the continued viability of existing and future development. • Infrastructure. New developments must contribute their fair share of adequate infrastructure and services that are sufficient to meet the ultimate demand of the development and surrounding area and limit additional County-funded roadway development and maintenance. • Efficiency. New development uses should make efficient use of land within the County and limit the conversion of agricultural lands to maintain the economic viability of farms and recreational resources.	Road provides direct connectivity west to the Bay Area by way of I-580, east to I-5 by way of SR 132, and south to I-5 by way of I-580, providing north and southbound connectivity with the California highway transportation system. Potential impacts related to water supply are discussed under Impact 4.11-6 of this EIR. As discussed therein, the demand of the proposed project can be primarily met with surface water and recycled water, with groundwater as a supplemental supply. In addition, due to the proposed project's low estimated water demand relative to existing groundwater pumping, using groundwater as a supplemental supply would not negatively impact the Delta-Mendota Subbasin. Overall, sufficient water supplies would be available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. Regarding infrastructure, the project includes a stand-alone on-site WWTP. As such, additional demands would not be placed on public sewer systems. For water supply, the project intends to rely primarily on surface water provided by Byron-Bethany Irrigation District (BBID) and would pay all connection and service fees related to such services. Groundwater would supplement surface water, as needed. For roadways, this EIR requires the project applicant to conduct a transportation phasing analysis in conjunction with each future subdivision application to determine which improvements to State facilities would be triggered to address queueing impacts. The successful completion of roadway improvements along the State system is ultimately subject to the approval of the California Department of Transportation (Caltrans). Other roadway improvements would be triggered by the project in order to address level of service (LOS) conflicts created by the proposed project. This analysis is contained in the non-CEQA Local Transportation Analysis (LTA) prepared by Fehr & Peers. LOS is no longer a CEQA consideration and, thus, roadway improvements to address LOS conflicts will be addressed by the County during its General Plan consistency review of the proposed project and formulation of conditions of approval. Furthermore, many of the recommended roadway improvements triggered by full buildout of the Specific Plan are located in jurisdictions other than San Joaquin County (e.g., Caltrans, City of Tracy). The



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Policy		Project Consistency
		County, as the CEQA lead agency for the proposed project, cannot compel another agency to implement roadway improvements. Regarding efficiency, the size of the proposed project and the need to be located in close proximity to major transportation corridors (see the first bullet of this policy) suggest that the project site is an efficient location for the proposed uses. Furthermore, while the proposed project would result in the conversation of Prime Farmland, it does not necessarily follow that farms and recreational resources within the County would be rendered economically inviable.
Public Facilities and Services		
Policy TM-1.3	**Multimodal System**. The County shall encourage, where appropriate, development of an integrated, multi-modal transportation system that offers attractive choices among modes including pedestrian ways, public transportation, roadways, bikeways, rail, waterways, and aviation, and reduces air pollution and greenhouse gas emissions.	With implementation of Mitigation Measure 4.12-2, the proposed project would be required to construct a Class I off-street multi-use path on the west side of MacArthur Drive or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance from the north edge of the project site to Linne Road, which would provide improved bicycle connectivity between the project site and existing uses to the north. In addition, with implementation of Mitigation Measure 4.12-3, the proposed project would be required to expand San Joaquin Regional Transit District (RTD) fixed-route bus service to the project site and operate a private employee shuttle system during peak periods that circulates within the site and off-site to the Altamont Commuter Express (ACE) Station located on Tracy Boulevard at Linne Road. Successfully implementation of these transit measures, however, is subject to the approval of the transit agencies, which cannot be compelled by San Joaquin County.
TM-1.6	**Automobile Dependency Alternatives**. The County shall support public and private efforts where appropriate to provide alternative choices to single occupant driving.	See Policy TM-1.3 above.
TM-1.10	**Eliminate Gaps**. The County shall strive to eliminate "gaps" in roadways, bikeways, and pedestrian networks by planning and seeking funding to construct grade-separated crossings of rail lines, canals, creeks, and other barriers to improve connectivity and encourage construction of new	See Policy TM-1.3 above.



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Policy		Project Consistency
	bikeways and pedestrianways in and between existing communities where appropriate.	
Policy TM-1.11	**Transportation System Improvements**. The County shall require new development to provide transportation system improvements necessary to serve the development.	See Policy ED 3.2 and TM-1.3 above. In addition, the proposed project would be subject to Mitigation Measures 4.12-5(a) through 4.12-5(f), which would require numerous transportation system improvements to serve the proposed project and reduce roadway hazards. However, some of the measures would require approvals from multiple agencies and public utilities. Given that the required measures are not guaranteed to be approved by Caltrans, the City of Tracy, or other outside agencies, and are outside of the County's jurisdiction, the County cannot legally impose the mitigation measures.
TM-2.5	**Reconstructed Rural Complete Streets**. The County may require, based on community support and feasibility and the County's Bicycle Master Plan, reconstructed streets in rural areas to accommodate bicyclists and agricultural machinery, except where facility improvements are determined to be cost prohibitive.	See Policy TM-1.3 above.
Policy TM-2.7	**New Development**. The County shall require all new developments to provide their fair share of roadway facilities for alternative transportation modes to reduce automobile demand.	See Policy TM-1.11 above. In addition, the proposed project would be subject to Mitigation Measure 4.12-4(a), which requires implementation of an Employee Trip Reduction Plan (eTRIP), and Mitigation Measure 4.12-4(b), which requires implementation of transportation demand management (TDM) strategies, which would reduce automobile demand.
Policy TM-3.3	**Onsite Circulation Systems**. The County shall require new development to design on-site circulation systems and parking facilities to minimize backup on County roadways.	Pursuant to Mitigation Measure 4.12-5(b), all left and right turn lanes constructed at project intersections along South Chrisman Road and within the various project development areas shall provide adequate vehicle storage to accommodate the 95th percentile vehicle queues (considering cumulative travel demands and the effects of trucks on storage requirements). The mitigation measure also requires that intersection designs shall consider curb return radii requirements, width of receiving travel lanes, placement of traffic control equipment, and other design parameters to ensure that trucks can perform left- and right-turns without encroaching onto oncoming travel lanes, running over curbs, or colliding with signal equipment or signs.



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Policy		Project Consistency
Policy TM-3.7	**Frontage Standards**. For developments that are located adjacent to a County roadway, the County shall require access onto County roads.	See Policy TM-3.3 above.
Policy TM-4.9	**Parking Facility Design**. The County shall ensure that new automobile parking facilities are designed to facilitate safe and convenient pedestrian access, including clearly defined corridors and walkways connecting parking areas with buildings.	See Policy ED 3.2 and TM-1.3 above.
Policy TM-4.7	**Bicycle Connectivity**. The County shall support development of the bicycle system to connect residential areas with commercial areas, employment centers, educational facilities, local and regional recreational facilities, and other major attractions.	See Policy TM-1.3 above.
Policy TM-8.5	**Compatible Land Uses**. The County shall require that only compatible land uses be permitted near airports, in accordance with the Airport Land Use Plan.	As discussed under Impact 4.7-5 in Chapter 4.7, Hazards and Hazardous Materials, the proposed uses are allowable within the Airport Influence Area (AIA) associated with the Tracy Municipal Airport. While the future tenants of the proposed industrial buildings and commercial uses, as well as the building elevations, are not currently known, all future uses and development within the AIA would be required to comply with the criteria for conditional uses, as shown in Table 3A of the ALUCP, to ensure safety compatibility with the Tracy Municipal Airport. In addition, Basins 1 and 2 would be sized to allow stormwater to percolate into the soils within two days of a storm event due to their proximity to the Tracy Municipal Airport, pursuant to Federal Aviation Administration (FAA) regulations. Lastly, the project site is located outside of the 55 A-weighted decibels (dBA) Community Noise Equivalent Level (CNEL) airport noise contour.
Policy IS-1.2	**Infrastructure Standards**. The County shall require new developments that include improvements to existing infrastructure or new infrastructure to meet the requirements and standards of the County or other agencies providing services.	As discussed throughout Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, the proposed utilities infrastructure improvements would be designed consistent with all applicable standards and regulations.
Policy IS-1.7	**Infrastructure Improvement Limitations**. The County shall limit infrastructure improvements in areas that are not planned for future development.	As discussed throughout Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, the proposed utilities infrastructure improvements associated with buildout of the proposed Specific Plan would be sized to serve



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Policy		Project Consistency
		on-site development only, and would not serve off-site areas that are not planned for future development.
Policy IS-1.8	**Infrastructure Financing, Design, and Construction**. The County shall require new development to fund the initial financing, design, and construction of required infrastructure facilities. All financing (including operation and maintenance) and improvement plans shall be subject to County review and approval.	As discussed in Chapter 3, Project Description, of this EIR, long-term operation and maintenance of project infrastructure will be supported by a site-specific Community Services District (CSD) and related financing mechanisms formed in accordance with a project-wide public facilities financing plan developed in compliance with State planning laws and regulations.
Policy IS-1.13	**Infrastructure Financing**. The County shall approve new development only when financial mechanisms are in place to ensure that adopted County service standards are met and that long-term infrastructure and facility maintenance can be provided.	See Policy IS-1.8 above.
Policy IS-1.16	**Master Planned Facilities**. The County shall require new development including single-parcel development, to provide necessary on-site and off-site infrastructure improvements. Proposed new developments that cannot be served by an existing service provider shall be required to fund preparation of a master plan or specific plan for the parcel and adjacent areas that includes: • a large enough area and mix of uses to support self-sustaining infrastructure service systems; • detailed infrastructure and service plan, financing, and maintenance plan; and • approval by the Director of Public Works.	As discussed in Chapter 3, Project Description, of this EIR, the proposed Specific Plan includes the development of on-site utilities improvements that would be sized to adequately serve buildout of the project site. The Specific Plan includes specific guidance related to the proposed utilities infrastructure.
Policy IS-2.6	**New Development Requirements**. The County shall require new development to provide water, sewer, storm water, and/or street lighting service(s), using one of the following methods, subject to County review and approval:	See Policy IS-1.8 above.



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Policy		Project Consistency
	• Obtain a will-serve letter from an existing Special District, Community Service District, Mello-Roos Community Facilities District or other non-city public utility agency and obtain LAFCo approval for annexation or out-of-agency service; • Obtain a will-serve letter from a city and obtain LAFCo approval for out-of-agency service; • Fund the formation of a new Community Service District, Mello-Roos Community Facilities District or other non-County public utility agency that would perform ongoing maintenance.; or • When approved by the Director of Public Works, fund the formation of a new County Service Area (CSA) that would provide ongoing maintenance services.	
Policy IS-4.3	**Water Supply Availability**. The County shall consider the availability of a long-term, reliable potable water supply as a primary factor in the planning of areas for new growth and development.	As discussed under Impact 4.11-6 in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, sufficient water supplies would be available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years.
Policy IS-4.8	**Water Conservation Measures**. The County shall require existing and new development to incorporate all feasible water conservation measures to reduce the need for water system improvements.	As discussed in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, the proposed project would comply with California's Model Water Efficient Landscape Ordinance (MWELO). In addition, as discussed therein, the proposed irrigation system would consist of a recycled water storage tank and booster pump station, located south of the WWTP (Parcel 11), with associated recycled water piping ("purple pipe") to deliver recycled water from the WWTP to landscaped areas throughout the project. In fact, it is anticipated that recycled water on-site would exceed the necessary irrigation water, and excess recycled water could be supplied to surrounding farms rather than stored on-site.
Policy IS-4.13	**Water Quality Standards**. The County shall require that water supplies serving new development meet State water quality standards. If necessary, the County shall require that water be treated to meet State standards and that a water quality monitoring	It is intended that the proposed project's domestic water needs would be met primarily through surface water supplied by BBID, with supplemental use of groundwater, if needed, through installation of one or more new wells. Treated water would be provided by a new public water system created to serve the



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Policy		Project Consistency
	program be in place prior to issuance of building permits.	project and permitted through the State of California, or through CSA-16, if it is feasible to administratively consolidate with that existing system.
Policy IS-4.15	**Test Wells**. Prior to issuing building permits for new development that will rely on groundwater, the County shall require confirmation for existing wells or test wells for new wells to ensure that water quality and quantity are adequate to meet the needs of existing, proposed, and planned future development.	According to the project-specific Water Supply Assessment (WSA) and as discussed further in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, the proposed project intends to primarily use surface water supply from the BBID and would only use groundwater as a supplemental future supply to address any surface water shortages that occur during drought. Any supplemental groundwater would be pumped from one or more new wells drilled as part of the proposed project, as the existing on-site wells would be properly abandoned during project buildout. Any new wells would be tested to ensure water quality is adequate prior to issuance of a building permit for the well.
Policy IS-5.6	**Consistent Fire Protection Standards for New Development**. The County, in coordination with local water agencies and fire protection agencies, shall ensure consistent and adequate standards for fire flows and fire protection for new development.	As discussed under Impact 4.11-5 in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, a separate groundwater well would be installed to serve only the fire system. Fire water would be provided to the project through the proposed water system. Between domestic and fire storage requirements, approximately 1.3 million gallons per day (mgd) of water storage is anticipated. Splitting the storage volume between pressure zones may be possible, but booster pumps capable of meeting domestic and fire flow requirements would be necessary at each tank location. The proposed location for the storage tank(s) and pump station would be located within the Initial Phase boundaries, on Parcel 8 of the Initial Phase Vesting Tentative Map (see Figure 3-6 of this EIR). In addition, as discussed under Impact 4.11-1, given that the proposed project includes the development of a fire station on-site, adequate fire protection services would be available to serve the proposed project.
Policy IS-6.3	**Adequate Wastewater Facilities**. The County shall ensure through the development review process that wastewater collection, treatment, and disposal facilities are sufficient to serve existing and new development, and are scalable to meet capacity demands when needed.	As discussed under Impact 4.11-7 in Chapter 4.11, Public Services/Utilities and Service Systems, of this EIR, wastewater produced by the proposed project would be treated and disposed of on-site at a WWTP located in the Pacific Gateway East development area. To serve the Initial Phase of the proposed project, the sewer collection system and package wastewater treatment facility would be constructed, as would the recycled water storage and pump station. Any expansions to the wastewater system over the years of project operations would be accomplished by the addition of treatment package units. Because wastewater generated by the proposed project would be treated in an on-site WWTP, specifically sized to serve the proposed project, and which could be



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Policy		Project Consistency
		expanded to match buildout of the Specific Plan, adequate capacity would be available to treat wastewater flows generated by the proposed project.
Policy IS-6.6	**Wastewater Treatment System Standards**. The County shall require that the development, operation and maintenance of wastewater treatment systems meet the requirements and standards of the wastewater treatment agency and the County, including the requirements and standards of the County Environmental Health Department.	See Policy LU-2.11 above.
Public Health and Safety		
Policy PHS-1.10	**Emergency Vehicles Access**. The County shall require all new developments to provide, and existing developments to maintain, adequate primary and alternative access for emergency vehicles.	As discussed under Impact 4.14-1 of this EIR, the existing roads within and adjacent to the project site include South Chrisman Road and South MacArthur Drive, which would provide primary access to the project site during emergency situations. Other surrounding existing roadways include South Tracy Boulevard, Interstate 5 (I-5), SR 132, and I-580 would also serve as emergency vehicle access routes to both the Initial Phase of development and the full project buildout. As part of the proposed project, new internal roadways would be constructed, which would connect to existing roads in the project vicinity. The internal roadway network would provide access throughout the project site by way of a looped route and would consist of two-lane local industrial streets with rights-of-way (ROWs) wide enough to accommodate emergency vehicles. Accordingly, the proposed project would provide adequate emergency access to the project site. In addition, the proposed project would include a new fire station within the Pacific Gateway East development area, which would be staffed with a three-person engine company. It should be noted that complete closure of the roadways may only be necessary when bridge replacement work is being conducted at the Delta-Mendota Canal and California Aqueduct crossings for road widening purposes; however, the closures would have a less-than-significant impact through implementation of a traffic control plan as required by Mitigation Measure 4.12-1.
Policy PHS-3.1	**Consider Geologic Hazards for New Development**. The County shall consider the risk to human safety and property from seismic and geologic	Seismic and geologic hazards associated with the proposed project are addressed under Impact 4.6-1 and Impact 4.6-3, respectively. As discussed under Impact 4.6-1, the proposed project would not be subject to seismic

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Policy		Project Consistency
	hazards in designating the location and intensity for new development and the conditions under which that development may occur.	hazards, and a less-than-significant impact would occur. With respect to potential geologic hazards, as discussed under Impact 4.6-3, it is anticipated that the proposed project would only use groundwater as a supplemental future supply to address any surface water shortages during drought. Regardless of the amount of groundwater used to serve the project, as discussed in Chapter 4.6, Geology and Soils, of this EIR, and according to the WSA, the projected future water demand for the project (not including recycled water) is 801 acre-feet per year (AFY), which is below the current demand of existing on-site uses of 4,538 AFY and below the total existing groundwater use within the project site of 2,380 AFY. As such, the proposed project would alleviate potential impacts related to subsidence induced by groundwater pumping. In addition, implementation of Mitigation Measures 4.6-3(a) and (b) would ensure that all such impacts are reduced to a less-than-significant level.
Policy PHS-3.2	**Location of Sensitive Land Uses**. The County shall not approve any of the following land uses if they are located within one-eighth of a mile of any active fault or on soil that is highly susceptible to liquefaction: facilities necessary for emergency services; major utility lines and facilities; manufacturing plants using or storing hazardous materials; high occupancy structures, such as multifamily residences and large public assembly facilities; and facilities housing dependent populations, such as prisons, schools, and convalescent centers.	As discussed under Impact 4.6-3 in Chapter 4.6, Geology and Soils, of this EIR, according to the GFR, neither the project site nor the off-site improvements study area has a potential for liquefaction. As such, the proposed project would not be subject to potential hazards related to liquefaction.
Policy PHS-3.5	**Subsidence or Liquefaction**. The County shall require that all proposed structures, utilities, or public facilities within County-recognized areas of near-surface subsidence or liquefaction be located and constructed in a manner that minimizes or eliminates potential damage.	See Policy LU-2.9 above.
Policy PHS-3.7	**Erosion Control**. The County shall encourage the planting of vegetation to decrease loss of soil by erosion.	As discussed under Impact 4.6-2 in Chapter 4.6, Geology and Soils, of this EIR, in accordance with the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, a Stormwater Pollution Prevention Plan (SWPPP) is required for any project that disturbs at least one acre of soil. Given that the Initial Phase of the proposed project would disturb approximately



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Policy		Project Consistency
		181.26 acres, and full project buildout would disturb approximately 1,576.7 acres within the site, the project would be required to prepare a SWPPP and submit a Notice of Intent (NOI) to the RWQCB. The SWPPP would be kept on-site during construction activity and made available upon request to representatives of San Joaquin County or the RWQCB. The SWPPP would include details of how sediment and erosion control practices, also known as best management practices (BMPs), would be implemented. Implementation of the SWPPP would comply with County, State, and federal water quality requirements. Furthermore, all future development would be subject to local and State codes and requirements for erosion control and grading. For example, pursuant to Section 9-704.020 of the County's Code of Ordinances, a valid grading permit, which would include appropriate measures to prevent soil erosion, would be required from the County Building Inspection Division prior to initiation of any grading or excavation.
Policy PHS-4.3	**Fire Prevention Measures**. The County shall implement State recommendations for fire prevention in Fire Hazard Severity Zones and require new and/or existing development to provide clearance around structures, use fire-resistant ground cover, build with fire-resistant rooting materials, participate in fuel load reduction, and take other appropriate measures.	The project site is within a Non-Very High Fire Hazard Severity Zone (FHSZ) area and is not located within a wildland-urban interface (WUI) zone. However, the project site is adjacent to a Moderate FHSZ and a WUI zone, both located east of the project site across I-580. As discussed under Impact 4.14-2, the proposed project would be required to comply with all applicable State and local standards and regulations associated with prevention of wildfire hazards, including the San Joaquin County Building and Fire Prevention Codes, which serve to adopt and amend the CBC and California Fire Code (CFC). In addition, any landscaping located adjacent to or within the proposed roadways would include irrigation scheduling to ensure the proposed vegetation would not result in excessively dry fuel sources. Through compliance with the San Joaquin County Code of Ordinances, regular maintenance of the vegetation within the proposed open space areas would be conducted. Such maintenance activities would include the removal and reduction of hazardous fuels, which would reduce the potential for fire to occur within the project site and spread to adjacent areas. Furthermore, power lines and other utilities associated with the proposed project would be undergrounded, which would reduce fire risks during operations.



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Policy		Project Consistency
Policy PHS-5.4	**Innovative Mitigation Measures**. The County shall encourage innovative mitigation measures and project redesign to reduce air quality impacts by coordinating with the SJVAPCD, project applicants, and other interested parties.	As discussed in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, the proposed project would include several sustainability-oriented measures through implementation of Mitigation Measures 4.3-2(a) through 4.3-2(c), 4.3-3(a), 4.3-3(b), 4.3-4, and 4.3-8(a).
Policy PHS-5.7	**TAC Exposure Reduction Measures for New Development**. The County shall require new development projects to implement all applicable best management practices that will reduce exposure of sensitive receptors (e.g., hospitals, schools, daycare facilities, elderly housing and convalescent facilities) to toxic air contaminants.	As discussed in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, the proposed project would be subject to Mitigation Measures 4.3-2(b) and 4.3-3(b) which would reduce the proposed project's toxic air contaminant (TAC) emissions through the use of Tier 4 construction equipment, zero emission forklift equipment, zero emission yard mules, and zero emission landscape equipment. In addition, the EIR includes Mitigation Measure 4.2-4, would require the installation of high efficiency particulate air (HEPA) filters within the maximally exposed sensitive receptors within the project area. With implementation of Mitigation Measure 4.2-4 cancer risks would be reduced to below the San Joaquin Valley Air Pollution Control District (SJVAPCD) significance threshold. However, installation of HEPA filters in the existing residences would require resident approval, and neither San Joaquin County nor the project applicant can legally impose such improvements on private properties.
Policy PHS-5.11	**Paving Materials**. The County shall require all access roads, driveways, and parking areas serving new commercial and industrial development to be constructed with materials that minimize particulate emissions and are appropriate to the scale and intensity of use.	The proposed project would be required to comply with all SJVAPCD rules and regulations, which are discussed in detail within Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR. In addition, the proposed project would be required to comply with all applicable design standards included within the Pacific Gateway Specific Plan, which would ensure that all roadways constructed as part of the project would be built in compliance with the County's regulations.
Policy PHS-5.13	**Industrial Best Management Practices**. The County shall require industrial facilities to incorporate economically feasible Best Management Practices and control technology to reduce PM10 and PM2.5 emissions consistent with State and Federal regulations.	The proposed project would be required to comply with all applicable SJVAPCD rules and regulations for operation, including, but not limited to, Rule 9510 (Indirect Source Review), Rule 4101 (Visible Emissions), and Rule 4102 (Nuisance). Rule 9510 requires the proposed project to reduce operational emissions of nitrogen oxides (NO_X) and particulate matter 10 microns in diameter (PM_{10}) emissions by 33.3 percent and 50 percent, respectively, as compared to the unmitigated baseline. Because particulate matter 2.5 microns in diameter ($PM_{2.5}$) is a subset of PM_{10}, compliance with Rule 9510 would reduce emissions of both $PM_{2.5}$ and PM_{10} emissions. Compliance with such



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Policy		Project Consistency
		rules and regulations would be ensured by the County as a condition of project approval.
Policy PHS-7.2	**Avoid Contamination of Resources**. The County shall strive to ensure that hazardous materials and wastes do not contaminate air, water, or soil resources.	The proposed project would be required to comply with all applicable local, State, and federal regulations pertaining to hazardous material and waste. As discussed in Chapter 4.7, Hazards and Hazardous Materials, of this EIR, Section 25505 of the Health and Safety Code requires that facilities provide a Hazardous Materials Business Plan (HMBP) if they handle reportable quantities of hazardous materials at any given time in the year. Consistent with the Health and Safety Code, the proposed project would be subject to a site inspection every three years, and HMBP elements must be reported into the California Environmental Reporting System (CERS) annually.
Policy PHS-7.5	**Locate Hazardous Materials Away from Populated Areas**. To the extent feasible, the County shall require proposed activities and land uses that use, store, or dispose of hazardous materials or wastes to be located away from existing and planned populated areas.	The project site is located within a non-urbanized area and is generally surrounded by agricultural uses. In addition, as discussed under Impact 4.7-1 within Chapter 4.7, Hazards and Hazardous Materials, the proposed project would comply with all applicable federal, State and local laws and regulations related to the use, storage, and disposal of hazardous materials or waste. Furthermore, specific tenants have not been identified at this stage of the project processing. Thus, the extent to which businesses that use hazardous materials may be located within the Specific Plan area is unknown. Notwithstanding, the Hazards and Hazardous Materials chapter of this EIR addresses the potential use of hazardous materials on-site. Please also see Policy PHS-7.2.
Policy PHS-7.6	**Require Hazardous Materials Management Plans**. The County shall require businesses that use or store materials and wastes on-site to prepare Hazardous Materials Management Plans (Business Plans) that map and inventory all hazardous materials and contain contingency plans for accidents, designate an individual or individuals as emergency coordinator(s), and ensure that all employees understand the potential for accidents and the appropriate response. Plans must follow the requirements for Federal, State, and/or local defined special flood hazard areas.	See Policy PHS-7.2 above.



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
Policy PHS-7.8	**Consistency with Hazardous Waste Management Plan**. The County shall require all new development to be consistent with the County Hazardous Waste Management Plan (CHWMP). Any proposed hazardous waste facility, or expansion of an existing hazardous waste facility, shall be consistent with the CHWMP.	See Policy PHS-7.6 above.
Policy PHS-8.1	**Land Use Compatibility**. The County shall prohibit land uses within unincorporated areas that interfere with the safe operation of aircraft or that would expose people to hazards from the operation of aircraft.	Please see Policy TM-8.5.
Policy PHS-8.4	**Compliance with Federal Aviation Administration (FAA) Regulations**. The County shall require development within airport approach and departure zones to be in compliance with FAA Regulations that address objects affecting navigable airspace.	See Policy TM-8.5 above.
Policy PHS-9.1	**Noise Standards for New Land Uses**. The County shall require new development to comply with the noise standards shown in Tables 9-1 (see Table 4.10-4) and 9-2 (see Table 4.10-5) through proper site and building design, such as building orientation, setbacks, barriers, and building construction practices.	As discussed under Impact 4.10-2 in Chapter 4.10, Noise, of this EIR, implementation of Mitigation Measure 4.10-2(c) requires the construction of eight- to 12-foot-tall sound walls along portions of the project boundaries to shield the nearest single-family residences from operational noise associated with Specific Plan Buildout conditions. Mitigation Measure 4.10-2(c) would reduce non-transportation noise levels to below the noise standards shown in General Plan Table 9-1.
Policy PHS-9.2	**Airport Noise Compatibility Criteria**. The County shall require new development within airport areas of influence be consistent with the Airport Noise Compatibility Criteria in the Airport Land Use Compatibility Plan.	As discussed under Impact 4.10-4 in Chapter 4.10, Noise, of this EIR, the project site is located outside of the Tracy Municipal Airport 55 dBA CNEL airport noise contour. The Corral Hollow Road and West Linne Road intersection proposed for improvements is located within the Tracy Municipal Airport 60 to 65 dBA CNEL airport noise contour. However, the proposed improvements would be consistent with all applicable standards from the Airport Noise Compatibility Criteria.
Policy PHS-9.4	**Acceptable Vibration Levels**. The County shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable	As discussed under Impact 4.10-3 in Chapter 4.10, Noise, of this EIR, the Initial Phase and Specific Plan Buildout would not result in the generation of excessive groundborne vibration or groundborne noise levels. Based on Federal Transit Administration (FTA) criteria, Mitigation Measure 4.10-3 would



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
	interior vibration levels at nearby vibration-sensitive uses based on FTA criteria.	require preconstruction crack documentation and construction vibration monitoring to verify that construction vibrations do not cause damage to any adjacent structures if use of vibratory compactors is required within 25 feet or less of a residential structure.
Policy PHS-9.7	**Require Acoustical Study**. The County shall require a project applicant to prepare an acoustical study for any proposed new residential or other noise-sensitive development when the County determines the proposed development may expose people to noise levels exceeding acceptable General Plan noise levels.	Chapter 4.10, Noise, of this EIR is primarily based on the Environmental Noise Assessment prepared for the proposed project by Saxelby Acoustics.
Natural and Cultural Resources		
Policy NCR-1.3	**Open Space Opportunities**. The County shall support efforts to create opportunities for the public to experience and appreciate open space resources.	See Policy LU-8.1 above.
Policy NCR-2.1	**Protect Significant Biological and Ecological Resources**. The County shall protect significant biological and ecological resources including: wetlands; riparian areas; vernal pools; significant oak woodlands and heritage trees; and rare, threatened, and endangered species and their habitats.	Potential impacts to biological resources located within the project site are discussed in Chapter 4.4, Biological Resources, of this EIR. The project site does not include riparian areas, vernal pools, significant oak woodlands, or heritage trees. On-site biological resources include approximately 6.10 acres of wetlands, as well as suitable habitat for and members of special-status plant and wildlife species. Impacts 4.4-1 through 4.4-6 discuss potential impacts to special-status plant and wildlife species, while Impact 4.4-7 evaluates potential adverse effects on wetlands. Overall, Chapter 4.4 includes mitigation measures to reduce any potentially significant impacts to a less-than-significant level.
Policy NCR-2.7	**Protect Waterfowl Habitat**. The County shall strive to preserve, protect, and enhance feeding areas and winter habitat for migratory waterfowl.	Specific species of migratory waterfowl are not identified by the Biological Resources Assessment (BRA) prepared for the proposed project and, thus, are not anticipated to occur on-site. Generally, such species require aquatic habitats of significant size to use as feeding areas or overwintering habitat. As discussed under Impact 4.4-7, the 1,576.70-acre project site contains a total of approximately 6.10 acres of wetlands. Mitigation Measures 4.4-7(a) and 4.4-7(b) would reduce the potential adverse effects to wetlands to a less-than-significant level.
Policy NCR-2.3	**San Joaquin County Multi-Species Habitat Conservation and Open Space Plan**. The County	Consistency with the provisions of the SJMSCP is discussed under Impact 4.4-9 within Chapter 4.4, Biological Resources. As discussed therein, the SJMSCP

Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
	shall continue to implement the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan to mitigate biological impacts resulting from open space land conversion.	requires complete avoidance of Covered Species where possible and implementation of Incidental Take Minimization Measures where total avoidance is not possible. In order to ensure compliance with the SJMSCP, the project applicant would be required to obtain Incidental Take Minimization Measures and conduct preconstruction surveys to determine if SJMSCP Covered Species are present on-site. Implementation of Mitigation Measures 4.4-9(a) through 4.4-9(c) would ensure the foregoing requirements are met. In addition, SJMSCP requirements are incorporated into various mitigation measures within Chapter 4.4, including Mitigation Measures 4.4-2(a), 4.4-2(b), 4.4-4, and 4.4-6 related to Swainson's hawk, white-tailed kite, northern harrier, and various nesting birds, respectively. Finally, the proposed project would be required to pay SJMSCP land conversion fees for the on-site vegetation community and aquatic resources impacts.
Policy NCR-2.5	**No Net Loss of Wetlands**. The County shall not allow development to result in a net loss of riparian or wetland habitat.	Potential impacts to wetlands are discussed under Impact 4.4-7 within Chapter 4.4, Biological Resources, of this EIR. As discussed therein, development of the Initial Phase could impact up to approximately 3.27 acres of wetlands and 0.31-acre of non-wetland waters of the U.S. and full buildout of the Specific Plan could impact approximately 2.52 additional acres of potentially jurisdictional waters. Therefore, Mitigation Measures 4.4-7(a) and 4.4-7(b) would be required, which would reduce the potential impact to a less-than-significant level. If it is determined that the aquatic resources within the project site or off-site improvements study areas fall under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Central Valley RWQCB, or the California Department of Fish and Wildlife (CDFW), the project applicant would be required to provide appropriate compensation to achieve "no net loss" for permanent impacts to aquatic resources associated with project implementation. Potential adverse effects on riparian habitat identified in local or regional plans, policies, regulations or by the CDFW or U.S. Fish and Wildlife Service (USFWS) were discussed in Chapter 5, Effects Not Found to Be Significant, of this EIR. As discussed therein, the proposed project would not result in adverse effects to riparian habitat, as none occurs on-site.



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
Policy NCR-2.8	**Natural Open Space Buffer**. The County shall require a natural open space buffer to be maintained along any natural waterway to provide nesting and foraging habitat and to protect waterway quality.	The only waterways in the vicinity of the project site are the California Aqueduct, Delta-Mendota Canal, and Banta-Carbona Irrigation District Canal. The foregoing waterways are artificially constructed as part of a larger water conveyance system; therefore, open space buffers are not required.
Policy NCR-2.12	**Encourage Native Landscaping**. The County shall encourage the use of native plants for landscaping to provide suitable habitat for native wildlife.	According to the Pacific Gateway Specific Plan, the landscaping provided throughout the site would use native and climate-adapted plant species. The Master Landscape Design Guidelines also specify that the project site shall be landscaped based on San Joaquin County requirements, which would include Policy IS-4.19 and Policy NCR-2.12. Additionally, native landscaping treatments would be designed in conformance with the SJMSCP to provide refugia for San Joaquin kit fox.
Policy NCR-3.1	**Preserve Groundwater Recharge Areas**. The County shall strive to ensure that substantial groundwater recharge areas are maintained as open space.	Potential impacts related to groundwater are discussed under Impact 4.8-3 within Chapter 4.8, Hydrology and Water Quality. Development of the proposed project would result in an increase in impervious surfaces, although full buildout of the Specific Plan would also include permeable ground within the on-site parks, detention basins, and landscaping areas where some recharge could occur. While the proposed project would result in a reduction in the amount of natural soil surfaces available for potential infiltration, notable groundwater recharge areas are not identified within the project site and on-site runoff would be conveyed to the proposed retention basins to infiltrate soils and contribute to aquifer recharge.
Policy NCR-5.9	**Shaded Parking Lots**. The County shall require parking lots to be shaded in the summertime but allow winter solar access to adjacent buildings and sidewalks.	According to the Pacific Gateway Specific Plan, landscaping would be provided throughout the site in accordance with the Master Landscape Design Guidelines. The Master Landscape Design Guidelines also specify that the project site shall be landscaped based on San Joaquin County requirements, which would include Policy IS-4.19 and Policy NCR-2.12.
Policy NCR-5.12	**Energy Efficient Industry**. The County shall support energy efficiency of industrial processes.	As discussed under Impact 4.3-6 in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, the proposed project was determined to result in a less-than-significant impact related to the inefficient or wasteful use of energy. In addition, as demonstrated in Table B-1 of Appendix F to this EIR, the proposed project would comply with all applicable State regulations for renewable energy or energy efficiency to the extent required by law. Further, as shown in in Table B-2 and Table B-3 of Appendix F the proposed project would be consistent with the renewable energy and energy efficiency provisions of the San Joaquin County General Plan and the SJCOG RTP/SCS.



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
Policy NCR-5.13	**Solar Heating in Industrial Operations**. The County shall encourage Industrial operations that require large amounts of hot water to incorporate active solar systems in the design of buildings.	See response to Policy NRC-5.2 above.
Policy NCR-6.2	**No Destruction of Resources**. The County shall ensure that no significant architectural, historical, archeological, or cultural resources are knowingly destroyed through County action.	As discussed in Chapter 4.5, Cultural and Tribal Cultural Resources, of this EIR, known significant architectural, historical, archaeological, or cultural resources would not be adversely affected by on-site construction. Full project buildout could potentially impact sections of the off-site California Aqueduct, Hetch Hetchy Aqueduct, and Delta-Mendota Canal, as well as other buildings or structures adjacent to the off-site improvement study areas eligible for listing under the National Register of Historic Places (NRHP) or California Register of Historical Resources (CRHR). However, potential impacts to the eligible sections of the water conveyance systems would be reduced to a less-than-significant level with implementation of Mitigation Measure 4.5-1(a) and 4.5-1(c). However, until site-specific evaluations of the buildings and structures abutting the off-site improvement study areas are conducted, the degree to which potential impacts to existing historic structures can be avoided cannot be determined. Mitigation Measures 4.5-1(b) and 4.5-1(c) require further evaluation by an architectural historian who meets the Secretary of the Interior's Standards prior to any relevant intersection or road improvements to determine whether the structures would meet the criteria for inclusion. While it is not anticipated that construction of the off-site roadway improvements would completely destroy any architectural, historical, archaeological, or cultural resources located adjacent to the study areas, conducting such evaluation would inform the County's decision.
Policy NCR-6.5	**Protect Archeological, Paleontological, and Historical Resources**. The County shall protect significant archeological, paleontological, and historical resources by requiring a cultural resources report be prepared by a qualified cultural resource specialist prior to the issuance of any discretionary permit or approval in areas determined to contain significant historic or prehistoric archeological	Information presented in Chapter 4.5, Cultural and Tribal Cultural Resources, is primarily drawn from the Cultural Resources Study prepared by Eileen Barrow and Associates for the proposed project, as well as the Archival Research and Windshield Survey prepared for the off-site improvement study areas by Tom Origer and Associates.



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
	artifacts or paleontological resources that could be disturbed by project construction. The County shall require feasible mitigation identified in the report, such as avoidance, testing, or data recovery efforts, to be implemented. (MMRP)	
Policy NCR-6.6	**Tribal Consultation**. The County shall consult with Native American tribes regarding proposed development projects and land use policy changes consistent with the State's Local and Tribal Intergovernmental Consultation requirements.	As discussed on page 4.5-21 of this EIR within Chapter 4.5, Cultural and Tribal Cultural Resources, project notification letters were distributed on January 24, 2025, to the applicable tribes who had previously requested notification of new development projects within the County. Specifically, project notification letters were sent to representatives of the Buena Vista Rancheria of Me-Wuk Indians, California Tribal TANF Partnership, California Valley Miwok Tribe, North Valley Yokuts Tribe, and United Auburn Indian Community (UAIC). Requests for consultation were not received within the required consultation periods.
Policy NCR-6.8	**Land Use and Development**. The County shall encourage land uses and development that retain and enhance significant historic properties and sustain historical community character.	The project site is not considered a significant historic property.
Policy NCR-6.10	**Inadvertent Discovery of Cultural Resources.** If prehistoric or historic-period archaeological resources are encountered during ground disturbing activities in the county, all activities within 100 feet shall halt and the County shall be notified. A Secretary of the Interior-qualified archaeologist shall inspect the findings within 24 hours of discovery. If it is determined that a project could damage a unique archaeological resource (as defined pursuant to the CEQA Guidelines), mitigation shall be implemented in accordance with PRC Section 21083.2 and Section 15126.4 of the CEQA Guidelines, with a preference for preservation in place. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. If	Mitigation Measure 4.5-2(a) requires ground-disturbing activities to cease if archaeological resources are discovered.



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
	avoidance is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan in consultation with the County. Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2. Treatment for most resources would consist of (but would not be not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource to be impacted by the project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals. (MMRP)	
Policy NCR-7.1	**Scenic Roadways**. The County shall protect the visual character of designated scenic roadways.	While Chapter 4.1, Aesthetics, of this EIR concludes that the proposed project would have a significant impact to views of the Diablo Range foothills west of I-580, which is an officially designated State scenic highway, this policy appears to focus on the character of the roadway itself. I-580 is a scenic highway on account of the views that it affords of the surrounding landscape.
Policy NCR-7.2	**Views from Public Lands and Roadways**. The County shall ensure that views of waterways, hilltops, and oak groves from public land and public roadways are protected and public access is provided to them whenever possible.	As discussed under Impact 4.1-2 in Chapter 4.1, Aesthetics, of this EIR, although development of the proposed project would interfere with existing views of the Diablo Range foothills, public access to waterways, hilltops, and oak groves would not be impeded by the proposed project. Furthermore, while impacts to scenic vistas (i.e., the Diablo Range foothills) were determined to be significant, project buildout would only partially interfere with views of the Diablo Range foothills from some viewpoints. Nonetheless, because existing views of scenic vistas would be substantially affected by development of the proposed project and feasible mitigation does not exist to fully reduce the impact, impacts were identified as significant and unavoidable.
Policy NCR-7.3	**Designate Scenic Routes**. The County shall preserve scenic views from roadways by designating scenic routes based on the following criteria:	Pursuant to the criteria established by Policy NRC-7.3, because I-580 and SR 132 provide views of the Diablo Range foothills, the roadways could be



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
	• Leads to a recreational area; • Provides a representative sampling of the scenic diversity within the County; • Exhibits unusual natural or humanmade features of interest; • Provides opportunities to view activities outside the normal routine of most people; • Provides a route for people to view the Delta waterways; and • Links two scenic routes or connects with scenic routes of cities or other counties.	considered scenic routes. Nonetheless, the County has not officially designated either of the foregoing roadways as scenic routes.
Policy NCR-7.5	**Require Landscape Plans**. The County shall require landscape plans for new development along State- or County-designated scenic routes.	Because the project site is located adjacent to I-580, which is a State scenic highway, a landscape plan would be required. Site plans for full project buildout, which is analyzed at a programmatic level throughout this EIR, have not yet been prepared and, thus, a landscape plan for future development of the project site located along I-580 would be prepared at a future date. Nonetheless, all landscaping throughout the proposed project would be required to be designed consistent with the standards established in Chapter 9-402, Landscaping, of the County's Code of Ordinances.
Policy NCR-7.7	**Reducing Light Pollution**. The County shall encourage project designs, lighting configurations, and operational practices that reduce light pollution and preserve views of the night sky.	Pursuant to Mitigation Measure 4.1-3 of this EIR, the project applicant shall be required to submit a lighting plan to the San Joaquin County Community Development Department prior to improvement plan approval. Preparation and implementation of the lighting plan would ensure that County lighting standards would be enforced, thus reducing light pollution and preserving views of the night sky.
Policy NCR-7.8	**Underground Utility Lines**. The County shall require all new electric and communication distribution facilities adjacent to scenic routes to be placed underground, whenever feasible. Where overhead utility lines are unavoidable, every effort should be made to reduce the visual impact through elements of design.	As discussed in Chapter 3, Project Description, of this EIR, overhead electric lines would be placed underground within the proposed roadways during the Initial Phase and any following development phases.
Policy NCR-8.2	**Park Ratio Standard**. The County shall encourage and support the development of recreational facilities	While the County has an adopted countywide park ratio standard of 10 acres of regional park and three acres of local parks per 1,000 residents, the County's



Table 4.9-1
San Joaquin County General Plan Policy Consistency Discussion

Policy		Project Consistency
	to serve unincorporated communities at a ratio of 10 acres of regional parks and three acres of local parks per 1,000 residents, except for Mountain House, which has an approved park ratio of not less than five acres of parks per 1,000 population. The County shall consider increasing its park ratio standards to address unmet park needs.	park standards only apply to residential uses and do not apply to the proposed industrial and retail development. Therefore, the proposed project is not required to provide any parkland. Nonetheless, as shown in Figure 3-5, Conceptual Location of Public Parks, in Chapter 3, Project Description, of this EIR, the proposed project includes approximately 51.7 acres dedicated to open space and parks. The project would provide open space areas and community amenities, as well as recreational and park facilities throughout the project site, including an approximately 11.87-acre Central Park within the Pacific Gateway Central development area. The Central Park would include community amenities such as open space gathering areas, picnic areas, sport courts (e.g., pickleball and basketball), and parking spots for food trucks. The parks and open spaces would be integrated throughout the project site and would be connected by way of the proposed pedestrian and bicycle networks.
Policy NCR-8.13	**Preserve Natural Features**. The County shall encourage natural features to be preserved in recreation areas to increase opportunities for users to experience natural settings.	The proposed project would include various open space areas, including Gateway Park and nine mini parks (see Figure 3-5 of this EIR). The parks and open spaces would be integrated throughout the project site and would be connected by way of the proposed pedestrian and bicycle networks.
Policy NCR-8.22	**Park Dedication and In-Lieu Fees**. The County shall require dedication of parkland or in-lieu fees for local parks until other methods of sufficient financing are established. In-lieu fees shall: • be collected for new developments proposed in the county; • include land acquisition and site development costs, such as grading, access, drainage, and fencing; and • be given to the agency providing local recreation facilities.	See Policy NCR-8.2 above.

4.10 Noise

4.10 NOISE

4.10.1 INTRODUCTION

The Noise chapter of the EIR describes the existing noise environment in the project vicinity, and identifies potential impacts and mitigation measures related to noise and vibration associated with construction and operation of the proposed project. The method by which the potential impacts are analyzed is discussed, followed by the identification of potential impacts and the recommended mitigation measures designed to reduce significant noise and vibration impacts to less-than-significant levels, if required. The Noise chapter is primarily based on the Environmental Noise Assessment prepared for the proposed project by Saxelby Acoustics (Saxelby) (see Appendix M),[1] as well as the San Joaquin County General Plan[2] and associated EIR.[3]

4.10.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section provides background information on noise and vibration, a discussion of acoustical terminology and the effects of noise on people, existing sensitive receptors in the project vicinity, existing sources and noise levels in the project vicinity, and groundborne vibration.

Fundamentals of Acoustics

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected, or undesired, and therefore, may be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person. The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction;
- Interference with activities such as speech, sleep, and learning; and
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is not a completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

The decibel scale was devised to measure sound. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0.0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in dB correspond closely to human perception of relative loudness.

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1 Saxelby Acoustics. *Environmental Noise Assessment - Pacific Gateway Specific Plan EIR.* July 31, 2025.
2 San Joaquin County. *San Joaquin County General Plan.* Adopted December 2016.
3 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report.* Certified October 2014.

Table 4.10-1 below lists several examples of the noise levels associated with common situations.

Table 4.10-1
Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
N/A	110	Rock Band
Jet Fly-over at 300 meters (1,000 feet)	100	N/A
Gas Lawn Mower at 1 meter (3 feet)	90	N/A
Diesel Truck at 15 meters (50 feet), at 80 km/hr (50 mph)	80	Food Blender at 1 meter (3 feet) Garbage Disposal at 1 meter (3 feet)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 meters (100 feet)	70	Vacuum Cleaner at 3 meters (10 feet)
Commercial Area Heavy Traffic at 90 meters (300 feet)	60	Normal Speech at 1 meter (3 feet)
Quiet Urban Daytime	50	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	30	Library
Quiet Rural Nighttime	20	Bedroom at Night, Concert Hall (Background)
N/A	10	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Saxelby, 2025.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. A strong correlation exists between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For such reason, the A-weighted sound level has become the standard tool of environmental noise assessment.

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 environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, day/night average level (L_{dn}), and shows very good correlation with community response to noise.

The L_{dn} is based upon the average noise level over a 24-hour day, with a +10 dBA weighing applied to noise occurring during nighttime hours (10:00 PM to 7:00 AM). The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, the noise measurement tends to disguise short-term variations in the noise environment.

The Community Noise Equivalent Level (CNEL) is defined as the 24-hour average noise level with noise occurring during evening hours (7:00 PM to 10:00 PM) weighted by +5.0 dBA, and nighttime hours weighted by +10.0 dBA. The L_{max} is defined as the highest root-mean-square (RMS) sound level measured over a given period of time. The Sound Exposure Level (SEL) is a rating, in decibels, of a discrete event, such as aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.

Stationary sources of noise, including construction equipment, attenuate at a rate of approximately 6.0 dB per doubling of distance from the source depending on ground absorption. Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, increase the efficacy of noise attenuation that occurs by distance alone. Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles, would typically attenuate at a lower rate.

Surrounding Land Uses and Existing Sensitive Receptors

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise-sensitive biological species, although most jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise. Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include existing single-family residences, as well as the Jefferson Middle School adjacent to Chrisman Road at West Linne Road. Several of the existing single-family residences are located adjacent to the project site and off-site improvement study areas, while approximately ten additional existing single-family residences are located further away but within approximately 1,000 feet of the project site boundaries. Existing single-family residences are also located along area roadways. A greater number of sensitive receptors are located at varying distances from the project-area roadways, including Chrisman Road, where off-site improvements are required or where project traffic may travel to and from the site.

Existing Ambient Noise Environment

The existing ambient noise environment in the project vicinity is primarily defined by traffic on the local roadway network. To quantify the existing ambient noise environment in the project vicinity, Saxelby conducted continuous (24-hour) noise level measurements at four locations on the project site, as shown in Figure 4.10-1. The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted as Lmax, represents the highest noise level measured. The average value, denoted as L_{eq}, represents the energy average of all of the noise received by the sound level meter microphone during the monitoring period. The median value, denoted as L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period. A summary of the noise level measurement survey results is provided in Table 4.10-2.

Existing Traffic Noise Levels

The Federal Highway Administration (FHWA) Traffic Noise Model (FHWA-RD-77-108) was used to calculate existing noise levels due to traffic, expressed in L_{dn}, for roadways within the project vicinity. The approach used to evaluate existing traffic noise levels is discussed in the Method of Analysis section of this chapter. Traffic data for existing conditions were obtained from the transportation consultant, Fehr & Peers.

Figure 4.10-1
Noise Measurement Locations

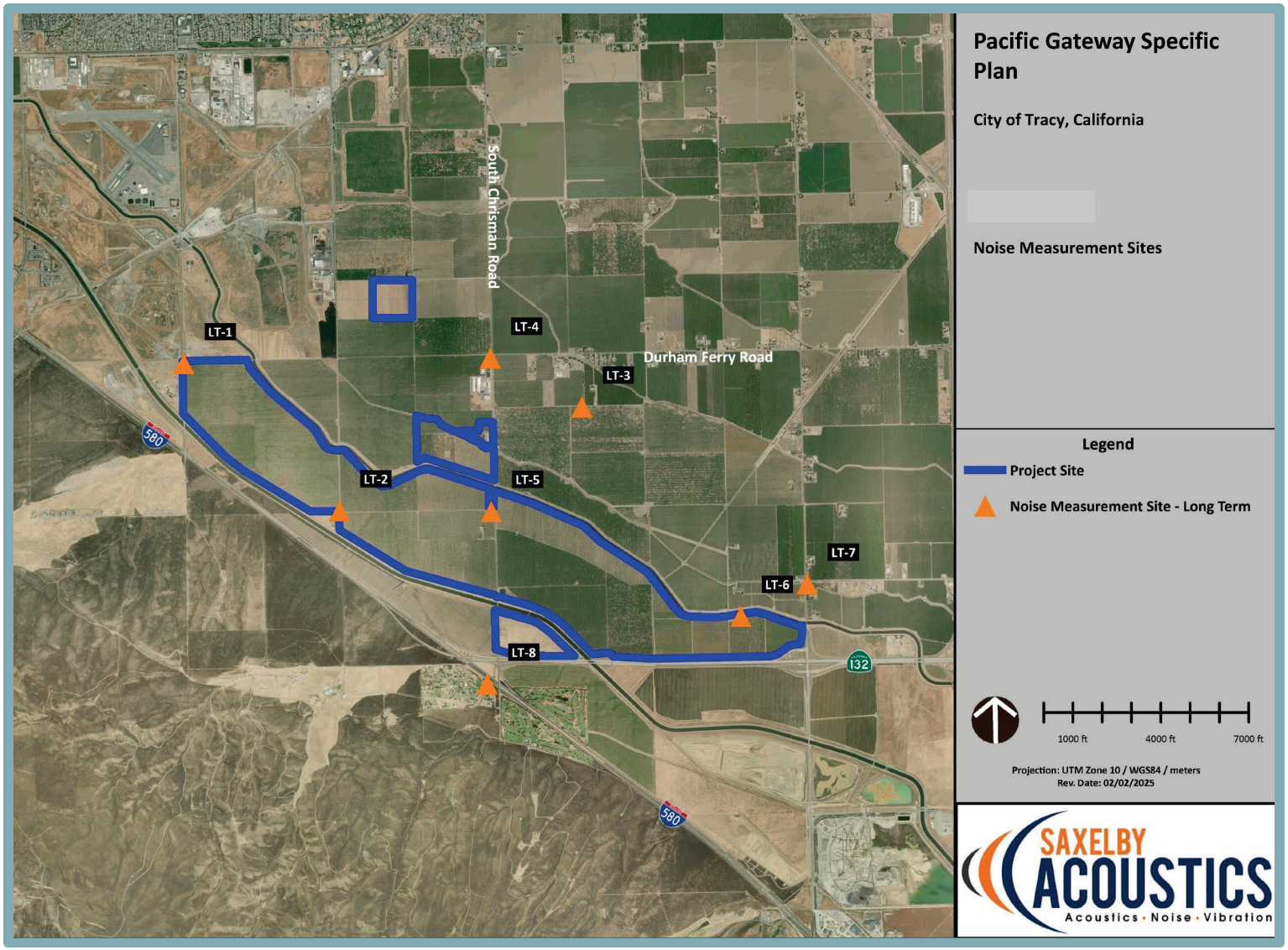


*Figure not OCR compatible.

Table 4.10-2
Summary of Existing Background Noise Measurement Data

Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1: 30 feet to centerline of South Tracy Boulevard	6/14/2023	63	59	45	82	57	47	79
LT-2: 35 feet to centerline of South MacArthur Drive	6/14/2023	58	49	46	66	53	51	62
LT-3: 1,800 feet to centerline of Durham Ferry Road	6/14/2023	48	43	38	59	42	41	53
LT-4: 80 feet to centerline of South Chrisman Road	6/14/2023	70	66	54	83	64	47	82
LT-5: 150 feet to centerline of South Chrisman Road	1/11/25	64	61	53	78	57	47	76
LT-6: 1,600 feet north of State Route (SR) 132 centerline, west of South Bird Road	1/11/25	66	66	61	77	56	52	71
LT-7: 50 feet to centerline of South Bird Road at West Kenner Road	1/11/25	59	56	49	78	52	42	70
LT-8: 200 feet to centerline of Interstate (I)-580	1/11/25	72	69	66	86	66	62	80

Notes:
- All values are shown in dBA.
- Daytime hours: 7:00 AM to 10:00 PM.
- Nighttime hours: 10:00 PM to 7:00 AM.

Source: Saxelby, 2025.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project vicinity roadway segment, as summarized in Table 4.10-3. In some locations, sensitive receptors may not receive full shielding from noise barriers or may be located at distances which vary from the assumed calculation distance.

Table 4.10-3
Existing Traffic Noise Levels

Roadway	Segment	Existing Exterior Noise Level (dBA L_{dn}) at Closest Sensitive Receptors
South Chrisman Road	Eleventh Street to West Schulte Road	71.5
South Chrisman Road	West Schute Road to Valpico Road	62.2
South Chrisman Road	Valpico Road to West Linne Road	67.5
West Linne Road	South Tracy Boulevard to South MacArthur Road	72.6
South Tracy Boulevard	West Linne Road to I-580	72.7
West Linne Road	South MacArthur Road to South Chrisman Road	68.7
South MacArthur Boulevard	West Linne Road to Project Site	59.4
South Chrisman Road	West Linne Road to Durham Ferry Road	67.8
South Chrisman Road	Durham Ferry Road to SR 132	58.3
Durham Ferry Road	South Chrisman Road to South Bird Road	59.3
Corral Hollow Road	West Linne Road to I-580	55.7
South Bird Road	South Lehman Road to Durham Ferry Road	56.9
Durham Ferry Road	South Bird Road to I-5	65.2
West Lehman Road	South Bird Road to Ahern Road	51.6

Source: Saxelby, 2025.

Existing Airport Noise Levels

The Tracy Municipal Airport is located approximately 1.1 miles northwest of the project site. Portions of the project site are located within Airport Compatibility Zone 8 of the Airport Influence Area (AIA) of the Tracy Municipal Airport.

The San Joaquin County Airport Land Use Compatibility Plan (ALUCP) depicts Zone 8 of the AIA extending to South Chrisman Road. Prohibited uses within Zone 8 include any hazards to flights, new or expanded landfills, and any objects greater than 100 feet in height. Figure 4.10-2 presents the noise contours for the airport in relation to the project site. As shown in the figure, the project site is located outside of the 55 dBA CNEL airport noise contour.

Fundamentals of Vibration

Vibration is similar to noise in that both involve a source, a transmission path, and a receiver. However, while noise is generally considered to be pressure waves transmitted through air, vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration depends on their individual sensitivity, as well as the amplitude and frequency of the source.

Figure 4.10-2
Existing Airport Noise Level Contours (CNEL)

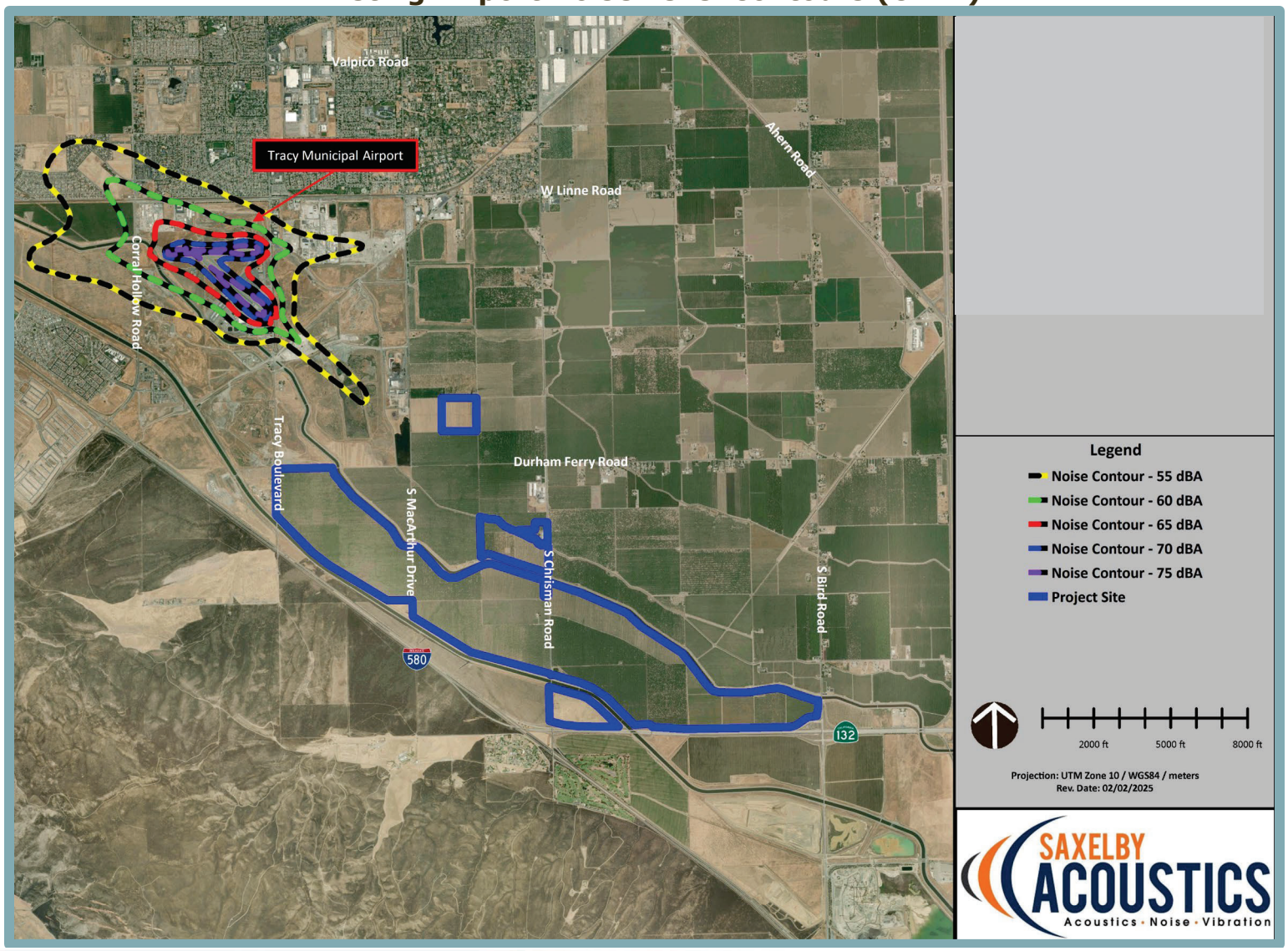


*Figure not OCR compatible.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second (in/sec) peak particle velocities (PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception, as well as damage to structures, have been developed for vibration in terms of PPV and RMS velocities. As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes decrease with increasing distance.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases. According to the California Department of Transportation (Caltrans) Transportation and Construction Vibration Guidance Manual, operation of construction equipment and construction techniques generate ground vibration. Roadway traffic can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. However, traffic rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.

Existing Ambient Vibration Environment

The project site is currently developed with agricultural uses, which is not a typical source of vibration. Sources of substantial ground vibration do not occur in the project vicinity. The existing vibration levels within the project site are below the threshold of perception.

4.10.3 REGULATORY CONTEXT

In order to limit exposure to physically and/or psychologically damaging noise levels, the State of California, various county governments, and most municipalities in the State have established standards and ordinances to control noise. Applicable federal laws or regulations pertaining to noise or vibration that would directly apply to the proposed project do not exist. The following provides a general overview of the existing State and local regulations that are relevant to the proposed project.

State Regulations

The following are the State environmental laws and policies relevant to noise.

California Building Code

The California Building Code (Title 24, Part 2 of the California Code of Regulations [CCR]) establishes uniform minimum noise insulation performance standards to protect persons within new buildings that house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings. Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also requires that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

Local Regulations

The following are the local environmental goals and policies relevant to noise and vibration.

San Joaquin County General Plan

The relevant goals and policies from the County's General Plan related to noise and vibration are presented below.

Public Health and Safety Element

Goal PHS-9 To protect County residents from the harmful and nuisance effects of exposure to excessive noise.

Policy PHS-9.1 **Noise Standards for New Land Uses.** The County shall require new development to comply with the noise standards shown in Tables 9-1 (see Table 4.10-4) and 9-2 (see Table 4.10-5) through proper site and building design, such as building orientation, setbacks, barriers, and building construction practices.

Policy PHS-9.2 **Airport Noise Compatibility Criteria.** The County shall require new development within airport areas of influence be consistent with the Airport Noise Compatibility Criteria in the Airport Land Use Compatibility Plan.

Policy PHS-9.3 **Screening Distances.** The County shall require new development proposed to be located adjacent to major freeways or railroad tracks to be consistent with the Federal Transit Administration (FTA) noise screening distance criteria.

Policy PHS-9.4 **Acceptable Vibration Levels.** The County shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby vibration-sensitive uses based on FTA criteria.

Policy PHS-9.6 **Enforcement of State and Federal Noise Regulations.** The County shall continue to enforce State and Federal noise laws regarding vehicle operation, equipment, and building insulation.

Policy PHS-9.7 **Require Acoustical Study.** The County shall require a project applicant to prepare an acoustical study for any proposed new residential or other noise-sensitive development when the County determines the proposed development may expose people to noise levels exceeding acceptable General Plan noise levels.

Table 4.10-4
Non-Transportation Noise Level Performance Standards for Noise Sensitive Uses at Outdoor Activity Areas[1,2]

Noise Level Descriptor	Daytime[3] (7:00 AM to 10:00 PM)	Nighttime[3] (10:00 PM to 7:00 AM)
Hourly L_{eq} dB	50	45
Maximum Level, dB	70	65

Note: These standards apply to new or existing residential areas affected by new or existing non-transportation sources.

1 Where the location of outdoor activity areas is unknown or is not applicable, the noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures.
2 Refer to Mountain House Master Plan, Table 11.2, Exterior Noise Standards for Noise-Sensitive Uses Affected by Non-Transportation Noise Sources, Page 11.12, for Mountain House Noise Standards.
3 Each of the noise level standards specified shall be reduced by 5 dB for impulsive noise, single tone noise, or noise consisting primarily of speech or music.

Source: San Joaquin County General Plan [Table PHS-1], 2016.

Table 4.10-5
San Joaquin County Maximum Allowable Noise Exposure from Transportation Noise Sources[1]

Noise Sensitive Land Use Type	Outdoor Activity Areas[2] (dB L_{dn})	Interior Spaces (dB L_{dn})
Residential	65	45
Administrative Office	-	45
Child Care Services-Child Care Centers	-	45
Community Assembly	65	45
Cultural; Library Services	-	45
Educational Services; General	-	45
Funeral; Interment Services – Undertaking	65	45
Lodging Services	65	45
Medical Services	65	45
Professional Services	-	45
Public Services (excluding hospitals)	-	45
Public Services (hospitals only)	65	45
Recreation – Indoor Spectator	-	45
Religious Assembly	65	45

Note: These standards apply to new or existing residential areas affected by new or existing non-transportation sources.

1 Refer to Mountain House Master Plan, Chapter 11, Noise, for Mountain House Noise Standards.
2 Where the location of outdoor activity areas is unknown or is not applicable, the noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures.

Source: San Joaquin County General Plan [Table PHS-1], 2016.

Policy PHS-9.9 **Noise Exemptions.** The County shall support the exemption of the following noise sources from the standards in this section:

- Emergency warning devices and equipment operated in conjunction with emergency situations, such as sirens and generators which are activated during power outages. The routine testing of such warning devices and equipment shall also be exempt provided such testing occurs during the hours of 7:00 am to 10:00 pm.
- Activities at schools, parks, or playgrounds, provided such activities occur during daytime hours.
- Activities associated with County-permitted temporary events and festivals.

Policy PHS-9.10 **Construction Noise Time Limitations**. The County shall seek to limit the potential noise impacts of construction activities on surrounding land uses by limiting construction activities to the hours of 7 am to 7pm, Monday through Saturday. Exceptions to these allowable hours could be allowed if approved beforehand by the County. (MMRP)

San Joaquin County Code of Ordinances

The County of San Joaquin Code of Ordinances provides regulations for vibration and sound. The specific language of Section 9-407.060 of the Development Title Update related to vibration is provided below:

9-407.060 Vibration

(a) **Perceptible Displacement**. No use shall cause any perceptible displacement at any lot line abutting any zone except an I-G Zone.

(b) **Displacement Within the General Industrial Zone**. Vibration displacement along any lot line within an I-G Zone shall not exceed the levels set forth in Table 9-405.060 (see Table 4.10-6). Vibration displacement shall be measured by a seismograph or other instrument capable of measuring and recording displacement and frequency, particle velocity, or acceleration. Readings shall be made at points of maximum vibration along any lot line within an I-G Zone.

Table 4.10-6
Maximum Displacement Levels at Any Lot Line (Inches)

Frequency (cycles per second)	Steady State	Impact
10 and below	0.0010	0.0020
10-20	0.0008	0.0016
20-30	0.0007	0.0014
30-40	0.0003	0.0006
40-50	0.0002	0.0004
50-60	0.0001	0.0002
60 and over	0.0001	0.0002

Source: San Joaquin County Development Title Update, 2024.

(c) **Exceptions**. The limits of this Section shall not apply to operations involved in the construction or demolition of structures or infrastructure or to vibration caused by motor vehicles or trains.

The specific language of Sections 9-404.020, 9-404.040, and 9-404.060 of the Development Title Update related to noise limits and applicable to the proposed project is provided below:

9-404.020 Exemptions
This Chapter does not apply to:
(a) **Emergencies.** The emission of sound for the purpose of alerting persons to the existence of an emergency, or the emission of sound in the performance of emergency work. This includes warning devices necessary for the protection of the public safety, such as police, fire, and ambulance sirens.
(b) **Parks and Schools.** Activities conducted in public parks, playgrounds, and public or private school grounds, including, but not limited to, school athletic and school entertainment events;
(c) **Construction.** Noise associated with construction, provided such activities do not take place before 6:00 a.m. or after 9:00 p.m. on any day;
(d) **Residential Property Maintenance.** Noise sources associated with maintenance of residential property located in Residential zones, provided such activities shall take place between 8:00 a.m. and 9:00 p.m. on any day.
(e) **Residential Air Conditioning.** Noise associated with residential air conditioning equipment, provided such equipment is in good repair;
(f) **Agricultural Operations.** Noise associated with any agricultural operation, including the processing or transportation of crops when such activities are conducted in Agricultural zones;
(g) **Community Assembly, Religious Institutions, and Other Similar Organizations.** Unamplified bells, chimes, or other similar devices used for community assembly or by religious institutions and other houses of religious worship.
(h) **Solid Waste Collection.** Collection of solid waste, vegetative waste, and recyclable materials by the County or under contract with the County.
(i) **Public Works Construction Projects, Maintenance and Repair.** Street, utility, and similar construction projects, or the maintenance or repair thereof, undertaken by, under contract to, or at the direction of the County, or the State of California, or a public utility. These activities include street sweeping, debris and litter removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, vacuuming catch basins, repairing of damaged poles, removal of abandoned vehicles, and repairing of water hydrants, watermains, gas lines, oil lines, sewers, storm drains, roads, and sidewalks.
(j) **Utility Facilities.** Facilities for utilities including, without limitation, electric power transformers and related equipment, sewer lift stations, wastewater processing, wells, and pumping stations.

9-404.040 Noise Limits
All uses and property must meet the following standards for noise from transportation sources and stationary sources.
(a) **Transportation Noise Sources**.
(1) Excluding projects on infill lots, proposed noise sensitive land uses that will be impacted by noise from existing or planned transportation facilities shall be required to mitigate the noise levels from these noise sources so that the resulting noise levels within the site do not exceed the standards specified in Table 9-404.040, Part I (see Table 4.10-7) for the specified noise sensitive land uses.

Table 4.10-7
Maximum Allowable Noise Exposure for Noise Sensitive Land Uses

Part I: Transportation Noise Sources		
Noise Sensitive Land Use (Use Types)	**Outdoor Activity Areas[1] dB L_{dn}**	**Interior Spaces dB L_{dn}**
Residential: All Housing Types and Residential Use Types	65	45
College and Trade School	65	45
Commercial Use Types not separately listed	--	45
Community Assembly/Religious Assembly	65	45
Cultural Institutions	65	45
Hospitals and Clinics	65	45
Offices	--	45
Park and Recreation Facilities	65	45
Schools	65	45

Part II: Stationary Noise Sources		
Sound Level	**Outdoor Activity Areas[1] Daytime[2] (7:00 AM to 10:00 PM)**	**Outdoor Activity Areas[1] Nighttime[2] (10:00 AM to 7:00 PM)**
Hourly Equivalent Sound Level (L_{eq}), dB[3]	55	45
Maximum Sound Level (L_{max}), dB	75	65

1 Where the location of outdoor activity areas is unknown or is not applicable, the noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures.
2 Each of the noise level standards specified shall be reduced by 5 dB for impulsive noise, single tone noise, or noise consisting primarily of speech or music.
3 If the noise source operates for less than 30 minutes per hour, then the maximum sound level standard shall apply.

Source: San Joaquin County Development Title Update [Table 9-404.040], 20224.

(2) Proposed projects on infill lots that will be impacted by noise from existing or planned transportation facilities shall be required to mitigate the noise levels from these noise sources so that the resulting noise levels do not exceed the standards specified in Table 9-404.040, Part I (see Table 4.10-7) for interior spaces only for the specified noise sensitive land uses.

(3) Private development projects that include the development of new transportation facilities or the expansion of existing transportation facilities shall be required to mitigate the noise levels from these facilities so that the resulting noise levels on noise sensitive land uses within and adjacent to said development projects do not exceed the standards specified in Table 9-404.040, Part I (see Table 4.10-7) for the specified noise sensitive land uses.

(b) **Stationary Noise Sources**

(1) Excluding proposed noise sensitive land uses on infill lots, proposed noise sensitive land uses that will be impacted by stationary noise sources shall be required to mitigate the noise levels from these sources so that the resulting noise levels on the proposed noise sensitive land uses do not exceed the standards

specified in Table 9-404.040, Part II (see Table 4.10-7) for the specified noise sensitive land uses.

(2) Proposed projects that will create new stationary noise sources or expand existing stationary noise sources shall be required to mitigate the noise levels from these sources so as not to exceed the noise level standards specified in Table 9-404.040, Part II (see Table 4.10-7) for the specified noise sensitive land uses.

9-404.060 Additional Regulations for Specific Activities

(a) **Construction.** General construction noise shall be limited to weekdays from 6:00 a.m. to 9:00 p.m. Pre-construction activities, including loading and unloading, deliveries, truck idling, backup beeps, and radios, also are limited to these construction noise hours.
   (1) No noise-producing construction activities shall be permitted outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Building Official.
   (2) More restrictive construction noise hours may be established as a Condition of Approval of an Administrative Use Permit or a Conditional Use Permit when appropriate given the surrounding neighborhood, the type of noise, or other unique factors.
   (3) Any waiver granted shall take the potential noise impacts upon the surrounding neighborhood and the larger community into consideration.
   (4) Except in emergencies, no construction shall be permitted outside of these hours, including maintenance work on public rights-of-way, that creates construction noise.

(b) **Deliveries.** Deliveries to or pickups from any commercial use sharing a lot line with any conforming residential use may occur between 7:00 a.m. and 10:00 p.m. daily. No deliveries to or pickups from any such use shall occur outside of these hours unless specifically authorized by a Conditional Use Permit.

(c) **Normal Maintenance.** Maintenance of real property operations may exceed the noise standards between 6:00 a.m. and 9:00 p.m.

City of Tracy General Plan

The proposed project would increase traffic volumes along area roadways, including roadway segments located within the City of Tracy. In addition, the proposed project would involve off-site improvements that would occur within the City of Tracy. Any such roadway segments or improvements would be subject to the City of Tracy standards and regulations. The relevant objectives and policies from the City of Tracy General Plan related to noise and vibration are presented below.

Objective N-1.1 Ensure appropriate exterior and interior noise levels for new land uses.

Policy P8 Measures to attenuate exterior and/or interior noise levels to acceptable levels shall be incorporated into all development projects. Acceptable, conditionally acceptable and unacceptable noise levels are presented in Figure 9-3 (see Table 4.10-8).

Table 4.10-8
City of Tracy Conditionally Acceptable and Unacceptable Noise Levels

Land Use Category	Exterior Noise Exposure (L_{dn})					
	55	60	65	70	75	80
Single-Family Residential						
Multi-Family Residential, Hotels, and Motels		(a)				
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches						
Office Buildings, Business Commercial, and Professional						
Auditoriums, Concert Halls, Amphitheaters						

	Normally Acceptable Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	Conditionally Acceptable Specified land use may be permitted only after detailed analysis of the noise reduction requirements and the needed noise insulation features included in the design.
	Unacceptable New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Note:
(a) Residential development sites exposed to noise levels exceeding 60 Ldn shall be analyzed following protocols in Appendix Chapter 12, Section 1208A, Sound Transmission Control, California Building Code.

Source: City of Tracy General Plan [Figure 9-3], 2011.

Objective N-1.2 Control sources of excessive noise.

Policy P2 Mitigation measures shall be required for new development projects that exceed the following criteria:

- Cause the L_{dn} at noise-sensitive uses to increase by 3 dB or more and exceed the "normally acceptable" level.
- Cause the Ldn at noise-sensitive uses to increase 5 dB or more and remain "normally acceptable."
- Cause new noise levels to exceed the City of Tracy Noise Ordinance limits.

Policy P4 All construction in the vicinity of noise sensitive land uses, such as residences, hospitals, or convalescent homes, shall be limited to daylight hours or 7:00 a.m. to 7:00 p.m. In addition, the following construction noise control measures shall be included as

requirements at conduction sites to minimize construction noise impacts:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction area.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

4.10.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the potential impacts of the proposed project related to noise and vibration. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, an impact related to noise and vibration is considered significant if the proposed project would result in any of the following:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or 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.

Summary of Applicable Noise Standards

Applicable noise level standards from the San Joaquin County General Plan, the San Joaquin County Code of Ordinances, and the City of Tracy General Plan are summarized below.

Construction Noise Criteria

With temporary construction noise impacts, identification of "substantial increases" depends upon the duration of the impact, the temporal daily nature of the impact, and the absolute change in decibel levels. General Plan Policy PHS 9-10 prohibits construction activities operating before 7:00 AM or after 7:00 PM unless authorized by the County, and, therefore, would be considered a significant impact. The City of Tracy and San Joaquin County have not adopted any formal standard for evaluating temporary construction noise which occurs within allowable hours. For short-term noise associated with project-related construction, Saxelby recommends use of the Caltrans increase criterion of 12 dBA (Caltrans Traffic Noise Protocol, 2020), applied to existing residential receptors in the project vicinity. The level of increase is approximately equivalent to a



doubling of sound energy and has been the standard of significance for Caltrans projects at the State level for many years. Application of this standard to construction activities is considered reasonable given the temporary nature of construction activities.

Transportation Noise Criteria

The San Joaquin County Code of Ordinances (Table 4.10-7) and General Plan (Table 4.10-5) applies a 65 dBA L_{dn} exterior noise standard to outdoor activity areas of residential uses affected by transportation noise sources, and a 45 dB L_{dn} interior noise standard for residential uses affected by transportation noise sources.

The City of Tracy General Plan applies a 60 dBA L_{dn} exterior noise standard to single-family residential land uses.

Non-Transportation Noise Criteria

The stationary source noise level standards apply to the warehousing and wastewater treatment plant uses proposed by the project. Table 4.10-4 shows the San Joaquin County General Plan noise level standards applicable to stationary noise sources. The General Plan mandates a noise level standard of 50 dBA L_{eq} during daytime (7:00 a.m. to 10:00 p.m.) hours and 45 dBA L_{eq} during nighttime (10:00 p.m. to 7:00 a.m.) hours at the outdoor activity areas of residential uses. The maximum noise level standards for San Joaquin County are 70 dBA L_{max} and 65 dBA L_{max} during daytime and nighttime hours, respectively. It should be noted that the County Development Title allows for daytime noise of up to 55 dBA L_{eq} and 75 dBA L_{max}, 5 dB higher than that allowed under the General Plan standards. For this analysis, the lower standards of the San Joaquin County General Plan are used for conservative purposes.

Substantial Increase Criteria

Generally, a project may have a significant effect on the environment if it substantially increases the ambient noise levels for adjoining areas or exposes people to measurably severe noise levels. In practice, a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in transportation noise associated with the proposed project is a factor in determining significance.

San Joaquin County, like many jurisdictions, does not have an adopted policy regarding significant increases in ambient noise. A common practice in many jurisdictions is to use a 3.0 to 5.0 dB increase as a threshold of significance. However, a limitation of using a single noise level increase value to evaluate noise impacts is that taking such an approach fails to account for pre-project noise conditions. The following table was developed by the Federal Interagency Committee on Noise (FICON) as a means of developing thresholds for identifying project-related noise level increases (see Table 4.10-9).

Table 4.10-9
Significance of Changes in Cumulative Noise Exposure (dB DNL)

Ambient Noise Level Without Project	Increase Required for Significant Impact
<60	+5.0 or more
60 to 65	+3.0 or more
>65	+1.5 or more

Source: Federal Interagency Committee on Noise.

The rationale for the graduated scales is that test subjects' reactions to increases in noise levels varied depending on the starting level of noise. Specifically, with lower ambient noise environments, such as those below 60 dB L_{dn}, a larger increase in noise levels was required to achieve a negative reaction than was necessary in environments where noise levels were already elevated. Therefore, because the County does not have defined thresholds for what would be considered a substantial increase in traffic noise levels, information from Table 4.10-9 is used. The approach to assessing the significance of increases in off-site traffic noise is also consistent with the industry-standard approach in general. The use of the FICON standards is considered conservative relative to thresholds used by other agencies in the State. For example, Caltrans requires a project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project-related noise level increases between 5.0 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a conservative approach to impact assessment for the proposed project.

For roadway segments and off-site improvements located within the City of Tracy, the City of Tracy establishes a similar test of significance. As shown above, Objective N-1.2 Policy P2 establishes 3 dB, or more, as the test of significance where noise levels would exceed the City's "normally acceptable" (60 dBA L_{dn}) exterior noise standard at residential uses. A 5 dBA, or more, limit is set where increased noise levels would remain less than the "normally acceptable" limit, which is equivalent to the FICON standards shown in Table 4.10-9, with the exception that FICON includes a test of 1.5 dBA, or more, where exterior noise levels exceed 65 dBA L_{dn}. The FICON standards are more strict than the 3 dBA test of significance for the City of Tracy for cases where exterior noise would exceed 65 dBA L_{dn}. Therefore, to provide a conservative analysis, the stricter Table 4.10-9 standards are applied at all receptor locations, whether in the City of Tracy or San Joaquin County.

Vibration Criteria

As discussed above, the County of San Joaquin Code of Ordinances provides regulations for vibration and sound within Section 9-407.060 of the Development Title Update. However, Section 9-407.060 provides an exception for the construction or demolition of structures or infrastructure, and for vibration caused by motor vehicles. Therefore, San Joaquin County does not have specific policies or standards pertaining to vibration levels applicable to the proposed project. However, Table 4.10-10 indicates that, pursuant to Caltrans standards, the threshold for architectural damage to structures is 0.2 peak particle velocity in inches per second (in/sec PPV) and continuous vibrations of 0.1 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors. Therefore, the 0.20 in/sec threshold for structural damage is used for the analysis of the proposed project's impacts related to vibration.

Table 4.10-10
Effects of Vibration on People and Buildings

PPV		Human Reaction	Effect on Buildings
mm/sec	in/sec		
0.15 - 0.30	0.006 - 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10 - 15	0.4 - 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: California Department of Transportation, 2002.

Method of Analysis

Below are descriptions of the methodologies used to measure background and ambient noise and estimate traffic noise under existing and cumulative conditions, construction noise, operational noise, and vibration associated with the project. Further modeling details and calculations are provided in Appendix M to this EIR. The results of the noise and vibration impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.

Existing Ambient Noise Environment

To quantify the existing ambient noise environment in the project vicinity, Saxelby conducted continuous (24-hour) noise level measurements at four locations within the project site. Noise measurements were taken on June 14, 2023, and January 11, 2025, and are shown on Figure 4.10-1. The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. Larson Davis Laboratories (LDL) model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL 200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

Traffic Noise Levels

To assess noise impacts due to traffic increases on the local roadway network associated with development of the Initial Phase and Specific Plan Buildout, traffic noise levels were predicted at sensitive receptors for existing and cumulative conditions. Existing and cumulative noise levels due to traffic were calculated using the FHWA-RD 77 108 noise prediction model. The model is based upon the California Vehicle Noise (Calveno) reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway



configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{dn} values for free flowing traffic conditions. To predict traffic noise levels in terms of L_{dn}, the input volume was adjusted to account for the day/night distribution of traffic. The FHWA model was used in conjunction with project-specific traffic volumes provided by Fehr & Peers to analyze the potential impact of project-generated traffic under Existing Plus Initial Phase conditions, Existing Plus Specific Plan Buildout conditions, and future Cumulative Plus Specific Plan Buildout conditions.

Construction Noise and Vibration

To assess noise impacts due to temporary noise, Saxelby used the FHWA Roadway Construction Model (RCNM) to predict noise levels for standard construction equipment used for roadway improvement projects. The assessment of potential significant noise effects due to construction is based on the standards and procedures described in the Federal Transit Authority (FTA) guidance manual and FHWA's RCNM. The RCNM is a noise prediction model that enables the prediction of construction noise levels for a variety of construction equipment based on a compilation of empirical data and the application of acoustical propagation formulas. The model enables the calculation of construction noise levels in more detail than manual methods, which eliminates the need to collect extensive amounts of project-specific input data. RCNM allows for the modeling of multiple pieces of construction equipment working either independently or simultaneously, the character of noise emission, and the usage factors for each piece of equipment.

Construction noise varies depending on the construction process, type of equipment involved, location of the construction site with respect to sensitive receptors, the schedule proposed to carry out each task (e.g., hours and days of the week), and the duration of the construction work. Noise sources in the RCNM database include actual noise levels and equipment usage percentages.

Saxelby analyzed potential future construction noise associated with the proposed project using data compiled for various pieces of construction equipment at a distance of 50 feet inside the boundary of each component of the proposed project. Similarly, construction vibration was analyzed using data compiled for various pieces of equipment at a distance of 25, 50, and 100 feet.

Project Operational Noise

To assess noise impacts due to project operational noise, Saxelby modeled the proposed stationary noise-generating components of the project that could affect existing neighboring residential uses, including project site traffic circulation, loading docks, parking lots, and on-site wastewater treatment plant. The following is a list of assumptions used for the operational noise modeling. The data used is based upon a combination of manufacturer provided data and Saxelby data from similar operations.

- Loading Docks, Truck Circulation, and Truck Parking: To determine typical noise levels associated with the proposed loading docks, truck circulation, and parking areas, Saxelby used noise level measurement data from a similar warehousing facility. Activities during the peak hour of loading dock activities included truck arrival/departures, truck idling, truck backing (including backup alarms), air brake release, and operation of truck-mounted refrigeration units. The results of the loading dock noise measurements indicate that a busy hour generated an average noise level of 61 dBA L_{eq} and 81 dBA L_{max} at the boundary of the truck maneuvering lanes.

- Auto Parking Lots: Saxelby estimated noise generated by employee parking lots at similar warehouse facilities. Based on such estimates, parking lot activities produce up to 52 L_{eq} at the edge of each lot during a peak hour.
- Wastewater Treatment Plant: Saxelby assumed the wastewater treatment plant could consist of two packaged membrane bioreactor (MBR) plants operating continuously during the daytime and nighttime, as measured by Saxelby at a similar facility. Equipment was assumed to be housed within sound attenuation enclosures. The average noise level was assumed to be 58 dBA at 25 feet in any direction from the plant. Additionally, Saxelby assumed a backup generator could be used during operations. The generator was assumed to produce noise levels of up to 75 dBA L_{eq} at 23 feet, pursuant to manufacturer provided data.
- Proposed University: Saxelby assumed that the proposed university could generate up to 938 peak hour automobile trips, with one percent of trips consisting of heavy trucks. Parking lot movements are predicted to generate a SEL of 71 dBA at 50 feet for cars and 85 dBA SEL at 50 feet for trucks. The university amenities were assumed to include two large sport fields such as soccer, football, or cricket (58 dBA L_{eq} at 200 feet from center of field), one basketball court (55 dBA L_{eq} at 50 feet from center of court), and two pickleball or tennis courts (61 dBA L_{eq} at 25 feet from edge of court). All amenities were assumed to be active concurrently and at the aforementioned levels continuously.

Saxelby used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed amenities, existing and proposed buildings, terrain type, and locations of sensitive receptors. The predictions were made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the baseline and standards of significance identified above.

4.10-1 Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below, even with mitigation, the impact could be *significant and unavoidable.*

Construction activities associated with the proposed project would require the use of numerous pieces of noise-generating equipment, such as excavating machinery (e.g., backhoes, bulldozers, excavators, front loaders) and other construction equipment (e.g., compactors, scrapers, graders). Construction worker traffic and construction-related material haul trips would raise ambient noise levels along local haul routes, depending on the number of haul trips made and types of vehicles used.

The following discussions address the potential temporary increases in ambient noise levels from the proposed project at existing noise-sensitive receptors in the surrounding environment due to on-site and off-site construction activities.

Initial Phase, Specific Plan Buildout

During construction of the proposed project, noise from construction activities would add to the noise environment in the immediate project vicinity. Table 4.10-11 below shows maximum noise levels associated with typical construction equipment. Based on the table, activities involved in typical construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet.

Table 4.10-11
Construction Equipment Noise

Type of Equipment	Maximum Level, dBA at 50 feet
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Concrete Mixer Truck	79
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: Federal Highway Administration, Roadway Construction Noise Model User's Guide, January 2006.

Construction activities would be temporary in nature and are anticipated to occur during normal daytime working hours. The General Plan (MMRP) exempts construction noise provided that activities do not occur before 7:00 AM or after 7:00 PM. The City of Tracy limits construction from 7:00 AM to 7:00 PM.

As discussed above, Caltrans defines a significant increase due to noise as an increase of 12 dBA over existing ambient noise levels; Saxelby used the aforementioned criterion to evaluate increases due to construction noise associated with the proposed project. As shown in Table 4.10-11, construction equipment is predicted to generate noise levels of up to 90 dBA L_{max} at 50 feet. Construction noise is evaluated as occurring at the edge of the project site to represent the loudest expected noise levels generated during project construction. The closest residential uses share a property line with the Initial Phase and Specific Plan Buildout area and could experience periods of construction as close as 50 feet. Therefore, while the majority of construction would occur at much larger distances from sensitive receptors, the nearest sensitive receptors could be exposed to noise levels of up to 90 dBA L_{max}. The average daytime maximum noise level in the vicinity of the nearest sensitive receptors was measured to be 77-78 dBA (LT-5 and LT-6). Therefore, project construction could cause an increase of up to 12-13 dBA L_{max} over existing noise levels. In addition, noise would also be generated during the construction phase by increased truck traffic on area roadways associated with transport of heavy materials and equipment to and from the construction site, which would be of short duration and would be similar to noise levels associated with existing trucking traffic.

Where construction would occur at distances of 100 feet or more from an existing residential use, the maximum noise levels would be 84 dBA L_{max}, an increase of approximately 7.0 dBA from the average daytime maximum noise level, which would be a less-than-significant increase.

The Initial Phase and Specific Plan Buildout would also require occasional early morning (before 7:00 AM) concrete pours to avoid daytime heat. The concrete pours could require up to 20 peak hour concrete mixer trucks to arrive to pour foundations and tilt up wall panels. As shown above in Table 4.10-11, a concrete mixer truck is expected to generate a maximum noise level of 79 dBA L_{max} at 50 feet. The nearest residential uses share a property line with the project site and could experience periods of construction as close as 50 feet. Therefore, maximum noise levels of up to 79 dBA L_{max} could occur during the early morning nighttime hours. The average nighttime maximum noise level in the vicinity of the sensitive receptors was measured to be 71-76 dBA (LT-5 and LT-6). Therefore, nighttime project construction could cause an increase of up to 3-8 dBA L_{max} over existing noise levels, which is within the allowable +12 dBA increase criteria.

Based on the above, construction activities associated with the Initial Phase and Specific Plan Buildout within 50 feet of the nearest sensitive receptors could generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and a significant impact could occur.

Off-Site Improvements Study Area

Many of the prospective roadway improvement areas are located along undeveloped lands, or sparsely populated areas, especially south of West Linne Road along South Chrisman Road. One potential off-site roadway improvement includes the widening of Chrisman Road to four lanes from Eleventh Street to SR 132. The roadway improvement would likely include roadway construction activity within 50 feet of existing noise-sensitive receptors. At such a distance, construction noise would be expected to range between 76 to 90 dBA L_{max}. Additional off-site improvements would likely be required along West Linne Road, between Tracy Boulevard and South Chrisman Road. Receptors along this stretch of roadway are located within approximately 60 feet to approximately 400 feet. At 60 feet, construction noise would be expected to range between 74 to 88 dBA L_{max}. Based upon noise measurements collected at site LT-4, existing maximum noise levels range from 79-88 dBA L_{max} along South Chrisman Road. Based upon the predicted off-site construction noise levels of up to 88-90 dBA L_{max}, construction of the off-site improvements would result in an increase of approximately 2-9 dBA over ambient noise levels, which would be below the increase criterion of 12 dBA. However, due to the programmatic nature of the off-site improvements, temporary construction of off-site improvements could potentially result in an increase in noise levels at sensitive receptors exceeding 12 dBA. Therefore, construction activities associated with the off-site improvements could generate a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and a significant impact could occur.

Conclusion

Based on the above, the proposed project could result in a ***significant*** impact related to the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Mitigation Measure(s)

Implementation of Mitigation Measure 4.10-1(a) would reduce daytime construction noise levels associated with the Initial Phase and Specific Plan Buildout at the nearest sensitive receptors (i.e., within 100 feet) by a minimum of 5 dBA to 85 dBA L_{max}, which would result in an overall noise level increase of 7-8 dBA over ambient conditions at such receptors. Because the increase in ambient noise would be reduced to below the applicable 12 dBA threshold of significance, implementation of Mitigation Measure 4.10-1(a) would reduce the above potential impact related to construction noise level increases under the Initial Phase and Specific Plan Buildout to a *less-than-significant* level.

In addition, while not identified as a significant impact, the six-foot tall temporary construction noise barrier included as part of Mitigation Measure 4.10-1(a) would further reduce nighttime construction noise associated with concrete pouring by 5 dBA. Therefore, maximum noise levels of up to 74 dBA L_{max} could occur during early morning nighttime hours. As discussed above, the average nighttime maximum noise level in the vicinity of the sensitive receptors was measured to be 71-76 dBA (LT-5 and LT-6). Therefore, with implementation of Mitigation Measure 4.10-1(a), nighttime project construction could cause an increase of up to 3 dBA L_{max} over existing noise levels, which is within the allowable +12 dBA increase criteria.

Implementation of Mitigation Measure 4.10-1(b) would further help to reduce construction noise levels associated with the Initial Phase and Specific Plan Buildout, as well as reduce construction noise levels associated with the off-site improvements. Regarding Mitigation Measure 4.10-1(c), due to the programmatic nature of the off-site improvements, the effectiveness of the measure would vary by off-site improvement study area and may not prevent ambient noise-level increases due to project construction from exceeding 12 dBA, relative to existing levels. Therefore, even with implementation of Mitigation Measure 4.10-1(c), the above potential impact related to construction noise level increases associated with the off-site improvements study area could remain *significant and unavoidable*.

Specific Plan Buildout

4.10-1(a) *Prior to the approval of any grading and/or building permits, the San Joaquin County Community Development Department shall establish the following as a condition of approval for any permit that results in the use of construction equipment:*

- *On-site construction occurring within 100 feet, or less, from existing residential uses shall be shielded by a six-foot tall temporary construction noise barrier, as shown in Figure 4.10-3. The sound barrier shall consist of ½-inch plywood or minimum sound transmission class (STC) 27 sound curtains.*

Figure 4.10-3
Specific Plan Buildout Temporary Construction Noise Barrier

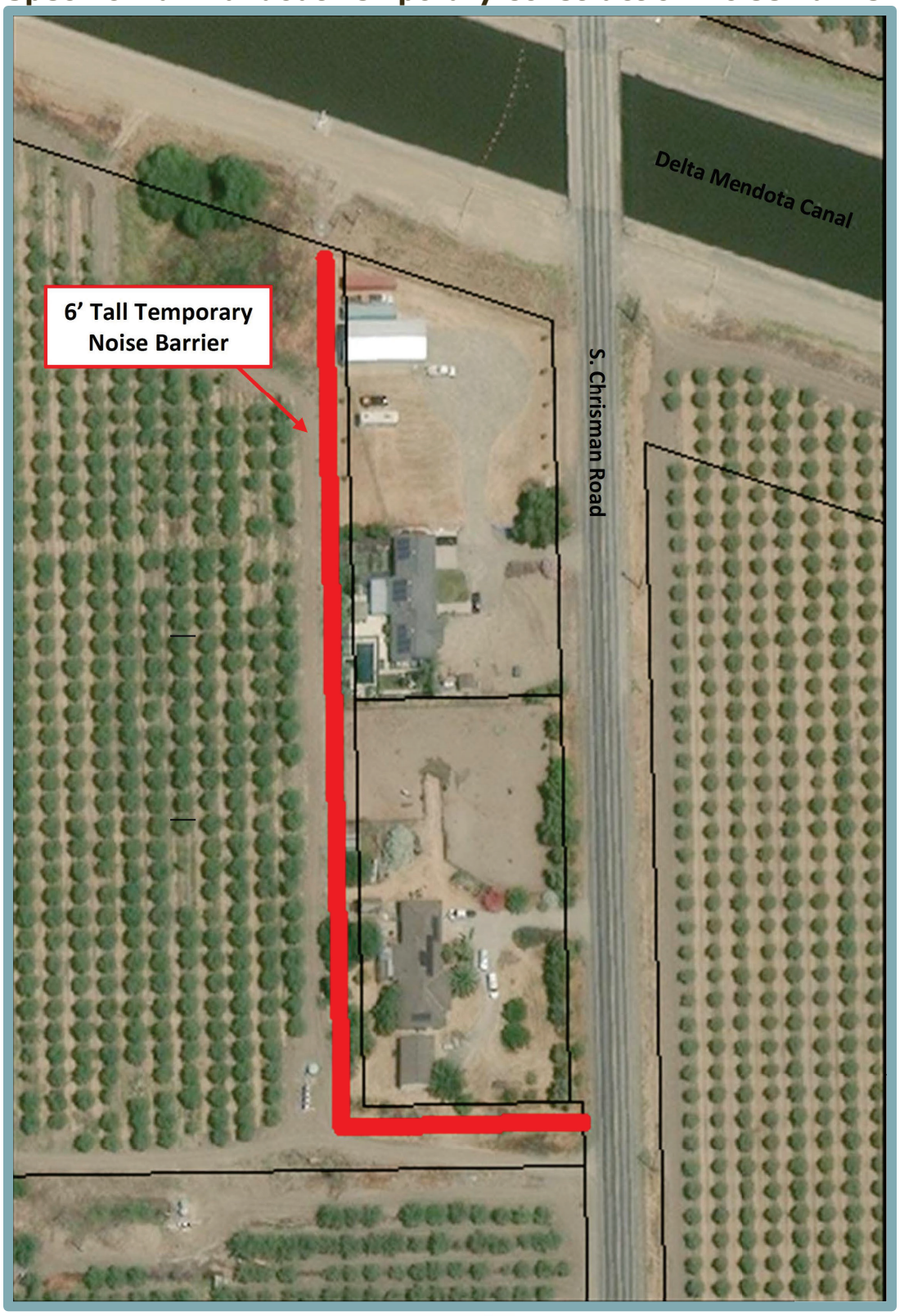


*Figure not OCR compatible.

- *The barrier shall be free from gaps, opening, or penetrations to ensure maximum performance.*

Initial Phase, Specific Plan Buildout

4.10-1(b) *Prior to the approval of any grading and/or building permits, the San Joaquin County Community Development Department, shall establish the following as conditions of approval for any permit that results in the use of construction equipment:*

- *On-site construction activities shall be limited to between 7:00 AM and 7:00 PM, unless otherwise allowed within the Pacific Gateway Specific Plan;*
- *All construction equipment powered by internal combustion engines shall be properly muffled and maintained;*
- *Quiet construction equipment, particularly air compressors, are to be selected whenever possible;*
- *All stationary noise-generating construction equipment such as generators or air compressors are to be located as far as is practical from existing residences. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site;*
- *Unnecessary idling of internal combustion engines is prohibited; and*
- *The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.*

Off-Site Improvements Study Area

4.10-1(c) *Prior to the approval of any grading and/or building permits, the project applicant shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive land uses and include specific noise management measures to be included within the project plans and specifications, subject to review and approval by the San Joaquin County Community Development Department, or other appropriate agency within whose jurisdiction the construction project is located. The noise management measures may include, but are not necessarily limited to, the following:*

- *Construction activities shall only take place between the hours specified by the applicable local ordinance;*
- *All heavy construction shall be maintained in good operating condition, with all internal-combustion, engine-driven equipment fitted with intake and exhaust mufflers that are in good condition;*

- *All mobile or fixed noise-producing equipment used on the proposed project that is regulated for noise output by a local, State, or federal agency shall comply with such regulations while in the project activity;*
- *Where feasible, electrically powered equipment shall be used instead of pneumatic or internal combustion powered equipment;*
- *All stationary noise-generating equipment shall be located as far away as possible from neighboring property lines;*
- *Signs prohibiting unnecessary idling of internal-combustion engines shall be posted;*
- *If deemed warranted by the construction noise management plan, a minimum six-foot-tall temporary construction sound wall shall be constructed along the construction area boundary adjacent to existing noise-sensitive receptors. The sound barrier fencing should consist of ½-inch plywood or minimum STC 27 sound curtains placed to shield nearby sensitive receptors. The barriers should be free from gaps, openings, or penetrations to ensure maximum performance except where needed for access. The temporary construction sound wall shall be constructed prior to any demolition or other ground disturbing activities associated with construction and remain in place until completion of construction activities within 100 feet of noise-sensitive receptors; and*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells shall be for safety warning purposes only.*

4.10-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below, even with mitigation, the impact is *significant and unavoidable*.

The primary sources of noise associated with the proposed project would be traffic noise associated with traffic on local roadways, as well as operational noise associated with the loading docks, on-site vehicle circulation, wastewater treatment plant, and university. Such operational noise sources are discussed in further detail below.

The prospective off-site improvements would be limited to roadway improvements. Once constructed, the off-site improvements would not involve any long-term operations or noise-generating uses. Therefore, the Off-Site Improvements Study Area would not have the potential to result in a substantial permanent increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies and is not discussed further below.

Traffic Noise at Existing Sensitive Receptors

Based upon the FICON criteria shown in Table 4.10-9, where existing traffic noise levels are greater than 65 dBA L_{dn} at the outdoor activity areas of noise-sensitive uses, a 1.5 dBA L_{dn} increase in roadway noise levels would be considered significant. Where traffic noise levels are between 60 dBA L_{dn} and 65 dBA L_{dn}, a 3.0 dBA L_{dn} increase in roadway noise levels would be considered significant. Where traffic noise levels are less than 60 dBA L_{dn}, a 5.0 dBA L_{dn} increase in roadway noise levels would be considered significant. Additionally, an impact would occur if the proposed project would cause noise levels at an outdoor area of a noise-sensitive use to exceed the San Joaquin County 65 dBA L_{dn} exterior noise standard, or the City of Tracy 60 dBA L_{dn} exterior noise standard (for receptors within the City). The following discussions include a separate analysis of traffic noise impacts associated with the Initial Phase and Specific Plan Buildout of the proposed project.

Initial Phase

Using the methodology described in the Method of Analysis section above, traffic noise levels under Initial Phase conditions were estimated as part of the Environmental Noise Assessment and are presented below in Table 4.10-12. Table 4.10-12 is for screening purposes and does not account for varying setbacks along each roadway segment. A more in-depth house-by-house analysis was also conducted by Saxelby, which is discussed below. Traffic noise levels were predicted for the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. Predicted traffic noise levels were then compared to the noise level increase significance criteria presented in Table 4.10-9.

As shown in Table 4.10-12, the Initial Phase would result in significant noise level increases on two roadway segments: South Chrisman Road from Valpico Road to West Linne Road and South Chrisman Road from West Linne Road to Durham Ferry Road. Due to the large number of potentially impacted receptors, Saxelby analyzed traffic noise level increases at each sensitive receptor, or groups of receptors, located along each of the roadway segments where a potentially significant impact was identified (South Chrisman Road from Valpico Road to West Linne Road and South Chrisman Road from West Linne Road to Durham Ferry Road).

Based upon the detailed traffic noise analysis shown in Appendix D of the Environmental Noise Assessment (see Appendix M of this EIR), under the Existing Plus Initial Phase traffic conditions, a total of 27 sensitive receptors were identified as impacted due to either the increase in traffic noise, or the proposed project causing noise levels to exceed the applicable San Joaquin County or City of Tracy exterior noise standards. Thus, as discussed in further detail below, mitigation would be required to reduce traffic noise at impacted sensitive receptors. Table 4.10-13 shows the predicted noise levels at each sensitive receptor location under Existing Plus Initial Phase traffic conditions, with and without mitigation.

Table 4.10-12
Existing Plus Initial Phase Traffic Noise Level Increases

Segment #	Roadway	Segment	Predicted Exterior Noise Level at Closest Sensitive Receptors (dBA L_{dn})					
			Existing	Existing Plus Initial Phase	Change	Local Noise Standard, L_{dn}	Threshold of Significance	Exceeds Threshold?
1	South Chrisman Road	Eleventh Street to West Schulte Road	71.5	72.7	1.2	65 dBA	+1.5 dBA	No
2	South Chrisman Road	West Schulte Road to Valpico Road	62.2	64.0	1.8	65 dBA	+3.0 dBA or >65 dBA	No
3	**South Chrisman Road**	**Valpico Road to West Linne Road**	**67.5**	**69.4**	**1.9**	**60 dBA**	**+1.5 dBA**	**Yes**
4	West Linne Road	South Tracy Boulevard to South MacArthur Road	72.6	73.0	0.4	65 dBA	+1.5 dBA	No
5	South Tracy Boulevard	West Linne Road to I-580	72.7	72.7	0.0	65 dBA	+1.5 dBA	No
6	West Linne Road	South MacArthur Road to South Chrisman Road	68.7	68.9	0.2	65 dBA	+1.5 dBA	No
7	South MacArthur Boulevard	West Linne Road to Project Site	59.4	59.4	0.0	65 dBA	+5.0 dBA or >65 dBA	No
8	**South Chrisman Road**	**West Linne Road to Durham Ferry Road**	**67.8**	**70.1**	**2.3**	**65 dBA**	**+1.5 dBA**	**Yes**
9	South Chrisman Road	Durham Ferry Road to SR 132	58.3	60.6	2.3	65 dBA	+5.0 dBA or >65 dBA	No
10	Durham Ferry Road	South Chrisman Road to South Bird Road	59.3	59.4	0.1	65 dBA	+5.0 dBA or >65 dBA	No
11	Corral Hollow Road	West Linne Road to I-580	55.7	55.7	0.0	65 dBA	+5.0 dBA or >65 dBA	No
12	South Bird Road	South Lehman Road to Durham Ferry Road	56.9	56.5	-0.4	65 dBA	+5.0 dBA or >65 dBA	No
13	Durham Ferry Road	South Bird Road to I-5	65.2	66.4	1.2	65 dBA	+1.5 dBA	No
14	West Lehman Road	South Bird Road to Ahern Road	51.6	50.9	-0.7	65 dBA	+5.0 dBA or >65 dBA	No

Bold indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Source: Saxelby, 2025.

Table 4.10-13
Existing Plus Initial Phase Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Initial Phase (dBA L_{dn})						Existing Plus Initial Phase– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Initial Phase	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R1	1	24169 South Chrisman Road, Tracy, CA 95304	1	71.5	72.7	1.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R2	1	24301 South Chrisman Road Unit B, Tracy, CA 95304	1	62.9	64.1	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R3	1	24353 South Chrisman Road, Tracy, CA 95304	1	60.6	61.8	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R4	1	24591 South Chrisman Road, Tracy, CA 95304	1	60.6	61.8	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R5	1	24711 South Chrisman Road, Tracy, CA 95304	1	60.1	61.3	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R6	1	25023 South Chrisman Road, Tracy, CA 95304	1	62.2	63.4	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R7	1	25079 South Chrisman Road, Tracy, CA 95304	1	61.0	62.2	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R8	1	25111 South Chrisman Road, Tracy, CA 95304	1	60.4	61.6	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R9	1	25288 South Chrisman Road, Tracy, CA 95304	1	59.1	60.3	1.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R10	2	25673 South Chrisman Road, Tracy, CA 95304	1	62.2	64.0	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R11	2	25909 South Chrisman Road, Tracy, CA 95304	1	55.7	57.5	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R12	2	1728 Toulouse Court, Tracy, CA 95304	29	62.2	64.0	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R13	3	27000 Hillview Street, Tracy, CA 95304	1	67.5	69.4	1.9	**1.5**	No	**Yes**	-2.1	65.4	1.5	No	No
R14	3	27070 Hillview Street, Tracy, CA 95304	1	60.0	61.9	1.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R15	3	27120 Hillview Street, Tracy, CA 95304	1	61.2	63.1	1.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R16	3	27150 Hillview Street, Tracy, CA 95304	1	61.2	63.1	1.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R17	3	27200 Hillview Street, Tracy, CA 95304	1	66.5	68.4	1.9	**1.5**	No	**Yes**	-2.1	64.4	1.5	No	No
R18	3	27251 South Chrisman Road, Tracy, CA 95304	1	69.1	71.0	1.9	**1.5**	No	**Yes**	-2.1	67.0	1.5	No	No
R19	3	27320 Hillview Street, Tracy, CA 95304	1	65.9	67.8	1.9	**1.5**	No	**Yes**	-2.1	63.8	1.5	No	No
R20	3	22360 Walnut Court, Tracy, CA 95304	1	60.8	62.7	1.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R21	3	27398 Walnut Court, Tracy, CA 95304	1	63.2	65.1	1.9	3.0	**Yes**	**Yes**	-2.1	61.1	3.0	No	No
R22	3	27503 South Chrisman Road, Tracy, CA 95304	2	69.1	71.0	1.9	**1.5**	No	**Yes**	-2.1	67.0	1.5	No	No
R23	3	27527 South Chrisman Road, Tracy, CA 95304	15	66.8	68.7	1.9	**1.5**	No	**Yes**	-2.1	64.7	1.5	No	No

(Continued on next page)



Table 4.10-13
Existing Plus Initial Phase Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Initial Phase (dBA L_{dn})						Existing Plus Initial Phase– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Initial Phase	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R26	4	10450 West Linne Rdpad, Tracy, CA 95377	1	72.6	73.0	0.4	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R27	4	10322 West Linne Road, Tracy, CA 95377	2	59.1	59.5	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R28	4	4717 Bonsai Avenue, Tracy, CA 95377	6	53.6	54.0	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R29	4	4739 Windchime Way, Tracy, CA 95377	4	60.1	60.5	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R30	4	4723 Cherub Way, Tracy, CA 95377	5	53.4	53.8	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R31	4	187 Glenhaven Drive, Tracy, CA 95377	11	52.3	52.7	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R32	4	4740 Glenbrook Drive, Tracy, CA 95377	15	53.7	54.1	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R33	4	9362 Lorraine Road, Tracy, CA 95377	1	61.6	62.0	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R34	4	9310 Lorraine Road, Tracy, CA 95377	1	62.5	62.9	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R35	4	9262 Lorraine Road, Tracy, CA 95377	1	60.3	60.7	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R36	4	28455 South MacArthur Drive, Tracy, CA 95377	1	64.1	64.5	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R37	5	28700 South Tracy Boulevard, Tracy, CA 95377	1	72.7	72.7	0.0	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R25	5	28584 South Tracy Boulevard, Tracy, CA 95377	1	55.9	56.3	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R38	5	28770 South Tracy Boulevard, Tracy, CA 95377	1	62.9	62.9	0.0	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R39	5	6683 South Tracy Boulevard, Tracy, CA 95377	1	65.5	65.5	0.0	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R40	5	30558 South Tracy Boulevard, Tracy, CA 95377	1	57.5	57.5	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R41	5	30773 South Tracy Boulevard, Tracy, CA 95377	1	60.5	60.5	0.0	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R42	6	8393 West Linne Road, Tracy, CA 95304	1	68.7	68.9	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R43	6	8806 Waterwell Way, Tracy, CA 95304	1	60.4	60.6	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R44	6	8762 Waterwell Way, Tracy, CA 95304	1	60.2	60.4	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R45	6	8738 Waterwell Way, Tracy, CA 95304	1	60.2	60.4	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R46	6	8706 Waterwell Way, Tracy, CA 95304	1	59.9	60.1	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R47	6	8672 Waterwell Way, Tracy, CA 95304	1	60.0	60.2	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R48	6	8650 Waterwell Way, Tracy, CA 95304	2	60.5	60.7	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R49	6	8556 Waterwell Way, Tracy, CA 95304	1	59.2	59.4	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R50	6	8538 Waterwell Way, Tracy, CA 95304	1	58.5	58.7	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R51	6	8512 Waterwell Way, Tracy, CA 95304	1	57.0	57.2	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-13
Existing Plus Initial Phase Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Initial Phase ($dBA L_{dn}$)						Existing Plus Initial Phase– with Quiet Pavement at Impacted Receptors ($dBA L_{dn}$)				
				Existing	Existing Plus Initial Phase	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R52	6	28552 South MacArthur Drive, Tracy, CA 95377	1	57.5	57.7	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R53	6	28475 Depot Master Drive, Tracy, CA 95304	1	68.3	68.5	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R54	6	28480 Depot Master Drive, Tracy, CA 95304	1	68.7	68.9	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R55	6	8120 Depot Master Court, Tracy, CA 95304	1	68.7	68.9	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R56	6	28460 Jack Godwin Court, Tracy, CA 95304	1	70.3	70.5	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R57	6	28443 Jack Godwin Court, Tracy, CA 95304	1	69.2	69.4	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R58	6	28450 Jack Godwin Court, Tracy, CA 95304	1	69.2	69.4	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R59	6	7897 West Linne Road, Tracy, CA 95304	1	64.0	64.2	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R60	6	7860 Zilli Drive, Tracy, CA 95304	1	70.3	70.5	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R61	6	7831 West Linne Road, Tracy, CA 95304	1	64.2	64.4	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R62	6	7831 West Linne Road, Tracy, CA 95304	1	70.9	71.1	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R63	6	7783 West Linne Road, Tracy, CA 95304	1	63.7	63.9	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R64	6	7717 West Linne Road, Tracy, CA 95304	1	62.4	62.6	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R65	6	7705 West Linne Road, Tracy, CA 95304	1	68.3	68.5	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R66	6	7681 West Linne Road, Tracy, CA 95304	1	65.2	65.4	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R67	6	7594 West Linne Road, Tracy, CA 95304	1	71.7	71.9	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R68	6	7700 West Linne Road, Tracy, CA 95304	1	63.1	63.3	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R69	6	7714 West Linne Road, Tracy, CA 95304	1	59.1	59.3	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R70	6	7790 West Linne Road, Tracy, CA 95304	1	58.9	59.1	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R71	6	7834 West Linne Road, Tracy, CA 95304	1	59.4	59.6	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R72	6	7902 West Linne Road, Tracy, CA 95304	1	62.7	62.9	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R73	6	7936 West Linne Road, Tracy, CA 95304	1	62.2	62.4	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R74	6	8000 West Linne Road, Tracy, CA 95304	1	60.3	60.5	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R75	7	28544 South MacArthur Drive, Tracy, CA 95377	1	59.4	59.4	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R76	7	30144 South MacArthur Drive, Tracy, CA 95377	1	58.3	58.3	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R77	8	7170 West Linne Road, Tracy, CA 95304	2	67.8	70.1	2.3	**1.5**	No	**Yes**	-1.7	66.1	1.5	No	No
R78	8	28981 South Chrisman Road, Tracy, CA 95304	1	67.5	69.8	2.3	**1.5**	No	**Yes**	-1.7	65.8	1.5	No	No

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Table 4.10-13
Existing Plus Initial Phase Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Initial Phase ($dBA L_{dn}$)						Existing Plus Initial Phase– with Quiet Pavement at Impacted Receptors ($dBA L_{dn}$)				
				Existing	Existing Plus Initial Phase	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R79	8	29325 South Chrisman Road, Tracy, CA 95304	1	69.3	71.6	2.3	**1.5**	No	**Yes**	-1.7	67.6	1.5	No	No
R80	8	29423 South Chrisman Road, Tracy, CA 95304	1	57.2	59.5	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R81	8	29400 South Chrisman Road, Tracy, CA 95304	1	58.0	60.3	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R82	8	29430 South Chrisman Road, Tracy, CA 95304	1	59.9	62.2	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R83	8	29430 South Chrisman Road, Tracy, CA 95304	1	57.0	59.3	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R84	8	29466 South Chrisman Road, Tracy, CA 95304	1	59.7	62.0	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R85	8	29466 South Chrisman Road, Tracy, CA 95304	1	57.5	59.8	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R86	8	29500 South Chrisman Road, Tracy, CA 95304	1	59.9	62.2	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R87	8	29534 South Chrisman Road, Tracy, CA 95304	1	59.9	62.2	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R88	8	29561 South Chrisman Road, Tracy, CA 95304	1	60.6	62.9	2.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R89	8	29879 South Chrisman Road, Tracy, CA 95304	1	58.6	60.9	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R90	8	29929 South Chrisman Road, Tracy, CA 95304	1	59.7	62.0	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R91	8	29750 South Chrisman Road, Tracy, CA 95304	1	61.6	63.9	2.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R92	8	29800 South Chrisman Road, Tracy, CA 95304	1	57.5	59.8	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R93	8	29850 South Chrisman Road, Tracy, CA 95304	1	55.8	58.1	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R94	8	30000 South Chrisman Road, Tracy, CA 95304	1	53.0	55.3	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R94b	8	7500 West Linne Road, Tracy, CA 95304 (Jefferson School)	1	61.3	63.6	2.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R95	9	32851 South Chrisman Road, Tracy, CA 95304	1	58.3	60.6	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R96	9	32951 South Chrisman Road, Tracy, CA 95304	1	58.3	60.6	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R97	10	6601 Durham Ferry Road, Tracy, CA 95304	1	59.3	59.4	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-13
Existing Plus Initial Phase Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Initial Phase ($dBA L_{dn}$)						Existing Plus Initial Phase– with Quiet Pavement at Impacted Receptors ($dBA L_{dn}$)				
				Existing	Existing Plus Initial Phase	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R98	10	6685 Durham Ferry Road, Tracy, CA 95304	1	51.2	51.3	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R99	10	7060 Durham Ferry Road, Tracy, CA 95304	1	43.8	43.9	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R100	10	6610 Durham Ferry Road, Tracy, CA 95304	1	51.2	51.3	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R101	10	6554 Durham Ferry Road, Tracy, CA 95304	1	49.5	49.6	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R102	10	6512 Durham Ferry Road, Tracy, CA 95304	1	47.7	47.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R103	10	6500 Durham Ferry Road, Tracy, CA 95304	1	48.0	48.1	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R104	10	6410 Durham Ferry Road, Tracy, CA 95304	1	46.9	47.0	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R105	10	6368 Durham Ferry Road, Tracy, CA 95304	1	46.7	46.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R106	10	6312 Durham Ferry Road, Tracy, CA 95304	1	47.1	47.2	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R107	10	6120 Durham Ferry Road, Tracy, CA 95304	1	44.7	44.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R108	10	5922 Durham Ferry Road, Tracy, CA 95304	1	50.2	50.3	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R109	10	5850 Durham Ferry Road, Tracy, CA 95304	1	51.4	51.5	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R110	10	5850 Durham Ferry Road, Tracy, CA 95304	1	52.8	52.9	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R111	10	5801 Durham Ferry Road, Tracy, CA 95304	1	50.8	50.9	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R112	10	5700 Durham Ferry Road, Tracy, CA 95304	1	48.9	49.0	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R113	10	5366 Durham Ferry Road, Tracy, CA 95304	1	44.3	44.4	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R114	10	5404 Durham Ferry Road, Tracy, CA 95304	1	48.7	48.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R115	10	5613 Durham Ferry Road, Tracy, CA 95304	1	45.2	45.3	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R116	10	5392 Durham Ferry Road, Tracy, CA 95304	1	48.6	48.7	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R117	10	5336 Durham Ferry Road, Tracy, CA 95304	1	47.5	47.6	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-13
Existing Plus Initial Phase Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Initial Phase (dBA L_{dn})						Existing Plus Initial Phase– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Initial Phase	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R118	10	30751 South Bird Road, Tracy, CA 95304	1	51.7	51.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R119	10	4952 Durham Ferry Road, Tracy, CA 95304	1	46.4	46.5	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R120	10	4911 Durham Ferry Road, Tracy, CA 95304	1	50.1	50.2	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R121	10	4952 Durham Ferry Road, Tracy, CA 95304	1	43.1	43.2	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R122	10	4876 Durham Ferry Road, Tracy, CA 95304	1	48.3	48.4	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R123	10	4873 Durham Ferry Road, Tracy, CA 95304	1	52.6	52.7	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R124	10	4820 Durham Ferry Road, Tracy, CA 95304	1	48.7	48.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R125	10	4699 Durham Ferry Road, Tracy, CA 95304	1	50.1	50.2	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R127	12	31154 South Bird Road, Tracy, CA 95304	2	56.9	56.5	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R128	12	31069 South Bird Road, Tracy, CA 95304	1	53.3	52.9	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R129	12	30920 South Bird Road, Tracy, CA 95304	1	51.3	50.9	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R130	12	30908 South Bird Road, Tracy, CA 95304	1	53.5	53.1	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R131	12	30830 South Bird Road, Tracy, CA 95304	1	52.4	52.0	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R132a	13	4447 Durham Ferry Road, Tracy, CA 95304	1	65.2	66.4	1.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R132b	13	4303 Durham Ferry Road, Tracy, CA 95304	1	60.7	61.9	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R133	13	4001 Durham Ferry Road, Tracy, CA 95304	1	61.7	62.9	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R134	13	3652 Durham Ferry Road, Tracy, CA 95304	1	49.1	50.3	1.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R135	13	3652 Durham Ferry Road, Tracy, CA 95304	1	53.4	54.6	1.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R136	13	3081 Durham Ferry Road, Tracy, CA 95304	1	54.7	55.9	1.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R137	14	4494 West Lehman Road, Tracy, CA 95304	1	51.6	50.9	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R138	14	3994 West Lehman Road, Tracy, CA 95304	1	39.7	39.0	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R139	14	3656 West Lehman Road, Tracy, CA 95304	1	40.2	39.5	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-13
Existing Plus Initial Phase Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Initial Phase (dBA L_{dn})						Existing Plus Initial Phase– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Initial Phase	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R140	14	3545 West Lehman Road, Tracy, CA 95304	1	43.6	42.9	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R141	14	3350 West Lehman Road, Tracy, CA 95304	1	46.8	46.1	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
Total Impacted Receiver Points, without Mitigation									**10**	**Total Impacted Receiver Points, with Mitigation**				**0**
Total Impacted Receptors, without Mitigation									**27**	**Total Impacted Receptors, with Mitigation**				**0**

Notes:
Receiver IDs represent the specific point where traffic noise levels have been analyzed. Some receiver points may represent more than one noise sensitive receptor where the receptors have similar noise exposure. Grouping of sensitive receptors where more than one receptor have a similar noise exposure is a common method for conducting traffic noise impact studies to minimize the number of analysis points. Please note that due to modifications made to the proposed project since the prior application, some receptor locations have been moved and may appear out of order in the table, and some receptor numbers are not used.

Bold indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Source: Saxelby, 2025.

Specific Plan Buildout

Using the methodology described in the Method of Analysis section above, traffic noise levels under Specific Plan Buildout conditions were estimated as part of the Environmental Noise Assessment and are presented below in Table 4.10-14. Table 4.10-14 is for screening purposes and does not account for varying setbacks along each roadway segment. A more in-depth house-by-house analysis was also conducted by Saxelby, which is discussed below. Traffic noise levels were predicted for the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. Predicted traffic noise levels were then compared to the noise level increase significance criteria presented in Table 4.10-9. As shown in Table 4.10-14, full buildout of the Specific Plan is predicted to result in significant noise level increases on all but three of the analyzed roadway segments.

Based upon the detailed traffic noise analysis shown in Appendix D of the Environmental Noise Assessment (see Appendix M of this EIR), under the Existing Plus Specific Plan Buildout conditions, a total of 150 sensitive receptors were identified as impacted due to either the increase in traffic noise, or the proposed project causing noise levels to exceed the applicable San Joaquin County or City of Tracy exterior noise standards. Thus, as discussed in further detail below, mitigation would be required to reduce traffic noise at impacted sensitive receptors. Table 4.10-15 shows the predicted noise levels at each sensitive receptor location under Existing Plus Specific Plan Buildout traffic conditions, with and without mitigation.

Operational Noise at Existing Sensitive Receptors

As discussed above, the San Joaquin County General Plan establishes an allowable exterior noise level limit of 50 dBA L_{eq} during daytime (7:00 AM to 10:00 PM) hours and 45 dBA L_{eq} during nighttime hours (10:00 PM to 7:00 AM) for stationary noise sources.

Operational noise associated with both the Initial Phase and Specific Plan Buildout would include noise generated from loading docks and on-site truck circulation, as well as the wastewater treatment plant and the proposed university. Noise levels associated with the aforementioned operations were estimated using the methodology presented in the Method of Analysis section above. Operational noise impacts associated with the Initial Phase and Specific Plan Buildout are discussed separately below.

Initial Phase

Using the methodology described in the Method of Analysis section, operational noise levels generated by the Initial Phase of the proposed project were estimated by Saxelby and are presented in Figure 4.10-4. As shown in the figure, operations associated with the Initial Phase would not expose nearby residences to noise levels exceeding 35 dBA L_{eq} during either the peak daytime or nighttime hours. Therefore, operation of the Initial Phase of the proposed project would not result in noise levels in excess of the County's 50 dBA L_{eq} daytime or 45 dBA L_{eq} nighttime noise standards, and impacts related to such would be less than significant.

Table 4.10-14
Existing Plus Specific Plan Buildout Traffic Noise Level Increases

Segment #	Roadway	Segment	Predicted Exterior Noise Level at Closest Sensitive Receptors (dBA L_{dn})					
			Existing	Existing Specific Plan Buildout	Change	Local Noise Standard, L_{dn}	Criteria	Significant?
1	**South Chrisman Road**	**Eleventh Street to West Schulte Road**	**71.5**	**76.0**	**4.5**	**65 dBA**	**+1.5 dBA**	**Yes**
2	**South Chrisman Road**	**West Schulte Road to Valpico Road**	**62.2**	**67.6**	**5.4**	**65 dBA**	**+3.0 dBA or >65 dBA**	**Yes**
3	**South Chrisman Road**	**Valpico Road to West Linne Road**	**67.5**	**73.6**	**6.1**	**60 dBA**	**+1.5 dBA**	**Yes**
4	**West Linne Road**	**South Tracy Boulevard to South MacArthur Road**	**72.6**	**74.4**	**1.8**	**65 dBA**	**+1.5 dBA**	**Yes**
5	South Tracy Boulevard	West Linne Road to I-580	72.7	72.7	0.0	65 dBA	+1.5 dBA	No
6	**West Linne Road**	**South MacArthur Road to South Chrisman Road**	**68.7**	**71.4**	**2.7**	**65 dBA**	**+1.5 dBA**	**Yes**
7	South MacArthur Boulevard	West Linne Road to Project Site	59.4	62.2	2.8	65 dBA	+5.0 dBA or >65 dBA	No
8	**Chrisman Road**	**West Linne Road to Durham Ferry Road**	**67.8**	**74.4**	**6.6**	**65 dBA**	**+1.5 dBA**	**Yes**
9	**South Chrisman Road**	**Durham Ferry Road to SR 132**	**58.3**	**65.2**	**6.9**	**65 dBA**	**+5.0 dBA or >65 dBA**	**Yes**
10	**Durham Ferry Road**	**South Chrisman Road to South Bird Road**	**59.3**	**64.7**	**5.4**	**65 dBA**	**+5.0 dBA or >65 dBA**	**Yes**
11	Corral Hollow Road	West Linne Road to I-580	55.7	56.6	0.9	65 dBA	+5.0 dBA or >65 dBA	No
12	**South Bird Road**	**South Lehman Road to Durham Ferry Road**	**56.9**	**62.2**	**5.3**	**65 dBA**	**+5.0 dBA or >65 dBA**	**Yes**
13	**Durham Ferry Road**	**South Bird Road to I-5**	**65.2**	**70.1**	**4.9**	**65 dBA**	**+1.5 dBA**	**Yes**
14	**West Lehman Road**	**South Bird Road to Ahern Road**	**51.6**	**58.7**	**7.1**	**65 dBA**	**+5.0 dBA or >65 dBA**	**Yes**

Bold indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Source: Saxelby, 2025.

Table 4.10-15
Existing Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Specific Plan Buildout(dBA L_{dn})						Existing Plus Specific Plan Buildout– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R1	1	24169 South Chrisman Road, Tracy, CA 95304	1	71.5	76.0	4.5	**1.5**	No	**Yes**	0.5	72.0	1.5	No	No
R2	1	24301 South Chrisman Road Unit B, Tracy, CA 95304	1	62.9	67.4	4.5	**3.0**	**Yes**	**Yes**	0.5	63.4	3.0	No	No
R3	1	24353 South Chrisman Road, Tracy, CA 95304	1	60.6	65.1	4.5	**3.0**	**Yes**	**Yes**	0.5	61.1	3.0	No	No
R4	1	24591 South Chrisman Road, Tracy, CA 95304	1	60.6	65.1	4.5	**3.0**	**Yes**	**Yes**	0.5	61.1	3.0	No	No
R5	1	24711 South Chrisman Road, Tracy, CA 95304	1	60.1	64.6	4.5	**3.0**	No	**Yes**	0.5	60.6	3.0	No	No
R6	1	25023 South Chrisman Road, Tracy, CA 95304	1	62.2	66.7	4.5	**3.0**	**Yes**	**Yes**	0.5	62.7	3.0	No	No
R7	1	25079 South Chrisman Road, Tracy, CA 95304	1	61.0	65.5	4.5	**3.0**	**Yes**	**Yes**	0.5	61.5	3.0	No	No
R8	1	25111 South Chrisman Road, Tracy, CA 95304	1	60.4	64.9	4.5	**3.0**	No	**Yes**	0.5	60.9	3.0	No	No
R9	1	25288 South Chrisman Road, Tracy, CA 95304	1	59.1	63.6	4.5	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R10	2	25673 South Chrisman Road, Tracy, CA 95304	1	62.2	67.6	5.4	**3.0**	**Yes**	**Yes**	1.4	63.6	3.0	No	No
R11	2	25909 South Chrisman Road, Tracy, CA 95304	1	55.7	61.1	5.4	**5.0**	No	**Yes**	1.4	57.1	5.0	No	No
R12	2	1728 Toulouse Court, Tracy, CA 95304	29	62.2	67.6	5.4	**3.0**	No	**Yes**	1.4	63.6	3.0	No	No
R13	3	27000 Hillview Street, Tracy, CA 95304	1	67.5	73.6	6.1	**1.5**	No	**Yes**	2.1	69.6	**1.5**	No	**Yes**
R14	3	27070 Hillview Street, Tracy, CA 95304	1	60.0	66.1	6.1	**5.0**	**Yes**	**Yes**	2.1	62.1	5.0	No	No
R15	3	27120 Hillview Street, Tracy, CA 95304	1	61.2	67.3	6.1	**3.0**	**Yes**	**Yes**	2.1	63.3	3.0	No	No
R16	3	27150 Hillview Street, Tracy, CA 95304	1	61.2	67.3	6.1	**3.0**	**Yes**	**Yes**	2.1	63.3	3.0	No	No
R17	3	27200 Hillview Street, Tracy, CA 95304	1	66.5	72.6	6.1	**1.5**	No	**Yes**	2.1	68.6	**1.5**	No	**Yes**
R18	3	27251 South Chrisman Road, Tracy, CA 95304	1	69.1	75.2	6.1	**1.5**	No	**Yes**	2.1	71.2	**1.5**	No	**Yes**
R19	3	27320 Hillview Street, Tracy, CA 95304	1	65.9	72.0	6.1	**1.5**	No	**Yes**	2.1	68.0	**1.5**	No	**Yes**
R20	3	22360 Walnut Court, Tracy, CA 95304	1	60.8	66.9	6.1	**3.0**	**Yes**	**Yes**	2.1	62.9	3.0	No	No
R21	3	27398 Walnut Court, Tracy, CA 95304	1	63.2	69.3	6.1	**3.0**	**Yes**	**Yes**	2.1	65.3	3.0	**Yes**	**Yes**
R22	3	27503 South Chrisman Road, Tracy, CA 95304	2	69.1	75.2	6. 1	**1.5**	No	**Yes**	2.1	71.2	**1.5**	No	**Yes**
R23	3	27527 South Chrisman Road, Tracy, CA 95304	15	66.8	72.9	6.1	**1.5**	No	**Yes**	2.1	68.9	**1.5**	No	**Yes**

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Table 4.10-15
Existing Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Specific Plan Buildout(dBA L_{dn})						Existing Plus Specific Plan Buildout– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R26	4	10450 West Linne Rdpad, Tracy, CA 95377	1	72.6	74.4	1.8	**1.5**	No	**Yes**	-2.2	70.4	1.5	No	No
R27	4	10322 West Linne Road, Tracy, CA 95377	2	59.1	60.9	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R28	4	4717 Bonsai Avenue, Tracy, CA 95377	6	53.6	55.4	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R29	4	4739 Windchime Way, Tracy, CA 95377	4	60.1	61.9	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R30	4	4723 Cherub Way, Tracy, CA 95377	5	53.4	55.2	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R31	4	187 Glenhaven Drive, Tracy, CA 95377	11	52.3	54.1	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R32	4	4740 Glenbrook Drive, Tracy, CA 95377	15	53.7	55.5	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R33	4	9362 Lorraine Road, Tracy, CA 95377	1	61.6	63.4	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R34	4	9310 Lorraine Road, Tracy, CA 95377	1	62.5	64.3	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R35	4	9262 Lorraine Road, Tracy, CA 95377	1	60.3	62.1	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R36	4	28455 South MacArthur Drive, Tracy, CA 95377	1	64.1	65.9	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R37	5	28700 South Tracy Boulevard, Tracy, CA 95377	1	72.7	72.7	0.0	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R25	5	28584 South Tracy Boulevard, Tracy, CA 95377	1	55.9	56.0	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R38	5	28770 South Tracy Boulevard, Tracy, CA 95377	1	62.9	62.9	0.0	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R39	5	6683 South Tracy Boulevard, Tracy, CA 95377	1	65.5	65.5	0.0	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R40	5	30558 South Tracy Boulevard, Tracy, CA 95377	1	57.5	57.5	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R41	5	30773 South Tracy Boulevard, Tracy, CA 95377	1	60.5	60.5	0.0	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R42	6	8393 West Linne Road, Tracy, CA 95304	1	68.7	71.4	2.7	**1.5**	No	**Yes**	-1.3	67.4	1.5	No	No
R43	6	8806 Waterwell Way, Tracy, CA 95304	1	60.4	63.1	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R44	6	8762 Waterwell Way, Tracy, CA 95304	1	60.2	62.9	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R45	6	8738 Waterwell Way, Tracy, CA 95304	1	60.2	62.9	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R46	6	8706 Waterwell Way, Tracy, CA 95304	1	59.9	62.6	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R47	6	8672 Waterwell Way, Tracy, CA 95304	1	60.0	62.7	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R48	6	8650 Waterwell Way, Tracy, CA 95304	2	60.5	63.2	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R49	6	8556 Waterwell Way, Tracy, CA 95304	1	59.2	61.9	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R50	6	8538 Waterwell Way, Tracy, CA 95304	1	58.5	61.2	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R51	6	8512 Waterwell Way, Tracy, CA 95304	1	57.0	59.7	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-15
Existing Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Specific Plan Buildout(dBA L_{dn})						Existing Plus Specific Plan Buildout– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R52	6	28552 South MacArthur Drive, Tracy, CA 95377	1	57.5	60.2	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R53	6	28475 Depot Master Drive, Tracy, CA 95304	1	68.3	71.0	2.7	**1.5**	No	**Yes**	-1.3	67.0	1.5	No	No
R54	6	28480 Depot Master Drive, Tracy, CA 95304	1	68.7	71.4	2.7	**1.5**	No	**Yes**	-1.3	67.4	1.5	No	No
R55	6	8120 Depot Master Court, Tracy, CA 95304	1	68.7	71.4	2.7	**1.5**	No	**Yes**	-1.3	67.4	1.5	No	No
R56	6	28460 Jack Godwin Court, Tracy, CA 95304	1	70.3	73.0	2.7	**1.5**	No	**Yes**	-1.3	69.0	1.5	No	No
R57	6	28443 Jack Godwin Court, Tracy, CA 95304	1	69.2	71.9	2.7	**1.5**	No	**Yes**	-1.3	67.9	1.5	No	No
R58	6	28450 Jack Godwin Court, Tracy, CA 95304	1	69.2	71.9	2.7	**1.5**	No	**Yes**	-1.3	67.9	1.5	No	No
R59	6	7897 West Linne Road, Tracy, CA 95304	1	64.0	66.7	2.7	3.0	**Yes**	**Yes**	-1.3	62.7	3.0	No	No
R60	6	7860 Zilli Drive, Tracy, CA 95304	1	70.3	73.0	2.7	**1.5**	No	**Yes**	-1.3	69.0	1.5	No	No
R61	6	7831 West Linne Road, Tracy, CA 95304	1	64.2	66.9	2.7	3.0	**Yes**	**Yes**	-1.3	62.9	3.0	No	No
R62	6	7831 West Linne Road, Tracy, CA 95304	1	70.9	73.6	2.7	**1.5**	No	**Yes**	-1.3	69.6	1.5	No	No
R63	6	7783 West Linne Road, Tracy, CA 95304	1	63.7	66.4	2.7	3.0	**Yes**	**Yes**	-1.3	62.4	3.0	No	No
R64	6	7717 West Linne Road, Tracy, CA 95304	1	62.4	65.1	2.7	3.0	**Yes**	**Yes**	-1.3	61.1	3.0	No	No
R65	6	7705 West Linne Road, Tracy, CA 95304	1	68.3	71.0	2.7	**1.5**	No	**Yes**	-1.3	67.0	1.5	No	No
R66	6	7681 West Linne Road, Tracy, CA 95304	1	65.2	67.9	2.7	**1.5**	No	**Yes**	-1.3	63.9	1.5	No	No
R67	6	7594 West Linne Road, Tracy, CA 95304	1	71.7	74.4	2.7	**1.5**	No	**Yes**	-1.3	70.4	1.5	No	No
R68	6	7700 West Linne Road, Tracy, CA 95304	1	63.1	65.8	2.7	3.0	**Yes**	**Yes**	-1.3	61.8	3.0	No	No
R69	6	7714 West Linne Road, Tracy, CA 95304	1	59.1	61.8	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R70	6	7790 West Linne Road, Tracy, CA 95304	1	58.9	61.6	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R71	6	7834 West Linne Road, Tracy, CA 95304	1	59.4	62.1	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-15
Existing Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Specific Plan Buildout(dBA L_{dn})						Existing Plus Specific Plan Buildout– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R72	6	7902 West Linne Road, Tracy, CA 95304	1	62.7	65.4	2.7	3.0	**Yes**	**Yes**	-1.3	61.4	3.0	No	No
R73	6	7936 West Linne Road, Tracy, CA 95304	1	62.2	64.9	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R74	6	8000 West Linne Road, Tracy, CA 95304	1	60.3	63.0	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R75	7	28544 South MacArthur Drive, Tracy, CA 95377	1	59.4	62.2	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R76	7	30144 South MacArthur Drive, Tracy, CA 95377	1	58.3	61.1	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R77	8	7170 West Linne Road, Tracy, CA 95304	2	67.8	74.4	6.6	**1.5**	No	**Yes**	2.6	70.4	**1.5**	No	**Yes**
R78	8	28981 South Chrisman Road, Tracy, CA 95304	1	67.5	74.1	6.6	**1.5**	No	**Yes**	2.6	70.1	**1.5**	No	**Yes**
R79	8	29325 South Chrisman Road, Tracy, CA 95304	1	69.3	75.9	6.6	**1.5**	No	**Yes**	2.6	71.9	**1.5**	No	**Yes**
R80	8	29423 South Chrisman Road, Tracy, CA 95304	1	57.2	63.8	6.6	**5.0**	No	**Yes**	2.6	59.8	5.0	No	No
R81	8	29400 South Chrisman Road, Tracy, CA 95304	1	58.0	64.6	6.6	**5.0**	No	**Yes**	2.6	60.6	5.0	No	No
R82	8	29430 South Chrisman Road, Tracy, CA 95304	1	59.9	66.5	6.6	**5.0**	**Yes**	**Yes**	2.6	62.5	5.0	No	No
R83	8	29430 South Chrisman Road, Tracy, CA 95304	1	57.0	63.6	6.6	**5.0**	No	**Yes**	2.6	59.6	5.0	No	No
R84	8	29466 South Chrisman Road, Tracy, CA 95304	1	59.7	66.3	6.6	**5.0**	**Yes**	**Yes**	2.6	62.3	5.0	No	No
R85	8	29466 South Chrisman Road, Tracy, CA 95304	1	57.5	64.1	6.6	**5.0**	No	**Yes**	2.6	60.1	5.0	No	No
R86	8	29500 South Chrisman Road, Tracy, CA 95304	1	59.9	66.5	6.6	**5.0**	**Yes**	**Yes**	2.6	62.5	5.0	No	No
R87	8	29534 South Chrisman Road, Tracy, CA 95304	1	59.9	66.5	6.6	**5.0**	**Yes**	**Yes**	2.6	62.5	5.0	No	No
R88	8	29561 South Chrisman Road, Tracy, CA 95304	1	60.6	67.2	6.6	**3.0**	**Yes**	**Yes**	2.6	63.2	3.0	No	No
R89	8	29879 South Chrisman Road, Tracy, CA 95304	1	58.6	65.2	6.6	**5.0**	**Yes**	**Yes**	2.6	61.2	5.0	No	No
R90	8	29929 South Chrisman Road, Tracy, CA 95304	1	59.7	66.3	6.6	**5.0**	**Yes**	**Yes**	2.6	62.3	5.0	No	No
R91	8	29750 South Chrisman Road, Tracy, CA 95304	1	61.6	68.2	6.6	**3.0**	**Yes**	**Yes**	2.6	64.2	3.0	No	No

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Table 4.10-15
Existing Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Specific Plan Buildout(dBA L_{dn})						Existing Plus Specific Plan Buildout– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R92	8	29800 South Chrisman Road, Tracy, CA 95304	1	57.5	64.1	6.6	**5.0**	No	**Yes**	2.6	60.1	5.0	No	No
R93	8	29850 South Chrisman Road, Tracy, CA 95304	1	55.8	62.4	6.6	**5.0**	No	**Yes**	2.6	58.4	5.0	No	No
R94	8	30000 South Chrisman Road, Tracy, CA 95304	1	53.0	59.6	6.6	**5.0**	No	**Yes**	2.6	55.6	5.0	No	No
R94b	8	7500 West Linne Road, Tracy, CA 95304 (Jefferson School)	1	61.3	67.9	6.6	**3.0**	**Yes**	**Yes**	2.6	63.9	3.0	No	No
R95	9	32851 South Chrisman Road, Tracy, CA 95304	1	58.3	65.2	6.9	**5.0**	**Yes**	**Yes**	2.9	61.2	5.0	No	No
R96	9	32951 South Chrisman Road, Tracy, CA 95304	1	58.3	65.2	6.9	**5.0**	**Yes**	**Yes**	2.9	61.2	5.0	No	No
R97	10	6601 Durham Ferry Road, Tracy, CA 95304	1	59.3	64.7	5.4	**5.0**	No	**Yes**	1.4	60.7	5.0	No	No
R98	10	6685 Durham Ferry Road, Tracy, CA 95304	1	51.2	56.6	5.4	**5.0**	No	**Yes**	1.4	52.6	5.0	No	No
R99	10	7060 Durham Ferry Road, Tracy, CA 95304	1	43.8	49.2	5.4	**5.0**	No	**Yes**	1.4	45.2	5.0	No	No
R100	10	6610 Durham Ferry Road, Tracy, CA 95304	1	51.2	56.6	5.4	**5.0**	No	**Yes**	1.4	52.6	5.0	No	No
R101	10	6554 Durham Ferry Road, Tracy, CA 95304	1	49.5	54.9	5.4	**5.0**	No	**Yes**	1.4	50.9	5.0	No	No
R102	10	6512 Durham Ferry Road, Tracy, CA 95304	1	47.7	53.1	5.4	**5.0**	No	**Yes**	1.4	49.1	5.0	No	No
R103	10	6500 Durham Ferry Road, Tracy, CA 95304	1	48.0	53.4	5.4	**5.0**	No	**Yes**	1.4	49.4	5.0	No	No
R104	10	6410 Durham Ferry Road, Tracy, CA 95304	1	46.9	52.3	5.4	**5.0**	No	**Yes**	1.4	48.3	5.0	No	No
R105	10	6368 Durham Ferry Road, Tracy, CA 95304	1	46.7	52.1	5.4	**5.0**	No	**Yes**	1.4	48.1	5.0	No	No
R106	10	6312 Durham Ferry Road, Tracy, CA 95304	1	47.1	52.5	5.4	**5.0**	No	**Yes**	1.4	48.5	5.0	No	No
R107	10	6120 Durham Ferry Road, Tracy, CA 95304	1	44.7	50.1	5.4	**5.0**	No	**Yes**	1.4	46.1	5.0	No	No
R108	10	5922 Durham Ferry Road, Tracy, CA 95304	1	50.2	55.6	5.4	**5.0**	No	**Yes**	1.4	51.6	5.0	No	No
R109	10	5850 Durham Ferry Road, Tracy, CA 95304	1	51.4	56.8	5.4	**5.0**	No	**Yes**	1.4	52.8	5.0	No	No
R110	10	5850 Durham Ferry Road, Tracy, CA 95304	1	52.8	58.2	5.4	**5.0**	No	**Yes**	1.4	54.2	5.0	No	No

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Table 4.10-15
Existing Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Specific Plan Buildout(dBA L_{dn})						Existing Plus Specific Plan Buildout– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R111	10	5801 Durham Ferry Road, Tracy, CA 95304	1	50.8	56.2	5.4	**5.0**	No	**Yes**	1.4	52.2	5.0	No	No
R112	10	5700 Durham Ferry Road, Tracy, CA 95304	1	48.9	54.3	5.4	**5.0**	No	**Yes**	1.4	50.3	5.0	No	No
R113	10	5366 Durham Ferry Road, Tracy, CA 95304	1	44.3	49.7	5.4	**5.0**	No	**Yes**	1.4	45.7	5.0	No	No
R114	10	5404 Durham Ferry Road, Tracy, CA 95304	1	48.7	54.1	5.4	**5.0**	No	**Yes**	1.4	50.1	5.0	No	No
R115	10	5613 Durham Ferry Road, Tracy, CA 95304	1	45.2	50.6	5.4	**5.0**	No	**Yes**	1.4	46.6	5.0	No	No
R116	10	5392 Durham Ferry Road, Tracy, CA 95304	1	48.6	54.0	5.4	**5.0**	No	**Yes**	1.4	50.0	5.0	No	No
R117	10	5336 Durham Ferry Road, Tracy, CA 95304	1	47.5	52.9	5.4	**5.0**	No	**Yes**	1.4	48.9	5.0	No	No
R118	10	30751 South Bird Road, Tracy, CA 95304	1	51.7	57.1	5.4	**5.0**	No	**Yes**	1.4	53.1	5.0	No	No
R119	10	4952 Durham Ferry Road, Tracy, CA 95304	1	46.4	51.8	5.4	**5.0**	No	**Yes**	1.4	47.8	5.0	No	No
R120	10	4911 Durham Ferry Road, Tracy, CA 95304	1	50.1	55.5	5.4	**5.0**	No	**Yes**	1.4	51.5	5.0	No	No
R121	10	4952 Durham Ferry Road, Tracy, CA 95304	1	43.1	48.5	5.4	**5.0**	No	**Yes**	1.4	44.5	5.0	No	No
R122	10	4876 Durham Ferry Road, Tracy, CA 95304	1	48.3	53.7	5.4	**5.0**	No	**Yes**	1.4	49.7	5.0	No	No
R123	10	4873 Durham Ferry Road, Tracy, CA 95304	1	52.6	58.0	5.4	**5.0**	No	**Yes**	1.4	54.0	5.0	No	No
R124	10	4820 Durham Ferry Road, Tracy, CA 95304	1	48.7	54.1	5.4	**5.0**	No	**Yes**	1.4	50.1	5.0	No	No
R125	10	4699 Durham Ferry Road, Tracy, CA 95304	1	50.1	55.5	5.4	**5.0**	No	**Yes**	1.4	51.5	5.0	No	No
R127	12	31154 South Bird Road, Tracy, CA 95304	2	56.9	62.2	5.3	**5.0**	No	**Yes**	1.3	58.2	5.0	No	No
R128	12	31069 South Bird Road, Tracy, CA 95304	1	53.3	58.6	5.3	**5.0**	No	**Yes**	1.3	54.6	5.0	No	No
R129	12	30920 South Bird Road, Tracy, CA 95304	1	51.3	56.6	5.3	**5.0**	No	**Yes**	1.3	52.6	5.0	No	No
R130	12	30908 South Bird Road, Tracy, CA 95304	1	53.5	58.8	5.3	**5.0**	No	**Yes**	1.3	54.8	5.0	No	No
R131	12	30830 South Bird Road, Tracy, CA 95304	1	52.4	57.7	5.3	**5.0**	No	**Yes**	1.3	53.7	5.0	No	No

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Table 4.10-15
Existing Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Specific Plan Buildout(dBA L_{dn})						Existing Plus Specific Plan Buildout– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Existing	Existing Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R132a	13	4447 Durham Ferry Road, Tracy, CA 95304	1	65.2	70.1	4.9	**1.5**	No	**Yes**	0.9	66.1	1.5	No	No
R132b	13	4303 Durham Ferry Road, Tracy, CA 95304	1	60.7	65.6	4.9	**3.0**	**Yes**	**Yes**	0.9	61.6	3.0	No	No
R133	13	4001 Durham Ferry Road, Tracy, CA 95304	1	61.7	66.6	4.9	**3.0**	**Yes**	**Yes**	0.9	62.6	3.0	No	No
R134	13	3652 Durham Ferry Road, Tracy, CA 95304	1	49.1	54.0	4.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R135	13	3652 Durham Ferry Road, Tracy, CA 95304	1	53.4	58.3	4.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R136	13	3081 Durham Ferry Road, Tracy, CA 95304	1	54.7	59.6	4.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R137	14	4494 West Lehman Road, Tracy, CA 95304	1	51.6	58.7	7.1	**5.0**	No	**Yes**	3.1	54.7	5.0	No	No
R138	14	3994 West Lehman Road, Tracy, CA 95304	1	39.7	46.8	7.1	**5.0**	No	**Yes**	3.1	42.8	5.0	No	No
R139	14	3656 West Lehman Road, Tracy, CA 95304	1	40.2	47.3	7.1	**5.0**	No	**Yes**	3.1	43.3	5.0	No	No
R140	14	3545 West Lehman Road, Tracy, CA 95304	1	43.6	50.7	7.1	**5.0**	No	**Yes**	3.1	46.7	5.0	No	No
R141	14	3350 West Lehman Road, Tracy, CA 95304	1	46.8	53.9	7.1	**5.0**	No	**Yes**	3.1	49.9	5.0	No	No
								Total Impacted Receiver Points, without Mitigation	**104**	**Total Impacted Receiver Points, with Mitigation**				**10**
								Total Impacted Receptors, without Mitigation	**150**	**Total Impacted Receptors, with Mitigation**				**27**

Notes:
Receiver IDs represent the specific point where traffic noise levels have been analyzed. Some receiver points may represent more than one noise sensitive receptor where the receptors have similar noise exposure. Grouping of sensitive receptors where more than one receptor have a similar noise exposure is a common method for conducting traffic noise impact studies to minimize the number of analysis points. Please note that due to modifications made to the proposed project since the prior application, some receptor locations have been moved and may appear out of order in the table, and some receptor numbers are not used.

Bold indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Source: Saxelby, 2025.

Figure 4.10-4
Initial Phase Operational Noise Levels

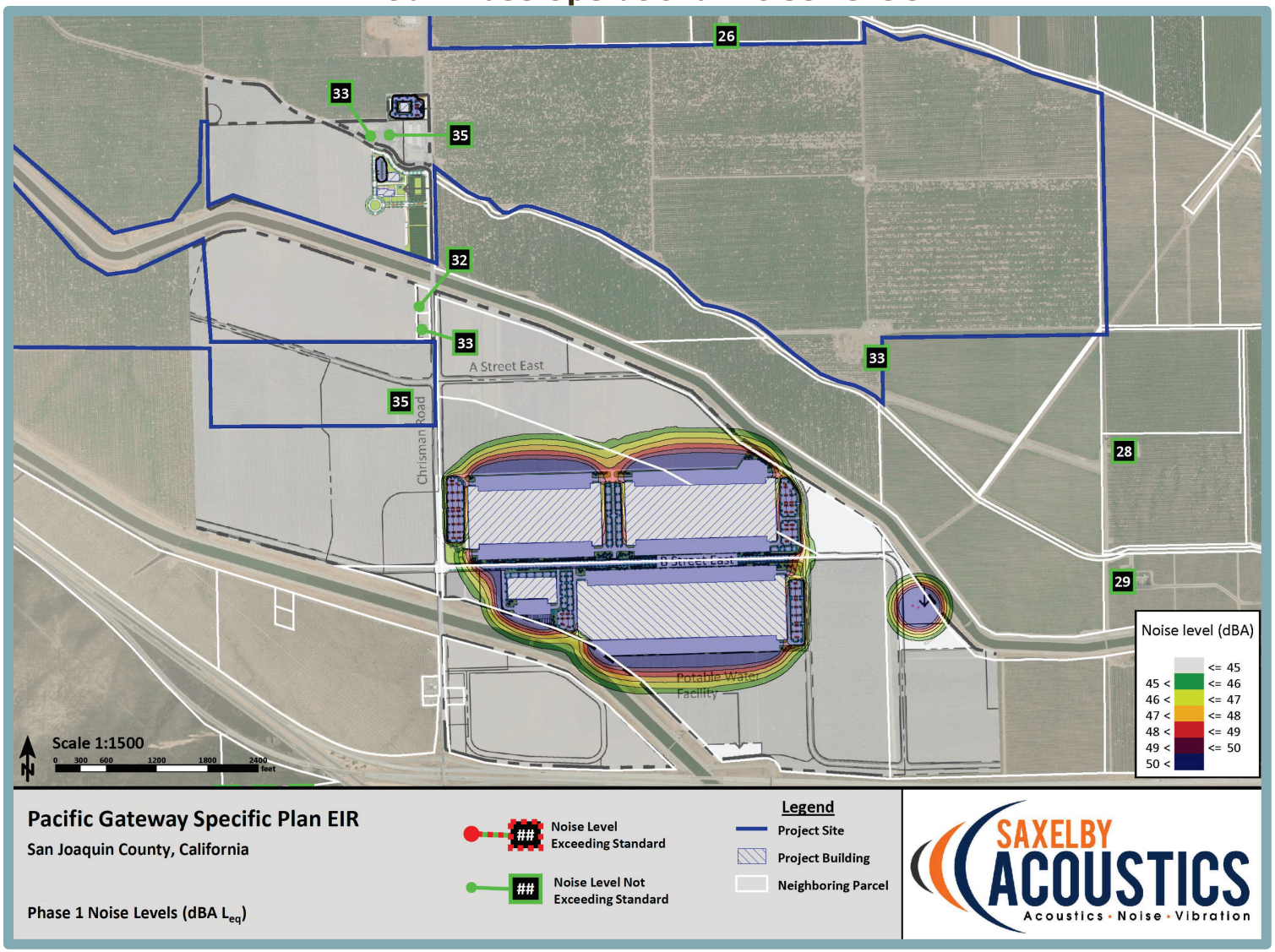


*Figure not OCR compatible.

Specific Plan Buildout

Operations associated with Specific Plan Buildout are predicted to result in noise levels at nearby residences of up to 50 dBA L_{eq} during daytime (7:00 AM to 10:00 PM) and nighttime (10:00 PM to 7:00 AM) hours (see Figure 4.10-5), which would exceed the San Joaquin County Development Code 45 dBA L_{eq} nighttime noise standard for non-transportation noise sources. Therefore, operations associated with Specific Plan Buildout could result in noise levels in excess of the County's 45 dBA L_{eq} nighttime noise standards, and impacts related to such could be significant.

Conclusion

Based on the above, the off-site improvements would not generate any permanent increase in ambient noise levels. However, a significant increase in traffic noise levels at existing sensitive receptors would occur under both the Initial Phase and Specific Plan Buildout. In addition, operational noise associated with Specific Plan Buildout could result in noise increases in exceedance of the applicable noise standards. As such, the proposed project could result in the generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and a ***significant*** impact could occur.

Mitigation Measure(s)

The following section discusses mitigation approaches to traffic, operational, and construction noise sources.

Traffic Noise

Potential mitigation measures to reduce the impact of traffic noise level increases include the use of sound walls or quiet pavement overlays. The majority of the impacted residential uses along the roadway segments listed within Table 4.10-12 are accessed directly by way of driveways from the main roadway or already have installed sound walls. As such, a sound wall would require many driveway openings, resulting in partial noise barriers. Openings in the sound wall would substantially reduce the noise barrier performance. Additionally, construction of noise barriers at off-site locations would result in encroachment into private property. Such encroachment would require private property owners to allow permission to enter their property. Therefore, construction of off-site noise barriers are not considered to be a practical mitigation option for the proposed project.

Quiet pavements overlays are typically assumed to provide a 3.0 to 5.0 dBA reduction. Assuming a minimum reduction of 4.0 dBA, quiet pavement placed along sensitive receptors on the roadway segments predicted to see a significant increase in traffic noise levels under the Initial Phase, as shown in Table 4.10-12, would reduce the traffic noise levels to below the applicable thresholds of significance. The total amount of quiet pavement overlay needed under the Initial Phase is estimated to be approximately one mile. The locations where quiet pavement would be required as part of the Initial Phase of the proposed project are shown in Figure 4.10-6. Therefore, implementation of Mitigation Measure 4.10-2(a) would reduce the above potential impact related to traffic noise levels at existing sensitive receptors under Initial Phase conditions to a less-than-significant level.

Figure 4.10-5
Specific Plan Buildout Operational Noise Levels

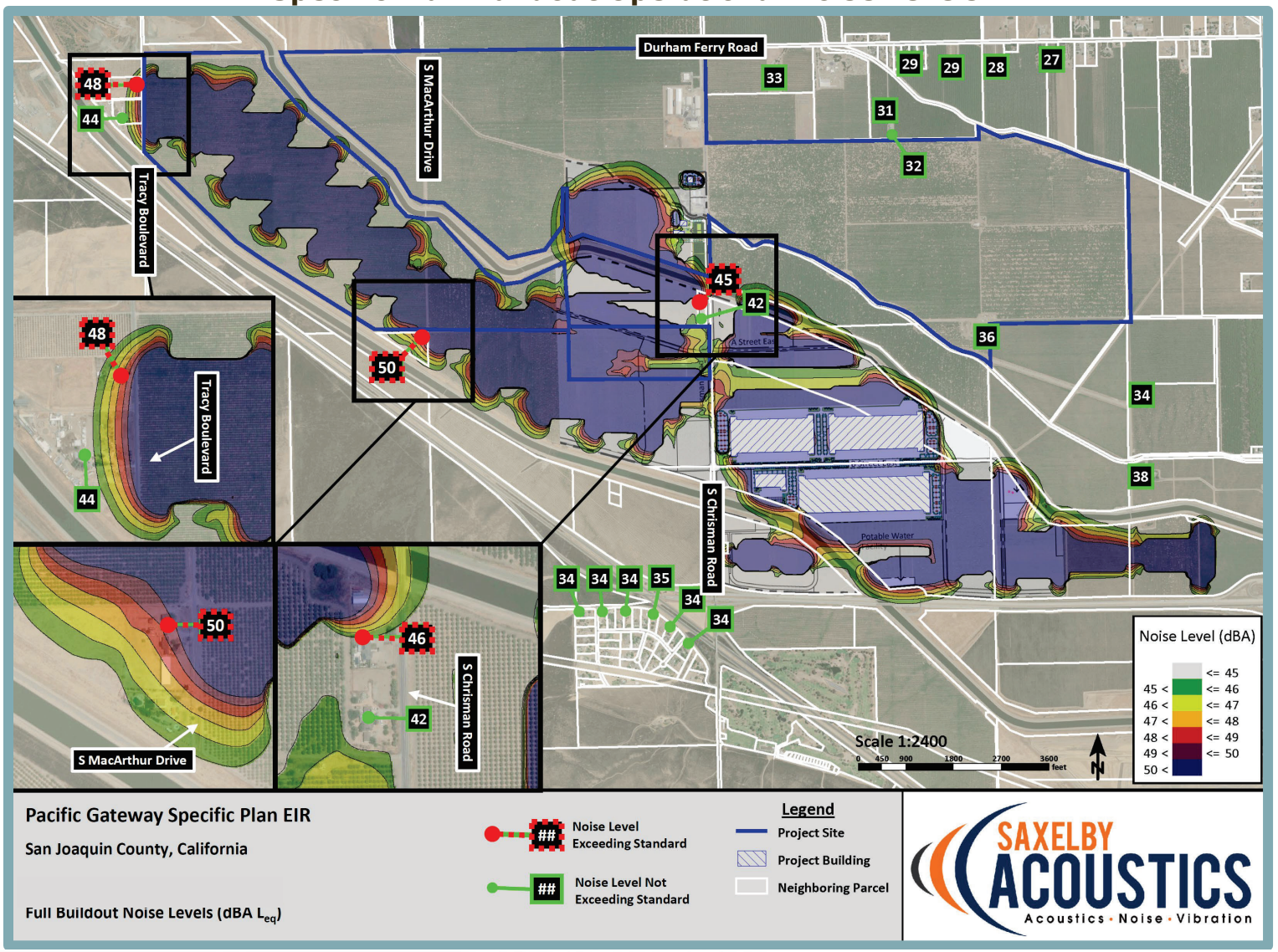


*Figure not OCR compatible.

Figure 4.10-6
Initial Phase Potentially Impacted Sensitive Receptors and Quiet Pavement

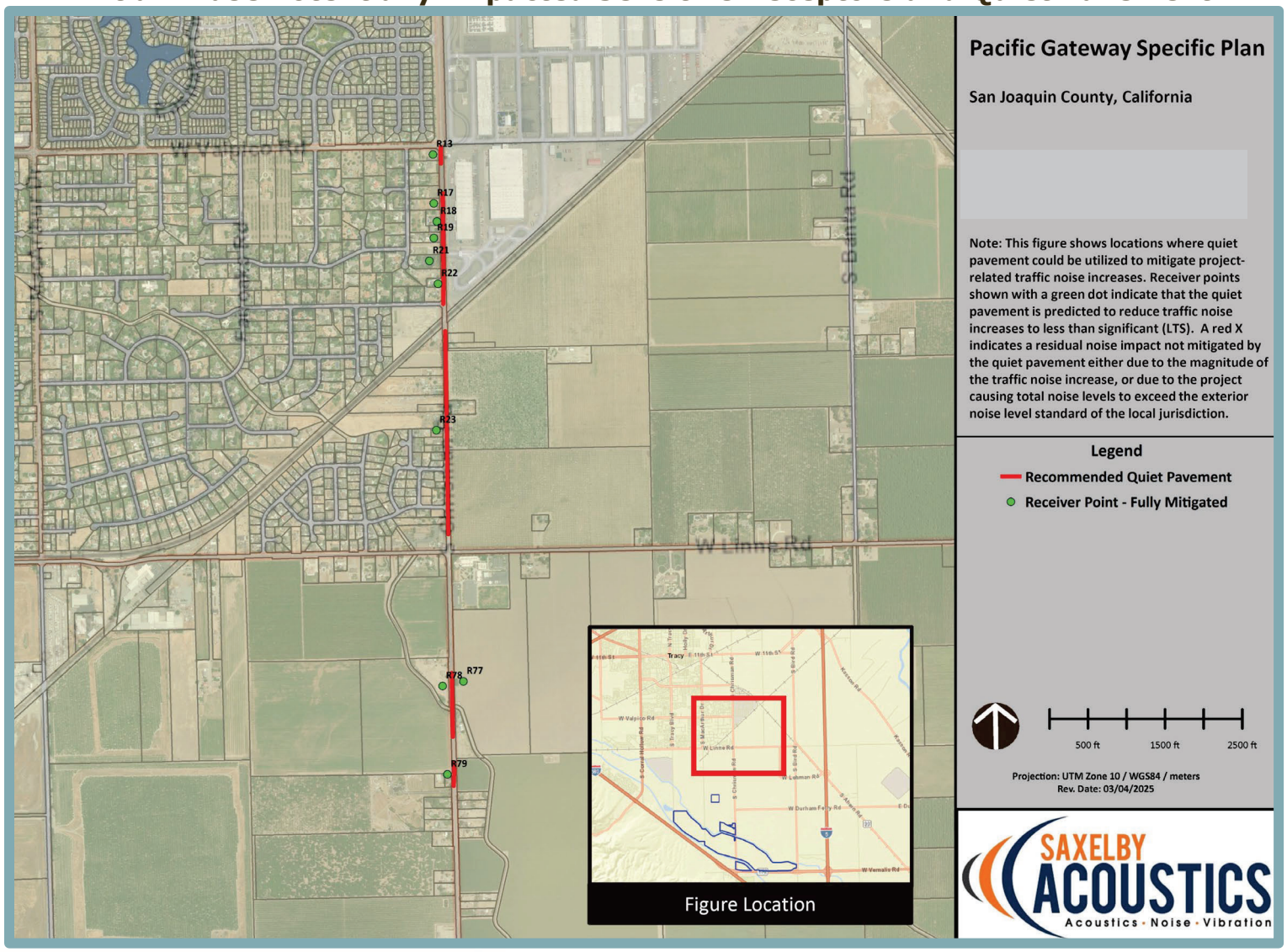


*Figure not OCR compatible.

Under Specific Plan Buildout conditions, the use of quiet pavement along sensitive receptors on the roadway segments predicted to see a significant increase in traffic noise levels, as shown in Table 4.10-15, would reduce the traffic noise levels to below the applicable thresholds of significance at all but 27 receptors. For example, approximately 29 receptors along Durham Ferry Road are predicted to experience an increase in traffic noise levels of approximately 5.4 dBA under Existing Plus Specific Plan Buildout conditions. With the use of quiet pavement, this increase is predicted to be reduced to 1.4 dBA and would be less than significant.

The total amount of quiet pavement overlay needed under Existing Plus Specific Plan Buildout conditions is estimated to be approximately 6.9 miles. The locations where quiet pavement would be required as part of Existing Plus Specific Plan Buildout conditions are shown in Figure 4.10-7 through Figure 4.10-11. However, as presented under Impact 4.10-5, under Cumulative Plus Specific Plan Buildout conditions, a total of 97 sensitive receptors are identified as being impacted due to either the increase in traffic noise, or the proposed project causing noise levels to exceed the applicable San Joaquin County or City of Tracy exterior noise standards, as compared to 150 under Existing Plus Specific Plan Buildout conditions. Therefore, a number of sensitive receptors impacted under Existing Plus Specific Plan Buildout conditions would no longer be impacted under Cumulative Plus Specific Plan Buildout conditions. As also presented below, the total amount of quiet pavement required under Cumulative Plus Specific Plan Buildout conditions would be approximately 4.2 miles, as compared to the 6.9 miles required under Existing Plus Specific Plan Buildout conditions, which would reduce the traffic noise levels at all but four sensitive receptors.

In general, the reduction in the number of impacted sensitive receptors from Existing Plus Specific Plan Buildout conditions to Cumulative Plus Specific Plan Buildout conditions is associated with the background growth in traffic, based on traffic volume information provided by Fehr & Peers, as well as the incorporation of additional planned roadway improvements under Cumulative conditions. The background growth in traffic results in a higher background ambient noise level under Cumulative baseline conditions, thereby “diluting” the proposed project’s incremental contribution to the ambient noise levels. As for the planned cumulative roadway improvements, these would have the effect of redistributing some of the traffic along the area roadways, thereby shifting noise levels along such roadways.

Because a number of sensitive receptors impacted under Existing Plus Specific Plan Buildout conditions would no longer be impacted under Cumulative Plus Specific Plan Buildout conditions, it is reasonable to require the proposed project only to implement the approximately 4.2 miles of quiet pavement required under Cumulative Plus Specific Plan Buildout conditions, as set forth in Mitigation Measure 4.10-5. Further, given the long-term buildout of the proposed project, it is reasonable to allow the project applicant to conduct future traffic noise assessments at each phase of development (beyond the Initial Phase) to confirm which roadway segments require quiet pavement treatment for that particular phase.

A number of sensitive receptors would be exposed to traffic noise levels in excess of the applicable thresholds of significance between Existing Plus Specific Plan Buildout conditions and Cumulative Plus Specific Plan Buildout conditions.

Figure 4.10-7
Specific Plan Buildout Potentially Impacted Sensitive Receptors and Quiet Pavement

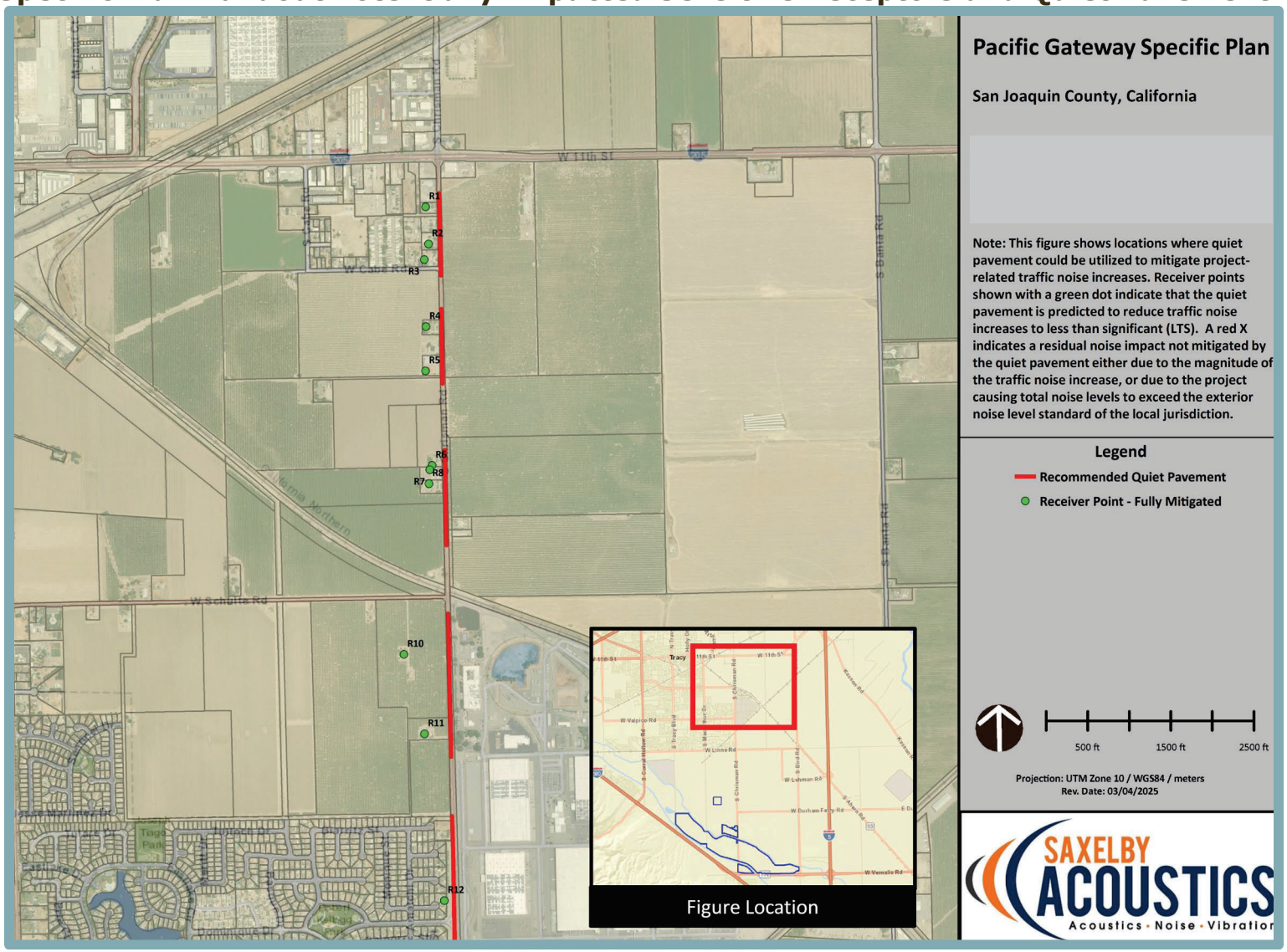


Figure 4.10-8
Specific Plan Buildout Potentially Impacted Sensitive Receptors and Quiet Pavement

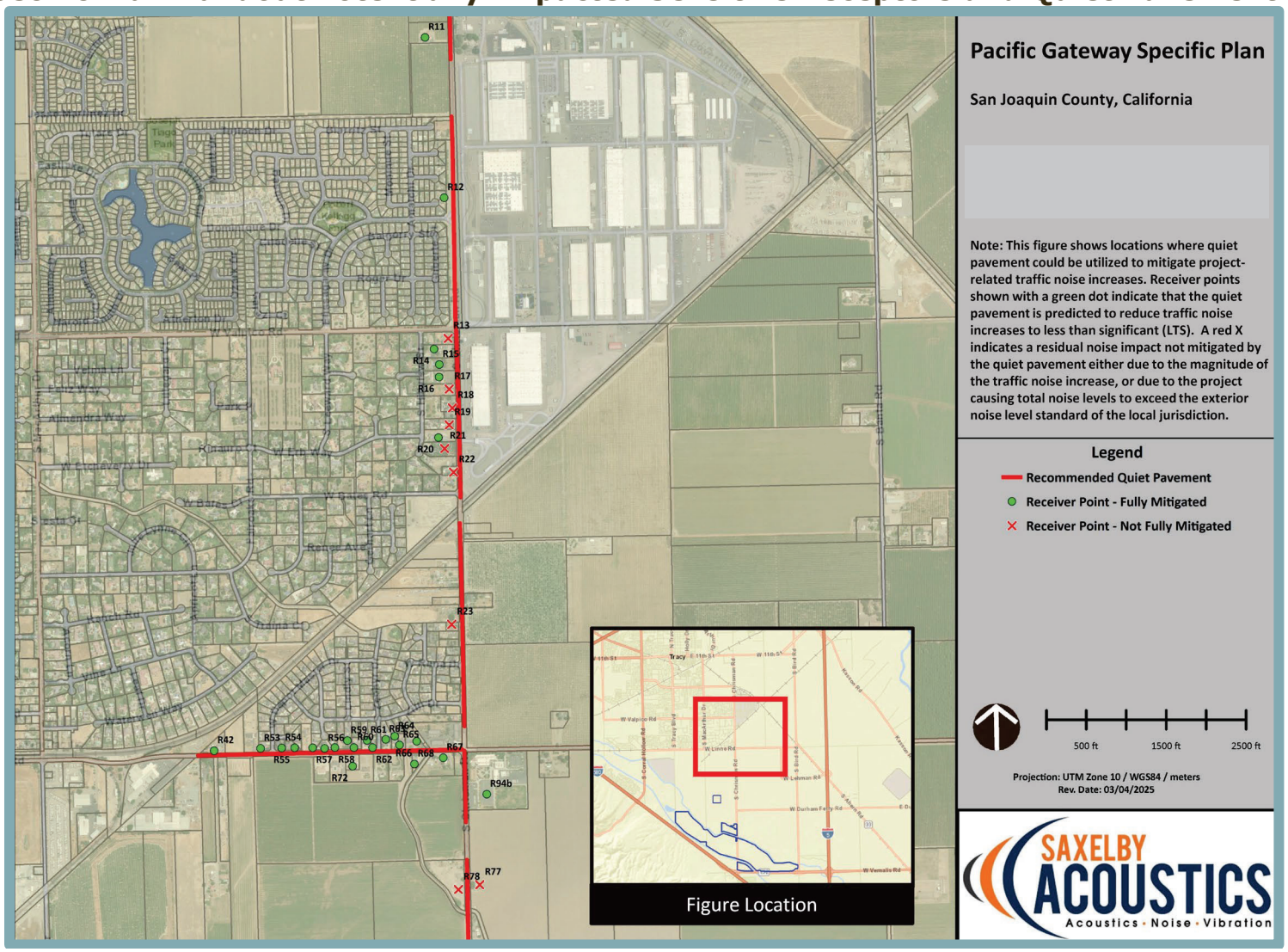


Figure 4.10-9
Specific Plan Buildout Potentially Impacted Sensitive Receptors and Quiet Pavement

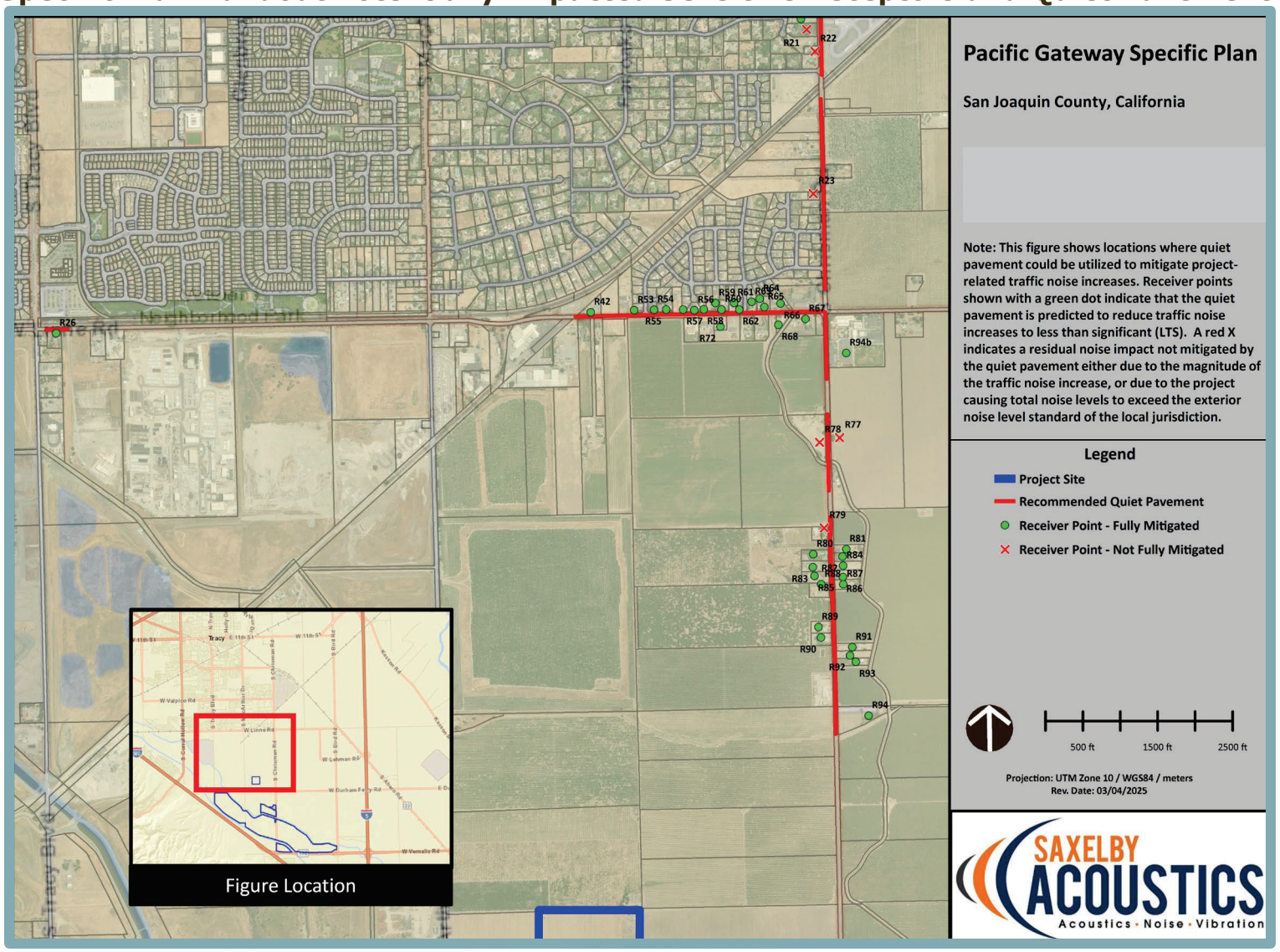


Figure 4.10-10
Specific Plan Buildout Potentially Impacted Sensitive Receptors and Quiet Pavement

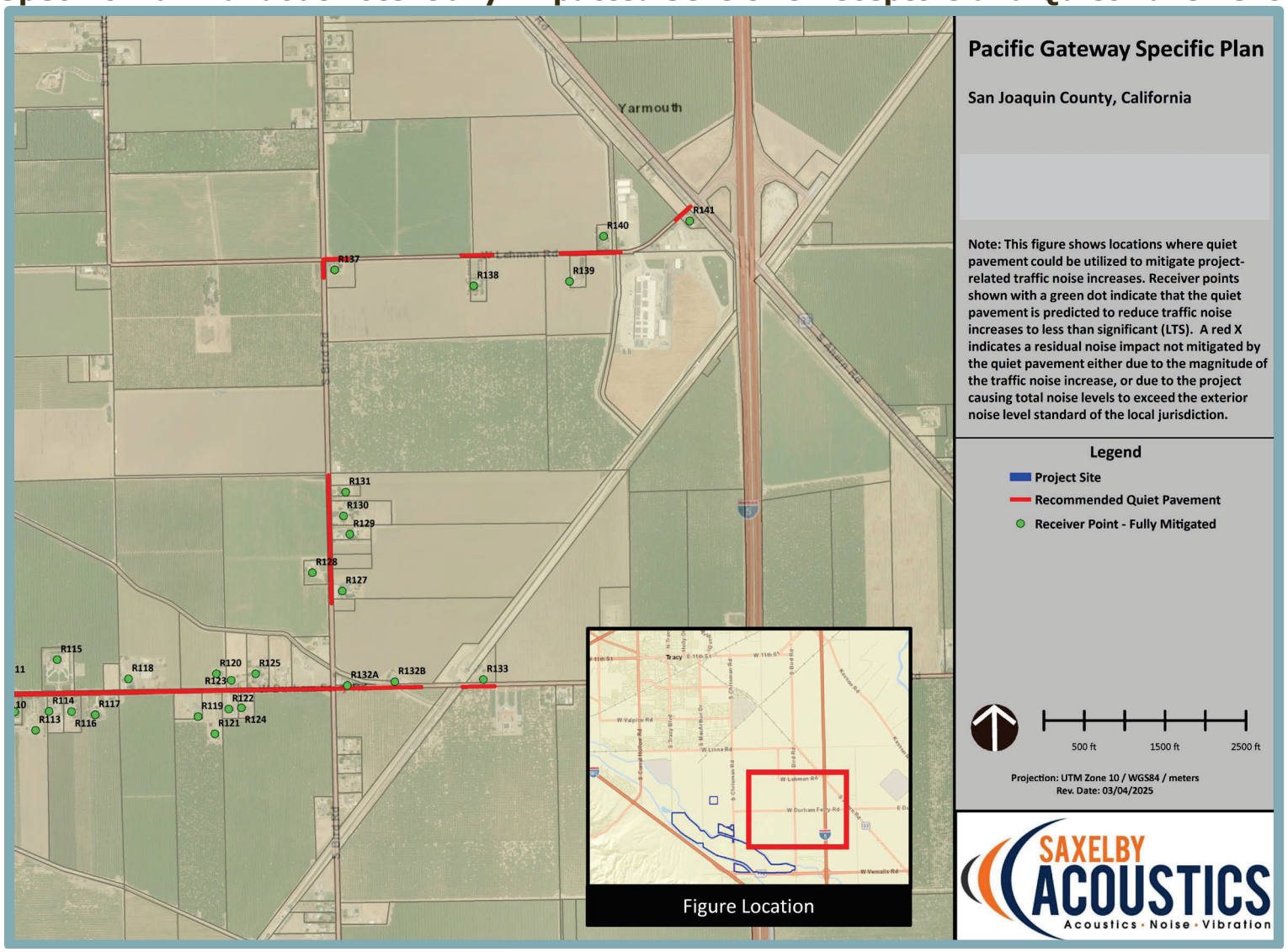
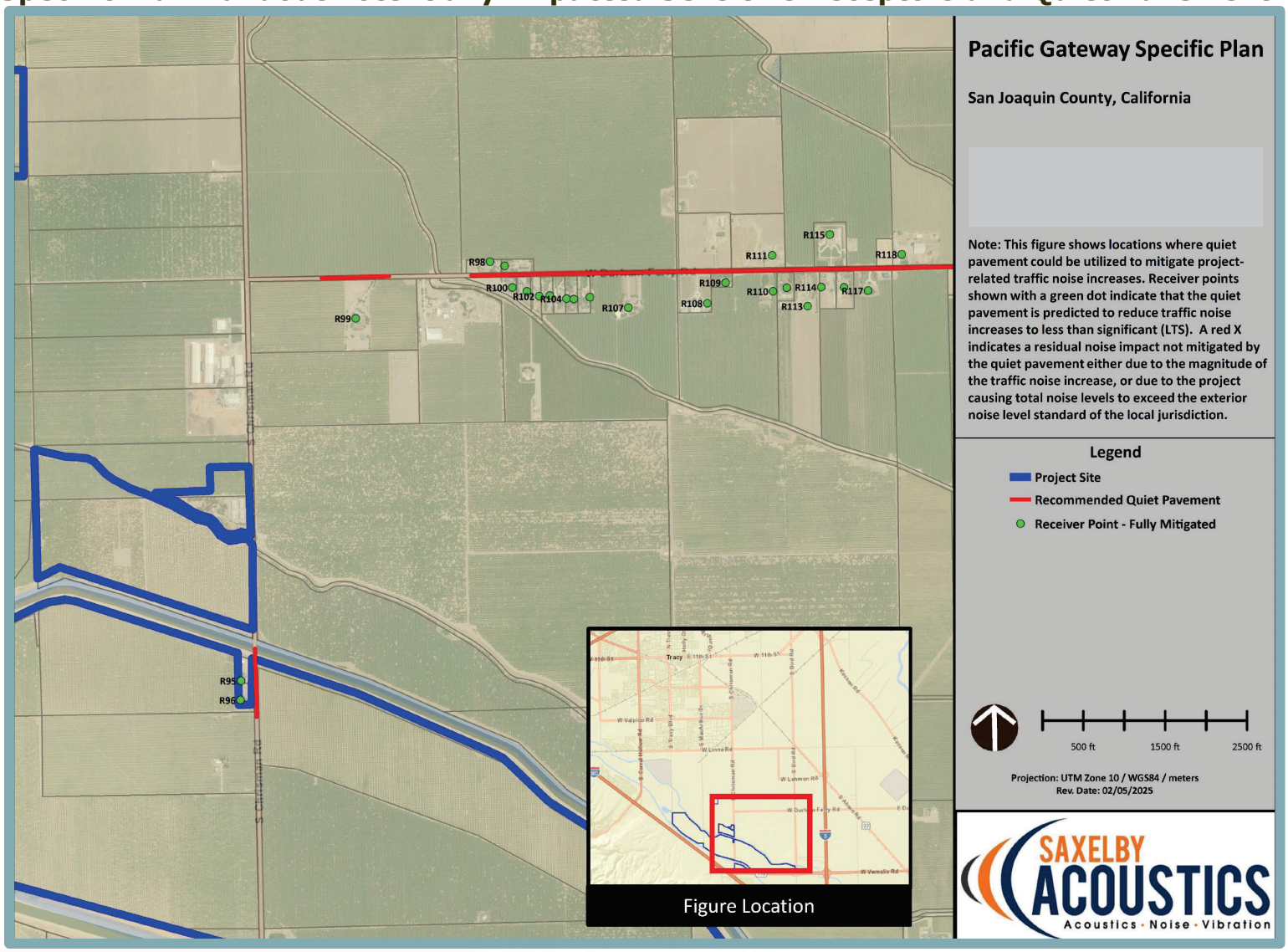


Figure 4.10-11
Specific Plan Buildout Potentially Impacted Sensitive Receptors and Quiet Pavement



In addition, as discussed in further detail under Impact 4.10-5 below, even with implementation of Mitigation Measure 4.10-5, four sensitive receptors would still be exposed to traffic noise levels in excess of the applicable thresholds of significance under Cumulative Plus Specific Plan Buildout conditions. Therefore, even with implementation of Mitigation Measure 4.10-2(b), the above potential impact related to traffic noise levels at existing sensitive receptors under Specific Plan Buildout conditions would remain significant and unavoidable.

Operational/Stationary Noise

Implementation of Mitigation Measure 4.10-2(c) requires the construction of eight- to 12-foot-tall sound walls along portions of the project boundaries to shield the nearest single-family residences from operational noise associated with Specific Plan Buildout conditions. Figure 4.10-12 shows the location of the sound walls and resulting noise level contours. As shown in the figure, construction of the sound walls would reduce noise levels at the nearest existing sensitive receptors to the applicable threshold of significance of 45 dBA L_{eq} noise level standard, or less. Therefore, implementation of Mitigation Measure 4.10-2(c) would reduce the above potential impact related to operational noise at existing sensitive receptors under Specific Plan Buildout conditions to a less-than-significant level.

Overall, even with implementation of the following mitigation measures, the proposed project would result in the generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and impacts would remain *significant and unavoidable*.

Initial Phase

4.10-2(a) To reduce traffic noise increases under Initial Phase conditions, the project applicant shall install quiet pavement overlays on the roadway segments shown in Figure 4.10-6 prior to the certificate of occupancy for the Initial Phase of the proposed project. Quiet pavement overlays shall follow industry best practices as outlined by the California Department of Transportation (Caltrans) (Quiet Pavement, Acoustic Measurement and Performance, February 2018), or a similar industry publication. Installation of quiet pavement shall be noted on Improvement Plans provided to the San Joaquin County Community Development Department for review and approval. For roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority.

Specific Plan Buildout

4.10-2(b) In conjunction with submittal of each future subdivision application, the project applicant shall submit a traffic noise analysis that determines which quiet pavement improvement(s) on roadway segments shown in Figure 4.10-13 through Figure 4.10-17 are required by that particular phase to ensure that traffic noise level increases attributable to the proposed project shall not exceed the FICON thresholds used in this EIR (see Table 4.10-9).

Figure 4.10-12
Specific Plan Buildout Operational Noise Levels With Mitigation

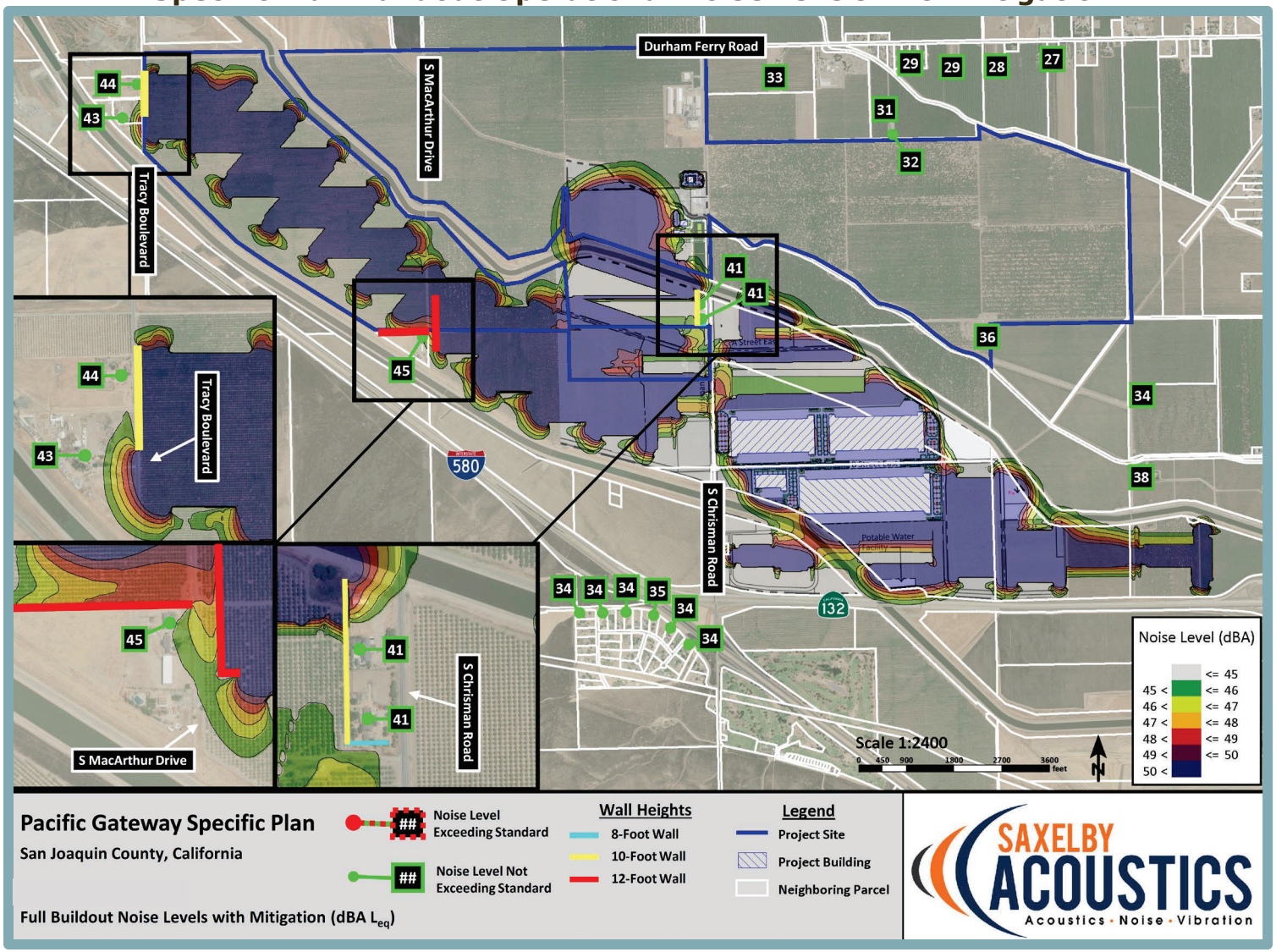


*Figure not OCR compatible.

The quiet pavement treatment shall be installed prior to certificate of occupancy for the first building within the phase under evaluation. Quiet pavement overlays shall follow industry best practices as outlined by Caltrans (Quiet Pavement, Acoustic Measurement and Performance, February 2018), or a similar industry publication.

Installation of quiet pavement shall be noted on Improvement Plans provided to the San Joaquin County Community Development Department for review and approval. For roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority.

4.10-2(c) Prior to the approval of any grading or building permits for any components of the Specific Plan Buildout subsequent to the Initial Phase, the project applicant shall construct eight- to 12-foot-tall sound walls along portions of the project site boundaries to shield the closest sensitive receptors from project operational noise. Figure 4.10-12 shows the location of the sound walls. If desired, sound walls may also be placed off-site on adjacent property owner's property if preferred and agreed to by the property owner. Alternative sound wall locations on affected properties could be considered acceptable, as determined by individual property owners. The sound walls shall be noted on Improvement Plans, subject to approval by the San Joaquin County Community Development Department. Inclusion of the sound walls may be waived if a future noise study prepared by a qualified acoustical engineer, submitted to the San Joaquin County Community Development Department for review and approval, shows that such walls are unnecessary based upon the proposed future site layout(s).

Off-Site Improvements Study Area
None required.

4.10-3 Generation of excessive groundborne vibration or groundborne noise levels. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Operations associated with the proposed project would not involve any activities that would result in the generation of excessive groundborne vibration or groundborne noise levels. However, construction activity associated with the proposed project would have the potential to result in varying degrees of temporary ground vibration depending on the specific construction equipment used and operations involved. Accordingly, the analysis below focuses on construction vibration only.

Initial Phase, Specific Plan Buildout

Project construction would use typical construction equipment and would not require significant sources of vibration such as pile driving or blasting. Table 4.10-16 below presents typical vibration levels produced by construction equipment. As shown in Table 4.10-16, construction vibration levels anticipated in association with

development of the proposed project would be less than the 0.20 in/sec threshold for structural damage at distances of 26 feet. The nearest sensitive receptor is located at a distance greater than 26 feet from typical construction activities at the project site, and, thus, would not be affected by construction vibration. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. As such, construction activities would not be anticipated to exceed acceptable vibration levels at such distances.

Table 4.10-16
Vibration Levels for Various Construction Equipment

Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)	PPV at 100 feet (in/sec)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.000	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.

Off-Site Improvements Study Area

As noted above, construction vibrations are not predicted to exceed acceptable levels at distances greater than 26 feet. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. However, because the exact distance between the off-site improvements and the nearest structures is unknown at this time, construction of such could occur within 26 feet of a sensitive receptor. Therefore, a significant impact could occur.

Conclusion

Based on the above, the Initial Phase and Specific Plan Buildout would not result in the generation of excessive groundborne vibration or groundborne noise levels. However, because the exact distance between the off-site improvements and the nearest structures is currently unknown, construction of such could result in the generation of excessive groundborne vibration or groundborne noise levels. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Mitigation Measure 4.10-3 requires preconstruction crack documentation and vibration monitoring in relation to the off-site improvements to ensure nearby structures, once determined, would not be exposed to excessive groundborne vibration or noise. Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout

None required.

Off-Site Improvements Study Area

4.10-3 If use of vibratory compactors is required within 25 feet or less of a residential structure, the project applicant shall ensure that preconstruction crack documentation and construction vibration monitoring is conducted to verify that construction vibrations do not cause damage to any adjacent structures. Results of the preconstruction crack documentation and construction vibration monitoring shall be provided to the San Joaquin County Community Development Department and the San Joaquin County Department of Public Works for review and approval. For roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. Alternatively, use of hand compaction equipment could be employed to minimize ground vibrations.

4.10-4 For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose persons residing or working in the project area to excessive noise levels. Based on the analysis below, the impact is *less than significant*.

Given that development of both the Initial Phase and Specific Plan Buildout would result in similar land uses, and that both phases would be located within the Tracy Municipal Airport AIA, the following discussion applies to both phases of the proposed project. A discussion off the off-site improvement areas is also provided separately below.

Initial Phase, Specific Plan Buildout

The Tracy Municipal Airport is located approximately 1.1 miles northwest of the project site. As discussed above and shown in Figure 4.10-2, the project site is located outside of the 55 dBA CNEL airport noise contour. Therefore, development of the proposed project would not expose persons residing or working in the project area to excessive noise levels associated with airport operations.

Off-Site Improvements Study Area

The Corral Hollow Road and West Linne Road intersection proposed for improvements is located within the Tracy Municipal Airport 60 to 65 dBA CNEL airport noise contour. However, the proposed improvements would not result in residential uses or permanent employees in the project area and, thus, would not expose persons residing or working in the project area to excessive noise levels associated with airport operations.

Conclusion

Based on the above, the proposed project would not expose persons residing or working in the project area to excessive noise levels associated with airport operations. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 6, Statutorily Required Sections of this EIR. Cumulative impacts are discussed only for the Specific Plan Buildout, and not for the Initial Phase, given the cumulative nature of the analysis. In addition, because the prospective off-site improvements would be limited to roadway improvements, once constructed, the off-site improvements would not involve any long-term operations or noise-generating uses and, thus, would not result in any permanent increase in ambient noise levels in the project area. Therefore, noise increases under cumulative conditions associated with the Off-Site Improvements Study Area are not discussed below.

4.10-5 Generation of a substantial permanent increase in ambient noise levels associated with development of the proposed project in combination with future development. Based on the analysis below, even with mitigation, the project's incremental contribution to the significant cumulative impact is *cumulatively considerable* and *significant and unavoidable*.

The proposed project in combination with the development of reasonably foreseeable projects within unincorporated San Joaquin County and the City of Tracy would incrementally affect the future cumulative ambient noise environment.

Using the methodology described above in the Method of Analysis section, traffic noise levels under Cumulative and Cumulative Plus Specific Plan Buildout conditions were estimated as part of the Environmental Noise Assessment and are shown in Table 4.10-17. Table 4.10-17 is for screening purposes and does not account for varying setbacks along each roadway segment. A more in-depth house-by-house analysis was also conducted by Saxelby, which is discussed below. Traffic noise levels were predicted for the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. Predicted traffic noise levels were then compared to the noise level increase significance criteria presented in Table 4.10-9.

As shown in Table 4.10-17, the proposed project would result in significant noise level increases on a total of eight roadway segments under Cumulative Plus Specific Plan Buildout conditions. Due to the large number of potentially impacted receptors, Saxelby analyzed traffic noise level increases at each sensitive receptor, or groups of receptors, located along each of the roadway segments where a potentially significant impact was identified.

Based upon the detailed traffic noise analysis shown in Appendix D of the Environmental Noise Assessment (see Appendix M of this EIR), under Cumulative Plus Specific Plan Buildout conditions, a total of 97 sensitive receptors were identified as impacted due to either the increase in traffic noise, or the proposed project causing noise levels to exceed the applicable San Joaquin County or City of Tracy exterior noise standards. Thus, as discussed in further detail below, mitigation would be required to reduce traffic noise at impacted sensitive receptors. Table 4.10-18 shows the predicted noise levels at each receptor location under the Cumulative Plus Specific Plan Buildout traffic conditions, with and without mitigation.

Because the proposed project would result in either a significant increase in ambient noise levels or cause noise levels to exceed the applicable San Joaquin County or City of Tracy exterior noise standards under Cumulative Plus Specific Plan Buildout conditions, the project's incremental contribution to significant cumulative noise impacts would be ***cumulatively considerable***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce traffic noise levels at existing sensitive receptors along the roadway segments predicted to see a significant increase in traffic noise levels, as shown in Table 4.10-18, under Cumulative Plus Specific Plan Buildout conditions to below the applicable thresholds of significance at all but four receptors. The total amount of quiet pavement overlay needed under Cumulative Plus Specific Plan Buildout conditions is estimated to be approximately 4.2 miles. The locations where quiet pavement is anticipated to be required as part of Cumulative Plus Specific Plan Buildout conditions are shown in Figure 4.10-13 through Figure 4.10-17.

Table 4.10-17
Cumulative Plus Specific Plan Buildout Traffic Noise Level Increases

Segment #	Roadway	Segment	Predicted Exterior Noise Level at Closest Sensitive Receptors (dBA L_{dn})					
			Cumulative No Project	Cumulative Plus Specific Plan Buildout	Change	Local Noise Standard, L_{dn}	Threshold of Significance	Exceeds Threshold?
1	**South Chrisman Road**	**Eleventh Street to West Schulte Road**	**73.2**	**77.1**	**3.9**	**65 dBA**	**+1.5 dBA**	**Yes**
2	**South Chrisman Road**	**West Schulte Road to Valpico Road**	**65.0**	**69.0**	**4.0**	**65 dBA**	**+1.5 dBA**	**Yes**
3	**South Chrisman Road**	**Valpico Road to West Linne Road**	**70.7**	**75.2**	**4.5**	**60 dBA**	**+1.5 dBA**	**Yes**
4	West Linne Road	South Tracy Boulevard to South MacArthur Road	76.9	77.8	0.9	65 dBA	+1.5 dBA	No
5	South Tracy Boulevard	West Linne Road to I-580	73.0	72.7	-0.3	65 dBA	+1.5 dBA	No
6	West Linne Road	South MacArthur Road to South Chrisman Road	71.7	73.0	1.3	65 dBA	+1.5 dBA	No
7	South MacArthur Boulevard	West Linne Road to Project Site	59.4	62.2	2.8	65 dBA	+5.0 dBA or >65 dBA	No
8	**South Chrisman Road**	**West Linne Road to Durham Ferry Road**	**69.4**	**75.1**	**5.7**	**65 dBA**	**+1.5 dBA**	**Yes**
9	**South Chrisman Road**	**Durham Ferry Road to SR 132**	**60.5**	**65.9**	**5.4**	**65 dBA**	**+3.0 dBA or >65 dBA**	**Yes**
10	**Durham Ferry Road**	**South Chrisman Road to South Bird Road**	**61.2**	**65.1**	**3.9**	**65 dBA**	**+3.0 dBA or >65 dBA**	**Yes**
11	Corral Hollow Road	West Linne Road to I-580	53.7	54.8	1.1	65 dBA	+5.0 dBA or >65 dBA	No
12	South Bird Road	South Lehman Road to Durham Ferry Road	61.4	64.2	2.8	65 dBA	+3.0 dBA or >65 dBA	No
13	**Durham Ferry Road**	**South Bird Road to I-5**	**69.4**	**71.9**	**2.5**	**65 dBA**	**+1.5 dBA**	**Yes**
14	**West Lehman Road**	**South Bird Road to Ahern Road**	**52.2**	**58.6**	**6.4**	**65 dBA**	**+5.0 dBA or >65 dBA**	**Yes**

Bold indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Source: Saxelby, 2025.

Table 4.10-18
Cumulative Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Proposed Project (dBA L_{dn})						Cumulative Plus Proposed Project– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Cumulative	Cumulative Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R1	1	24169 South Chrisman Road, Tracy, CA 95304	1	73.2	77.1	3.9	**1.5**	No	**Yes**	-0.1	73.1	1.5	No	No
R2	1	24301 South Chrisman Road Unit B, Tracy, CA 95304	1	64.6	68.5	3.9	**3.0**	**Yes**	**Yes**	-0.1	64.5	3.0	No	No
R3	1	24353 South Chrisman Road, Tracy, CA 95304	1	62.3	66.2	3.9	**3.0**	**Yes**	**Yes**	-0.1	62.2	3.0	No	No
R4	1	24591 South Chrisman Road, Tracy, CA 95304	1	62.3	66.2	3.9	**3.0**	**Yes**	**Yes**	-0.1	62.2	3.0	No	No
R5	1	24711 South Chrisman Road, Tracy, CA 95304	1	61.8	65.7	3.9	**3.0**	**Yes**	**Yes**	-0.1	61.7	3.0	No	No
R6	1	25023 South Chrisman Road, Tracy, CA 95304	1	63.9	67.8	3.9	**3.0**	**Yes**	**Yes**	-0.1	63.8	3.0	No	No
R7	1	25079 South Chrisman Road, Tracy, CA 95304	1	62.7	66.6	3.9	**3.0**	**Yes**	**Yes**	-0.1	62.6	3.0	No	No
R8	1	25111 South Chrisman Road, Tracy, CA 95304	1	62.1	66.0	3.9	**3.0**	**Yes**	**Yes**	-0.1	62.0	3.0	No	No
R9	1	25288 South Chrisman Road, Tracy, CA 95304	1	60.8	64.7	3.9	**3.0**	No	**Yes**	-0.1	60.7	3.0	No	No
R10	2	25673 South Chrisman Road, Tracy, CA 95304	1	65.0	69.0	4.0	**3.0**	No	**Yes**	0.0	65.0	3.0	No	No
R11	2	25909 South Chrisman Road, Tracy, CA 95304	1	58.5	62.5	4.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R12	2	1728 Toulouse Court, Tracy, CA 95304	29	65.0	69.0	4.0	**3.0**	No	**Yes**	0.0	65.0	3.0	No	No
R13	3	27000 Hillview Street, Tracy, CA 95304	1	70.7	75.2	4.5	**1.5**	No	**Yes**	0.5	71.2	1.5	No	No
R14	3	27070 Hillview Street, Tracy, CA 95304	1	63.2	67.7	4.5	**3.0**	**Yes**	**Yes**	0.5	63.7	3.0	No	No
R15	3	27120 Hillview Street, Tracy, CA 95304	1	64.4	68.9	4.5	**3.0**	**Yes**	**Yes**	0.5	64.9	3.0	No	No
R16	3	27150 Hillview Street, Tracy, CA 95304	1	64.4	68.9	4.5	**3.0**	**Yes**	**Yes**	0.5	64.9	3.0	No	No
R17	3	27200 Hillview Street, Tracy, CA 95304	1	69.7	74.2	4.5	**1.5**	No	**Yes**	0.5	70.2	1.5	No	No
R18	3	27251 South Chrisman Road, Tracy, CA 95304	1	72.3	76.8	4.5	**1.5**	No	**Yes**	0.5	72.8	1.5	No	No
R19	3	27320 Hillview Street, Tracy, CA 95304	1	69.1	73.6	4.5	**1.5**	No	**Yes**	0.5	69.6	1.5	No	No
R20	3	22360 Walnut Court, Tracy, CA 95304	1	64.0	68.5	4.5	**3.0**	**Yes**	**Yes**	0.5	64.5	3.0	No	No

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Table 4.10-18
Cumulative Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Proposed Project (dBA L_{dn})						Cumulative Plus Proposed Project– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Cumulative	Cumulative Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R21	3	27398 Walnut Court, Tracy, CA 95304	1	66.4	70.9	4.5	**1.5**	No	**Yes**	0.5	66.9	1.5	No	No
R22	3	27503 South Chrisman Road, Tracy, CA 95304	2	72.3	76.8	4.5	**1.5**	No	**Yes**	0.5	72.8	1.5	No	No
R23	3	27527 South Chrisman Road, Tracy, CA 95304	15	70.0	74.5	4.5	**1.5**	No	**Yes**	0.5	70.5	1.5	No	No
R26	4	10450 West Linne Rdpad, Tracy, CA 95377	1	76.9	77.8	0.9	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R27	4	10322 West Linne Road, Tracy, CA 95377	2	63.4	64.3	0.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R28	4	4717 Bonsai Avenue, Tracy, CA 95377	6	57.9	58.8	0.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R29	4	4739 Windchime Way, Tracy, CA 95377	4	64.4	65.3	0.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R30	4	4723 Cherub Way, Tracy, CA 95377	5	57.7	58.6	0.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R31	4	187 Glenhaven Drive, Tracy, CA 95377	11	56.6	57.5	0.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R32	4	4740 Glenbrook Drive, Tracy, CA 95377	15	58.0	58.9	0.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R33	4	9362 Lorraine Road, Tracy, CA 95377	1	65.9	66.8	0.9	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R34	4	9310 Lorraine Road, Tracy, CA 95377	1	66.8	67.7	0.9	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R35	4	9262 Lorraine Road, Tracy, CA 95377	1	64.6	65.5	0.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R36	4	28455 South MacArthur Drive, Tracy, CA 95377	1	68.4	69.3	0.9	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R37	5	28700 South Tracy Boulevard, Tracy, CA 95377	1	73.0	72.7	-0.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R25	5	28584 South Tracy Boulevard, Tracy, CA 95377	1	60.2	61.1	0.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R38	5	28770 South Tracy Boulevard, Tracy, CA 95377	1	63.2	62.9	-0.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R39	5	6683 South Tracy Boulevard, Tracy, CA 95377	1	65.8	65.5	-0.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R40	5	30558 South Tracy Boulevard, Tracy, CA 95377	1	57.8	57.5	-0.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R41	5	30773 South Tracy Boulevard, Tracy, CA 95377	1	60.8	60.5	-0.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-18
Cumulative Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Proposed Project (dBA L_{dn})						Cumulative Plus Proposed Project– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Cumulative	Cumulative Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R42	6	8393 West Linne Road, Tracy, CA 95304	1	71.7	73.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R43	6	8806 Waterwell Way, Tracy, CA 95304	1	63.4	64.7	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R44	6	8762 Waterwell Way, Tracy, CA 95304	1	63.2	64.5	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R45	6	8738 Waterwell Way, Tracy, CA 95304	1	63.2	64.5	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R46	6	8706 Waterwell Way, Tracy, CA 95304	1	62.9	64.2	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R47	6	8672 Waterwell Way, Tracy, CA 95304	1	63.0	64.3	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R48	6	8650 Waterwell Way, Tracy, CA 95304	2	63.5	64.8	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R49	6	8556 Waterwell Way, Tracy, CA 95304	1	62.2	63.5	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R50	6	8538 Waterwell Way, Tracy, CA 95304	1	61.5	62.8	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R51	6	8512 Waterwell Way, Tracy, CA 95304	1	60.0	61.3	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R52	6	28552 South MacArthur Drive, Tracy, CA 95377	1	60.5	61.8	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R53	6	28475 Depot Master Drive, Tracy, CA 95304	1	71.3	72.6	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R54	6	28480 Depot Master Drive, Tracy, CA 95304	1	71.7	73.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R55	6	8120 Depot Master Court, Tracy, CA 95304	1	71.7	73.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R56	6	28460 Jack Godwin Court, Tracy, CA 95304	1	73.3	74.6	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R57	6	28443 Jack Godwin Court, Tracy, CA 95304	1	72.2	73.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R58	6	28450 Jack Godwin Court, Tracy, CA 95304	1	72.2	73.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R59	6	7897 West Linne Road, Tracy, CA 95304	1	67.0	68.3	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R60	6	7860 Zilli Drive, Tracy, CA 95304	1	73.3	74.6	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R61	6	7831 West Linne Road, Tracy, CA 95304	1	67.2	68.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-18
Cumulative Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Proposed Project (dBA L_{dn})						Cumulative Plus Proposed Project– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Cumulative	Cumulative Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R62	6	7831 West Linne Road, Tracy, CA 95304	1	73.9	75.2	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R63	6	7783 West Linne Road, Tracy, CA 95304	1	66.7	68.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R64	6	7717 West Linne Road, Tracy, CA 95304	1	65.4	66.7	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R65	6	7705 West Linne Road, Tracy, CA 95304	1	71.3	72.6	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R66	6	7681 West Linne Road, Tracy, CA 95304	1	68.2	69.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R67	6	7594 West Linne Road, Tracy, CA 95304	1	74.7	76.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R68	6	7700 West Linne Road, Tracy, CA 95304	1	66.1	67.4	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R69	6	7714 West Linne Road, Tracy, CA 95304	1	62.1	63.4	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R70	6	7790 West Linne Road, Tracy, CA 95304	1	61.9	63.2	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R71	6	7834 West Linne Road, Tracy, CA 95304	1	62.4	63.7	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R72	6	7902 West Linne Road, Tracy, CA 95304	1	65.7	67.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R73	6	7936 West Linne Road, Tracy, CA 95304	1	65.2	66.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R74	6	8000 West Linne Road, Tracy, CA 95304	1	63.3	64.6	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R75	7	28544 South MacArthur Drive, Tracy, CA 95377	1	59.4	62.2	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R76	7	30144 South MacArthur Drive, Tracy, CA 95377	1	58.3	61.1	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R77	8	7170 West Linne Road, Tracy, CA 95304	2	69.4	75.1	5.7	**1.5**	No	**Yes**	1.7	71.1	**1.5**	No	**Yes**
R78	8	28981 South Chrisman Road, Tracy, CA 95304	1	69.1	74.8	5.7	**1.5**	No	**Yes**	1.7	70.8	**1.5**	No	**Yes**
R79	8	29325 South Chrisman Road, Tracy, CA 95304	1	70.9	76.6	5.7	**1.5**	No	**Yes**	1.7	72.6	**1.5**	No	**Yes**
R80	8	29423 South Chrisman Road, Tracy, CA 95304	1	58.8	64.5	5.7	**5.0**	No	**Yes**	1.7	60.5	5.0	No	No
R81	8	29400 South Chrisman Road, Tracy, CA 95304	1	59.6	65.3	5.7	**5.0**	**Yes**	**Yes**	1.7	61.3	5.0	No	No

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Table 4.10-18
Cumulative Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Proposed Project (dBA L_{dn})						Cumulative Plus Proposed Project– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Cumulative	Cumulative Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R82	8	29430 South Chrisman Road, Tracy, CA 95304	1	61.5	67.2	5.7	**3.0**	**Yes**	**Yes**	1.7	63.2	3.0	No	No
R83	8	29430 South Chrisman Road, Tracy, CA 95304	1	58.6	64.3	5.7	**5.0**	No	**Yes**	1.7	60.3	5.0	No	No
R84	8	29466 South Chrisman Road, Tracy, CA 95304	1	61.3	67.0	5.7	**3.0**	**Yes**	**Yes**	1.7	63.0	3.0	No	No
R85	8	29466 South Chrisman Road, Tracy, CA 95304	1	59.1	64.8	5.7	**5.0**	No	**Yes**	1.7	60.8	5.0	No	No
R86	8	29500 South Chrisman Road, Tracy, CA 95304	1	61.5	67.2	5.7	**3.0**	**Yes**	**Yes**	1.7	63.2	3.0	No	No
R87	8	29534 South Chrisman Road, Tracy, CA 95304	1	61.5	67.2	5.7	**3.0**	**Yes**	**Yes**	1.7	63.2	3.0	No	No
R88	8	29561 South Chrisman Road, Tracy, CA 95304	1	62.2	67.9	5.7	**3.0**	**Yes**	**Yes**	1.7	63.9	3.0	No	No
R89	8	29879 South Chrisman Road, Tracy, CA 95304	1	60.2	65.9	5.7	**3.0**	**Yes**	**Yes**	1.7	61.9	3.0	No	No
R90	8	29929 South Chrisman Road, Tracy, CA 95304	1	61.3	67.0	5.7	**3.0**	**Yes**	**Yes**	1.7	63.0	3.0	No	No
R91	8	29750 South Chrisman Road, Tracy, CA 95304	1	63.2	68.9	5.7	**3.0**	**Yes**	**Yes**	1.7	64.9	3.0	No	No
R92	8	29800 South Chrisman Road, Tracy, CA 95304	1	59.1	64.8	5.7	**5.0**	No	**Yes**	1.7	60.8	5.0	No	No
R93	8	29850 South Chrisman Road, Tracy, CA 95304	1	57.4	63.1	5.7	**5.0**	No	**Yes**	1.7	59.1	5.0	No	No
R94	8	30000 South Chrisman Road, Tracy, CA 95304	1	54.6	60.3	5.7	**5.0**	No	**Yes**	1.7	56.3	5.0	No	No
R94b	8	7500 West Linne Road, Tracy, CA 95304 (Jefferson School)	1	62.9	68.6	5.7	**3.0**	Yes	**Yes**	1.7	64.6	3.0	No	No
R95	9	32851 South Chrisman Road, Tracy, CA 95304	1	60.5	65.9	5.4	**3.0**	**Yes**	**Yes**	1.4	61.9	3.0	No	No
R96	9	32951 South Chrisman Road, Tracy, CA 95304	1	60.5	65.9	5.4	**3.0**	**Yes**	**Yes**	1.4	61.9	3.0	No	No
R97	10	6601 Durham Ferry Road, Tracy, CA 95304	1	61.2	65.1	3.9	**3.0**	**Yes**	**Yes**	-0.1	61.1	3.0	No	No
R98	10	6685 Durham Ferry Road, Tracy, CA 95304	1	53.1	57.0	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R99	10	7060 Durham Ferry Road, Tracy, CA 95304	1	45.7	49.6	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R100	10	6610 Durham Ferry Road, Tracy, CA 95304	1	53.1	57.0	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-18
Cumulative Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Proposed Project (dBA L_{dn})						Cumulative Plus Proposed Project– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Cumulative	Cumulative Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R101	10	6554 Durham Ferry Road, Tracy, CA 95304	1	51.4	55.3	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R102	10	6512 Durham Ferry Road, Tracy, CA 95304	1	49.6	53.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R103	10	6500 Durham Ferry Road, Tracy, CA 95304	1	49.9	53.8	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R104	10	6410 Durham Ferry Road, Tracy, CA 95304	1	48.8	52.7	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R105	10	6368 Durham Ferry Road, Tracy, CA 95304	1	48.6	52.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R106	10	6312 Durham Ferry Road, Tracy, CA 95304	1	49.0	52.9	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R107	10	6120 Durham Ferry Road, Tracy, CA 95304	1	46.6	50.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R108	10	5922 Durham Ferry Road, Tracy, CA 95304	1	52.1	56.0	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R109	10	5850 Durham Ferry Road, Tracy, CA 95304	1	53.3	57.2	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R110	10	5850 Durham Ferry Road, Tracy, CA 95304	1	54.7	58.6	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R111	10	5801 Durham Ferry Road, Tracy, CA 95304	1	52.7	56.6	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R112	10	5700 Durham Ferry Road, Tracy, CA 95304	1	50.8	54.7	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R113	10	5366 Durham Ferry Road, Tracy, CA 95304	1	46.2	50.1	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R114	10	5404 Durham Ferry Road, Tracy, CA 95304	1	50.6	54.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R115	10	5613 Durham Ferry Road, Tracy, CA 95304	1	47.1	51.0	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R116	10	5392 Durham Ferry Road, Tracy, CA 95304	1	50.5	54.4	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R117	10	5336 Durham Ferry Road, Tracy, CA 95304	1	49.4	53.3	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R118	10	30751 South Bird Road, Tracy, CA 95304	1	53.6	57.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R119	10	4952 Durham Ferry Road, Tracy, CA 95304	1	48.3	52.2	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R120	10	4911 Durham Ferry Road, Tracy, CA 95304	1	52.0	55.9	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A

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Table 4.10-18
Cumulative Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Proposed Project (dBA L_{dn})						Cumulative Plus Proposed Project– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Cumulative	Cumulative Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R121	10	4952 Durham Ferry Road, Tracy, CA 95304	1	45.0	48.9	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R122	10	4876 Durham Ferry Road, Tracy, CA 95304	1	50.2	54.1	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R123	10	4873 Durham Ferry Road, Tracy, CA 95304	1	54.5	58.4	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R124	10	4820 Durham Ferry Road, Tracy, CA 95304	1	50.6	54.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R125	10	4699 Durham Ferry Road, Tracy, CA 95304	1	52.0	55.9	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R127	12	31154 South Bird Road, Tracy, CA 95304	2	61.4	64.2	2.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R128	12	31069 South Bird Road, Tracy, CA 95304	1	57.8	60.6	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R129	12	30920 South Bird Road, Tracy, CA 95304	1	55.8	58.6	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R130	12	30908 South Bird Road, Tracy, CA 95304	1	58.0	60.8	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R131	12	30830 South Bird Road, Tracy, CA 95304	1	56.9	59.7	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R132a	13	4447 Durham Ferry Road, Tracy, CA 95304	1	69.4	71.9	2.5	**1.5**	No	**Yes**	-1.5	67.9	1.5	No	No
R132b	13	4303 Durham Ferry Road, Tracy, CA 95304	1	64.9	67.4	2.5	3.0	**Yes**	**Yes**	-1.5	63.4	3.0	No	No
R133	13	4001 Durham Ferry Road, Tracy, CA 95304	1	65.9	68.4	2.5	**1.5**	No	**Yes**	-1.5	64.4	1.5	No	No
R134	13	3652 Durham Ferry Road, Tracy, CA 95304	1	53.3	55.8	2.5	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R135	13	3652 Durham Ferry Road, Tracy, CA 95304	1	57.6	60.1	2.5	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R136	13	3081 Durham Ferry Road, Tracy, CA 95304	1	58.9	61.4	2.5	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R137	14	4494 West Lehman Road, Tracy, CA 95304	1	52.2	58.6	6.4	**5.0**	No	**Yes**	2.4	54.6	5.0	No	No
R138	14	3994 West Lehman Road, Tracy, CA 95304	1	40.3	46.7	6.4	**5.0**	No	**Yes**	2.4	42.7	5.0	No	No
R139	14	3656 West Lehman Road, Tracy, CA 95304	1	40.8	47.2	6.4	**5.0**	No	**Yes**	2.4	43.2	5.0	No	No
R140	14	3545 West Lehman Road, Tracy, CA 95304	1	44.2	50.6	6.4	**5.0**	No	**Yes**	2.4	46.6	5.0	No	No

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Table 4.10-18
Cumulative Plus Specific Plan Buildout Traffic Noise Impact Assessment at Sensitive Receptors

Receiver ID	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Proposed Project (dBA L_{dn})						Cumulative Plus Proposed Project– with Quiet Pavement at Impacted Receptors (dBA L_{dn})				
				Cumulative	Cumulative Plus Specific Plan Buildout	Change	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?	Change, with Quiet Pavement	Level with Quiet Pavement	Increase Criteria	Exceed Applicable Exterior Noise Standard Due to Project?	Impact?
R141	14	3350 West Lehman Road, Tracy, CA 95304	1	47.4	53.8	6.4	**5.0**	No	**Yes**	2.4	49.8	5.0	No	No
Total Impacted Receiver Points, without Mitigation									**52**	**Total Impacted Receiver Points, with Mitigation**				**3**
Total Impacted Receptors, without Mitigation									**97**	**Total Impacted Receptors, with Mitigation**				**4**

Notes:
Receiver IDs represent the specific point where traffic noise levels have been analyzed. Some receiver points may represent more than one noise sensitive receptor where the receptors have similar noise exposure. Grouping of sensitive receptors where more than one receptor have a similar noise exposure is a common method for conducting traffic noise impact studies to minimize the number of analysis points. Please note that due to modifications made to the proposed project since the prior application, some receptor locations have been moved and may appear out of order in the table, and some receptor numbers are not used.

Bold indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Source: Saxelby, 2025.

Figure 4.10-13
Cumulative Plus Proposed Project Potentially Impacted Sensitive Receptors and Quiet Pavement

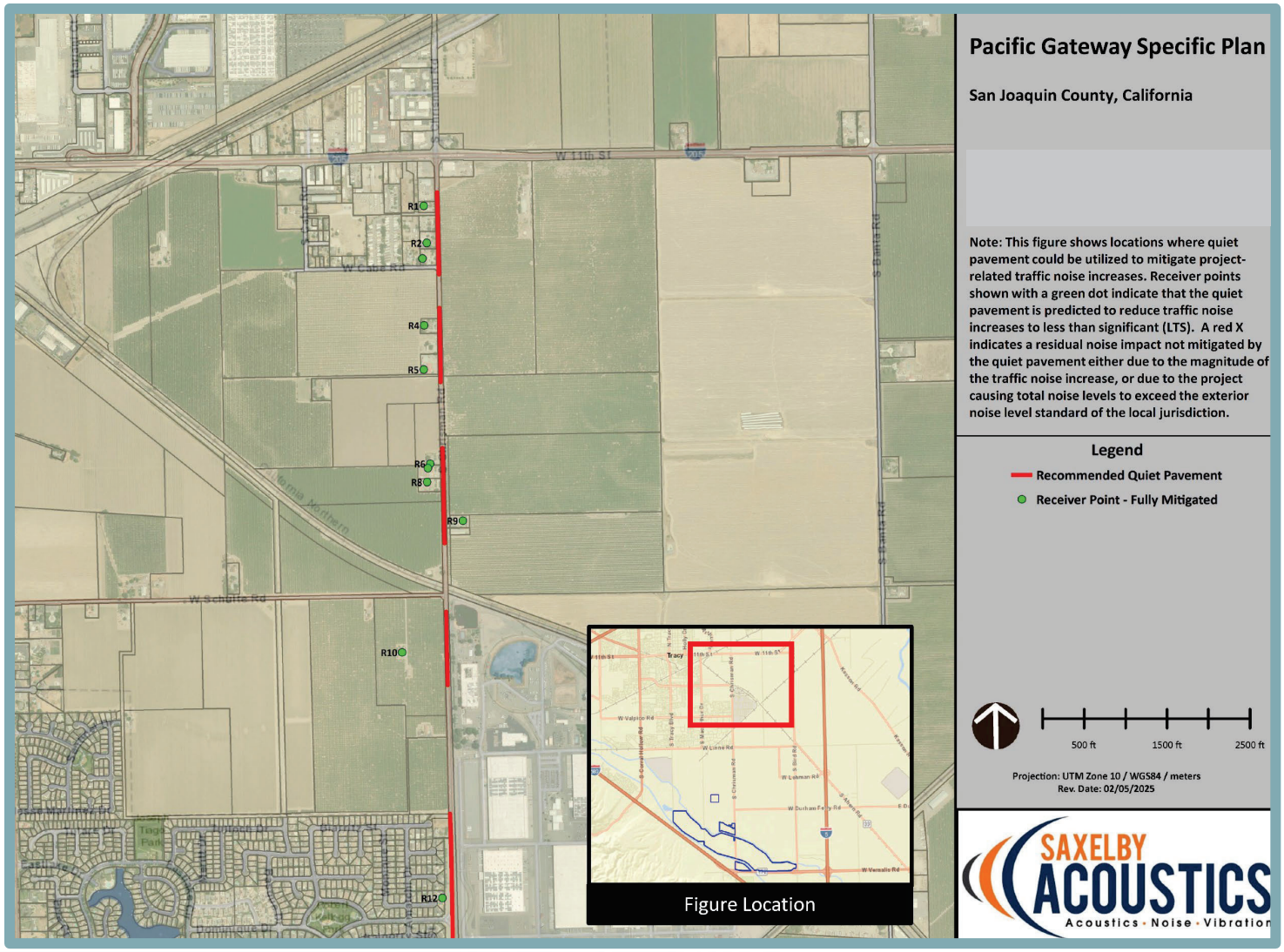


Figure 4.10-14
Cumulative Plus Proposed Project Potentially Impacted Sensitive Receptors and Quiet Pavement

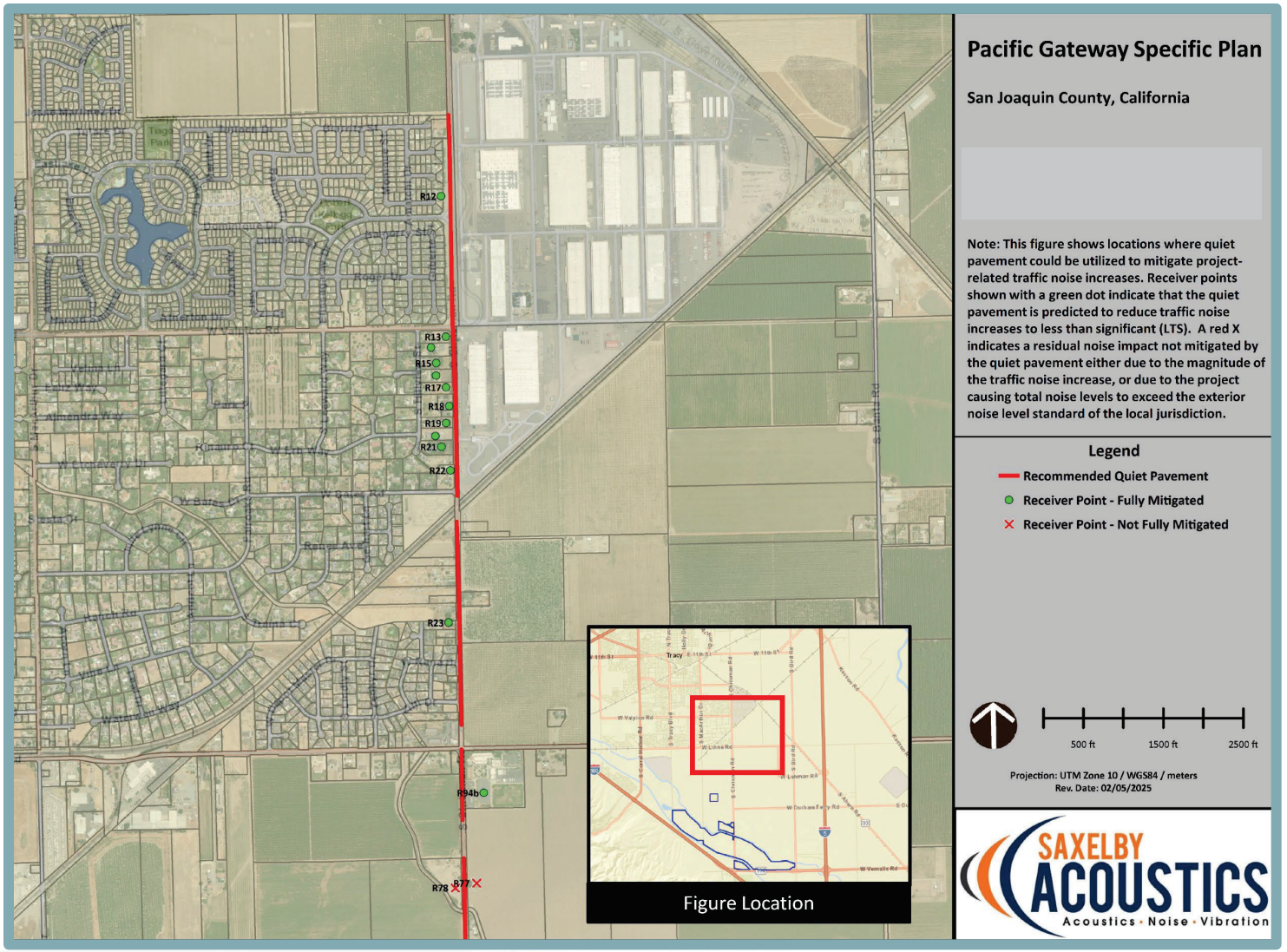


Figure 4.10-15
Cumulative Plus Proposed Project Potentially Impacted Sensitive Receptors and Quiet Pavement

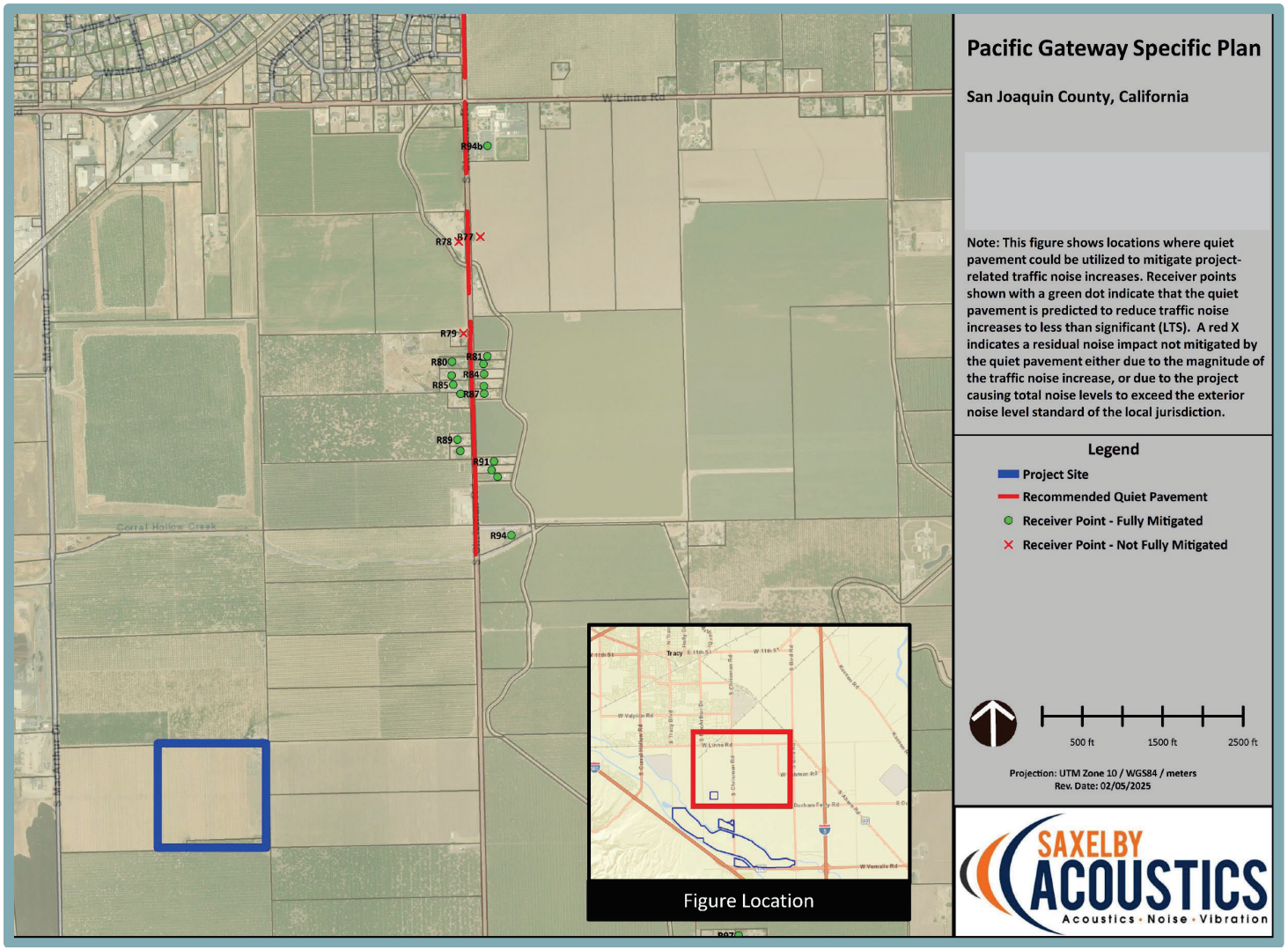


Figure 4.10-16
Cumulative Plus Proposed Project Potentially Impacted Sensitive Receptors and Quiet Pavement

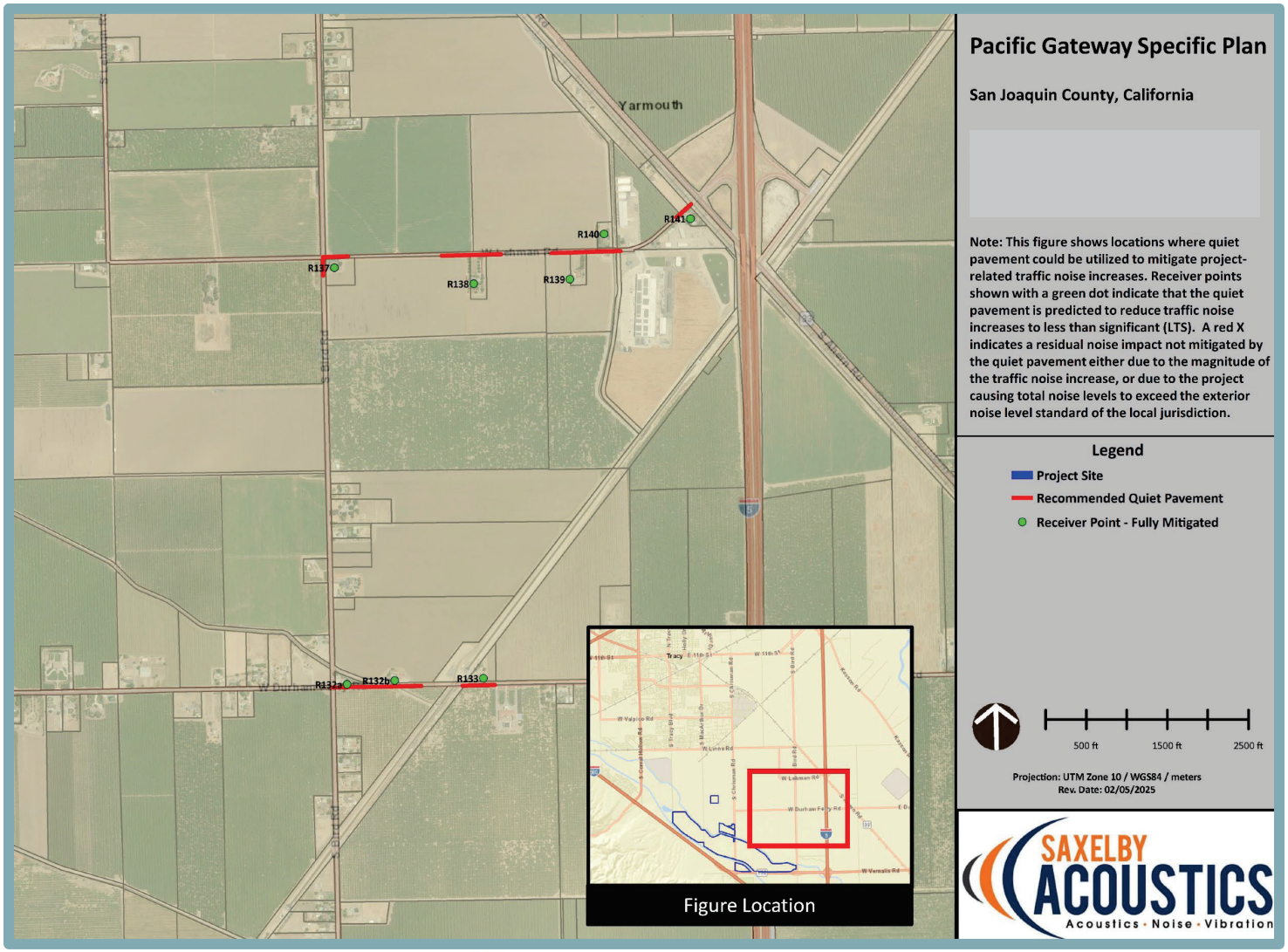
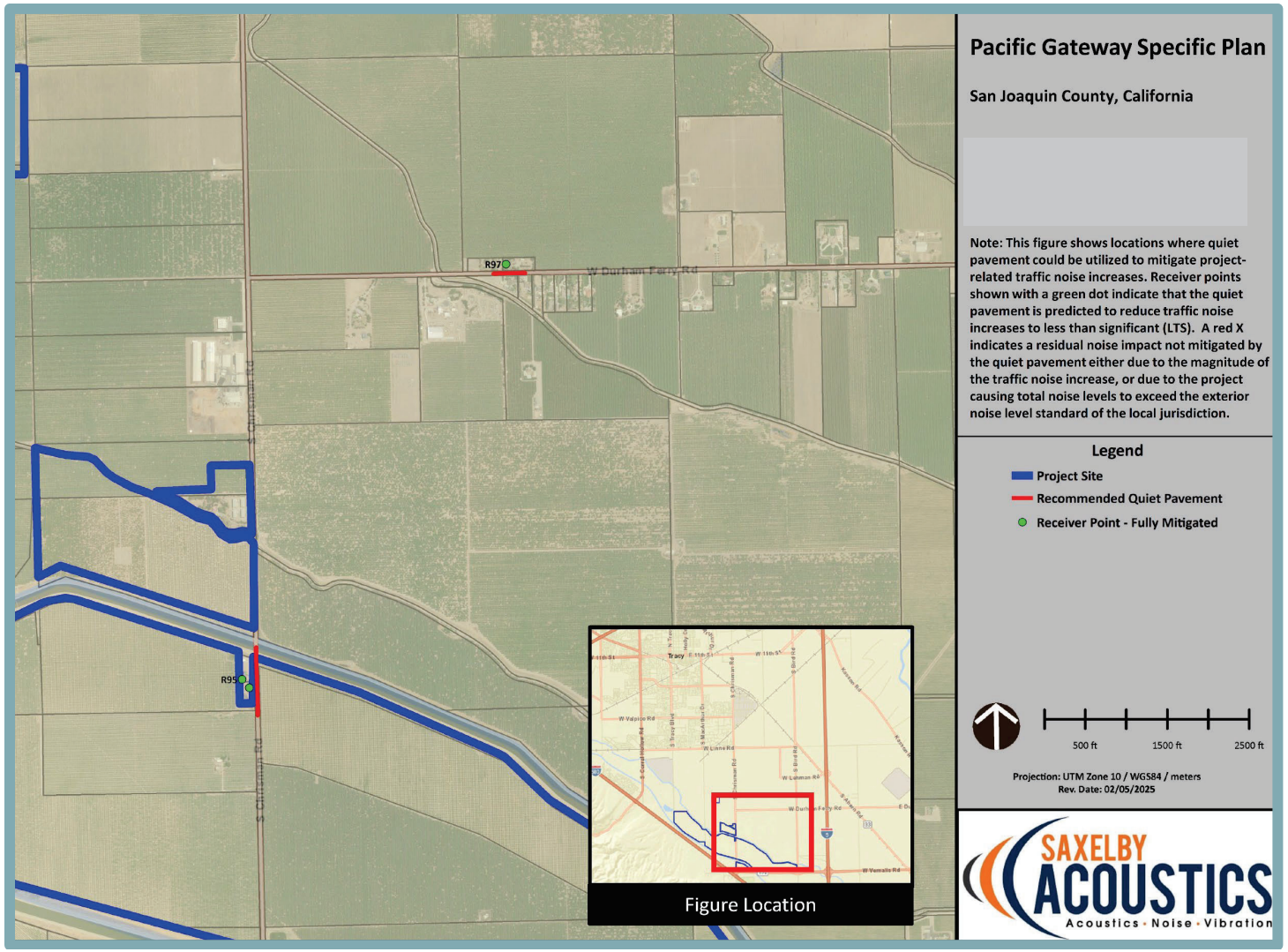


Figure 4.10-17
Cumulative Plus Proposed Project Potentially Impacted Sensitive Receptors and Quiet Pavement



Because, even with implementation of the following mitigation measure, four sensitive receptors would still be exposed to traffic noise levels in excess of the applicable thresholds of significance under Cumulative Plus Specific Plan Buildout conditions, the cumulative impact would remain *cumulatively considerable* and *significant and unavoidable*.

Initial Phase, Off-Site Roadway Improvements Study Area

None required.

Specific Plan Buildout

4.10-5 Implement Mitigation Measure 4.10-2(b).

4.11 Public Services/Utilities and Service Systems

4.11 PUBLIC SERVICES/UTILITIES AND SERVICE SYSTEMS

4.11.1 INTRODUCTION

The Public Services/Utilities and Service Systems chapter of the EIR summarizes the setting information and identifies potential new demands resulting from the proposed project on public services and utilities, including fire protection and law enforcement services, schools, parks, and recreation facilities, as well as water, sanitary sewer, electric power, natural gas, telecommunication, and solid waste disposal services. The chapter evaluates the sufficiency of water supplies to meet the project's water demand and assesses the adequacy of the wastewater treatment system required to serve the project. Pursuant to Section XV of CEQA Guidelines Appendix G, potential impacts to public services are identified if the proposed project would require the development of new facilities or expansion of existing facilities, the construction of which could have adverse physical effects on the environment. Information for the Public Services/Utilities and Service Systems chapter was primarily drawn from the Water Supply Assessment (WSA) prepared for the proposed project by Todd Groundwater (see Appendix K)[1] and the Water and Sewer Demands and System Requirements Technical Memorandum (Water and Sewer Memo) prepared for the proposed project by Schaaf and Wheeler (see Appendix N),[2] as well as the San Joaquin County General Plan[3] and the associated General Plan EIR.[4]

Impacts related to groundwater and storm drainage facilities are addressed in Chapter 4.8, Hydrology and Water Quality, of this EIR.

4.11.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing public services in the area, including fire and sheriff protection services, schools, parks, and recreation facilities, as well as the existing utilities and service systems in the project area, including water supply, wastewater conveyance and treatment, solid waste, and gas, electric, and telecommunication infrastructure. The project site is located in an unincorporated area of San Joaquin County, south of the City of Tracy, and is currently used for agriculture, including almond and cherry orchards, as well as limited agricultural processing and manufacturing.

Fire Protection Services

Fire protection services for the unincorporated areas of San Joaquin County are provided by independent special district fire departments, the California Department of Forestry and Fire Protection (CAL FIRE), and, in some cases, through contracted service with city fire departments. Collectively, 22 fire protection districts operate within the San Joaquin County region, and are staffed with paid firefighters, reserve firefighters, volunteer firefighters, and administrative staff that provide support services. All public fire protection agencies in San Joaquin County operate under a master mutual aid agreement, meaning that when a fire agency's normal facilities are exhausted, other fire departments are called on to provide assistance.

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1 Todd Groundwater. *Water Supply Assessment: Pacific Gateway, San Joaquin County, California*. August 2025.
2 Schaaf and Wheeler. *Pacific Gateway – Water and Sewer Demands and System Requirements*. August 21, 2025.
3 San Joaquin County. *San Joaquin County General Plan.* Adopted December 2016.
4 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report.* Certified October 2014.

Fire protection and emergency medical services for the project area are provided by the Tracy Rural Fire District (TRFD). Founded in 1945, the TRFD serves an area of over 26 square miles of residential, commercial, rural, and industrial land uses from the Lathrop city limits to the northeast, down to the Stanislaus County boundary to the south, and from the Alameda County line to the west to the Grant Line canal to the east. The TRFD owns and operates three fire stations. Fire protection is currently provided to the project area from Station 93, located at 1400 West Durham Ferry Road, and Station 95, located at 7151 Tracy Hills Drive. Both stations are staffed by three-person advanced life support (ALS) engine companies and are within five miles of the project site.[5]

The TRFD operates under a joint power agreement with the City of Tracy Fire Department, forming the South San Joaquin County Fire Authority (SSJCFA). The SSJCFA's 170 square mile service area currently includes the City of Tracy and the surrounding rural community in the southern portion of San Joaquin County. Through the governmental structure of the SSJCFA, fire service is delivered to the community without restriction or concern for jurisdictional boundaries of the member agencies. In other words, the full strength of the organization and its closest resources will always respond to members and visitors of the community.

The SSJCFA collects mitigation fees within the Authority's boundaries to finance SSJCFA facilities, apparatus, and equipment necessary to maintain adequate service levels.

Sheriff Protection Services

The San Joaquin County Sherriff's Office (SJCSO) serves the unincorporated portions of San Joaquin County, including the project site. The SJCSO consists of seven divisions: Civil and Custody Division, Coroner's Office, Internal Affairs Division, Public Information and Records Division, Administration Division, Investigations Division, and Operations Services Division. The SJCSO employs over 800 personnel and serves over 150,000 residents of unincorporated San Joaquin County. While an official staffing ratio has not been adopted, the SJCSO recommends a ratio of 1.5 line deputies per 1,000 residents Countywide. The department headquarters is located at 7000 Michael Canlis Boulevard, French Camp, approximately 22 miles north of the project site.

The unincorporated County is divided into eight districts, or "beat areas," that are staffed around the clock by Deputy Sheriffs who provide emergency response capability to citizens in their beat area. The project site is located within Beat 8, which encompasses the southwest portion of the County.

Additionally, the California Highway Patrol (CHP) provides traffic enforcement and accident response for the major roadways surrounding the project site, including South Chrisman Road, State Route (SR) 132, and Interstate 580 (I-580).

Schools

Elementary and secondary school students in San Joaquin County are served by 14 school districts. The project site is located within the jurisdiction of the Tracy Unified School District (TUSD) and the Jefferson Elementary School District (JESD).

The TUSD operates 18 school sites that serve students in kindergarten through 12th grade, including seven elementary schools, two middle schools, four kindergarten through eighth grade

[5] Tracy Rural Fire District. *Stations & Facilities*. Available at: https://www.tracyruralfire.org/stations-facilities. Accessed February 2025.

schools, and five high schools.[6] The JESD operates five schools with an enrollment of 3,000 kindergarten through eighth-grade students.[7] The nearest school to the project site is the Jefferson Middle School, which is operated by the JESD and is located at 7500 West Linne Road, approximately 2.4 miles north of the project site, as well as the Wanda Hirsch Elementary School, which is operated by the TUSD and is located at 1280 Dove Drive, approximately 3.3 miles north of the project site.

The TUSD and JESD administer development impact fees on new residential and non-residential construction within the district, which fund the cost of improving and expanding school facilities and equipment needed to accommodate additional student population induced by new development.

Parks and Recreational Facilities

San Joaquin County contains 11 regional park facilities, totaling approximately 500 acres, half of which are owned and operated by the County, while the remaining parks are owned and operated by cities within the County. The County also contains approximately 2,632 acres of local parks and recreation facilities, including community parks, neighborhood parks, baseball/softball fields, and bikeways/greenbelts. Pursuant to General Plan Policy NCR-8.2, the County has adopted a countywide park ratio standard of 10 acres of regional park and three acres of local parks per 1,000 residents.

The nearest existing park to the project site is William Adams Park, which consists of approximately five acres and is located approximately 2.3 miles north of the project site, within the City of Tracy.

Other Public Facilities

The Stockton-San Joaquin County Public Library system provides public library services throughout the County, with six service areas within the City of Stockton, and branch libraries located in the cities of Escalon, Lathrop, Manteca, Ripon, Tracy, and Mountain House, as well as the unincorporated communities of Linden and Thornton. In addition, in order to reach city and county neighborhoods that do not have a branch library nearby, a Mobile Library circulates throughout 24 separate stops in the County and Stockton. The Tracy Branch Library is located at 20 East Eaton Avenue, approximately five miles north of the project site.

Water Supply and Delivery Infrastructure

Potable water for irrigation and domestic use in the County is provided through multiple agencies and water projects, including federal, regional, and local water districts, special districts, and private systems. Irrigation, water, and water conservation districts are located throughout the County, some small, others spanning several planning areas. While some cities and unincorporated areas of the County are served by imported surface water from water districts or municipal water systems, some communities are not located within water districts or do not have

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6 Tracy Unified School District. *About us*. Available at: https://www.tracy.k12.ca.us/about-us. Accessed February 2025.

7 Jefferson Elementary School District. *Jefferson Elementary School District Local Control and Accountability Plan*. Available at: https://www.jeffersonschooldistrict.com/site/handlers/filedownload.ashx?moduleinstanceid=3556&dataid=7825&FileName=2024_Local_Control_and_Accountability_Plan_Jefferson_School_District_20240812.pdf. Accessed February 2025.

water systems that provide water service. These communities must rely on private wells and groundwater.

The project site is currently used for agricultural purposes that rely on groundwater wells and surface water deliveries from two irrigation districts: the Byron-Bethany Irrigation District (BBID) and the Del Puerto Water District (DPWD). BBID is a special district that provides water supply to the cities of Mountain House and Tracy and to agricultural customers in their service area, which spans portions of three counties and includes the project site. BBID has a varied portfolio of water supply sources, including pre-1914 and licensed post-1914 surface water rights in the Delta, water purchased through transfers, and Central Valley Project (CVP) water delivered to agricultural, municipal and industrial customers in the CVP service area.

BBID holds two appropriative water rights: (a) a vested pre-1914 appropriative water right; and (b) a post-1914 licensed appropriative water right acquired when BBID consolidated with the former West Side Irrigation District.

BBID's pre-1914 water right is based on a 1914 Notice of Appropriation of Water recorded by its predecessor in interest, the Byron-Bethany Irrigation Company (Company), in Contra Costa County. The Company perfected its pre-1914 appropriative right to divert water from a channel off of the west bank of Old River in the Delta, to provide domestic and irrigation water service to its landowners by May 18, 1914. BBID succeeded to the Company's property and interests in 1919, including this senior appropriative water right.

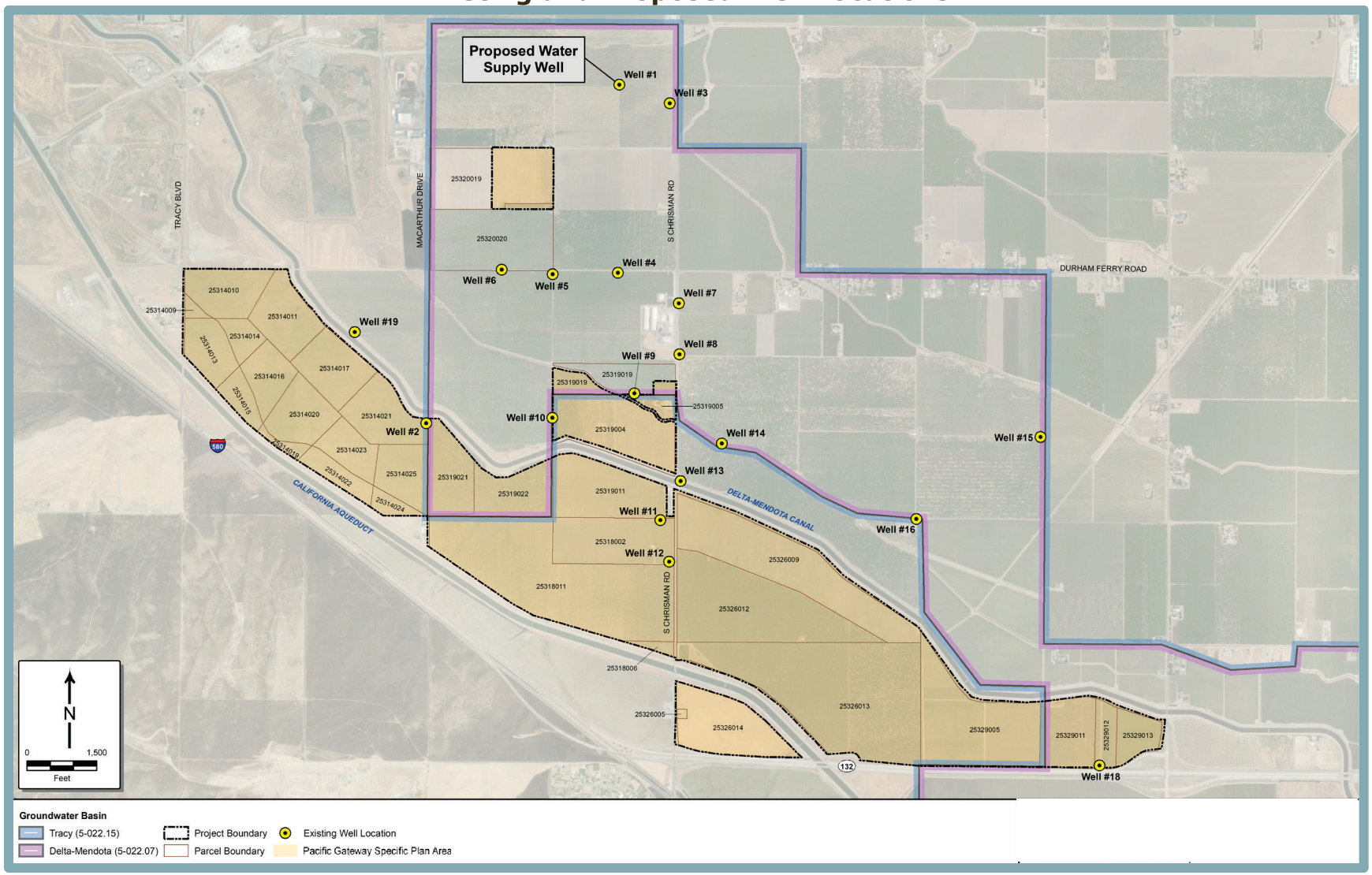
BBID's point of diversion is now (and has since 1964 been) located within Clifton Court Forebay (the reservoir constructed as part of the State Water Project [SWP]) at the intake channel of the Banks Pumping Plant, the first pumping plant for the California Aqueduct, which conveys water from the Delta, south. The only diverters downstream of BBID's pre-1914 water right point of diversion receive water through the SWP and are junior in terms of the hierarchy of appropriative water rights in relation to BBID. Pursuant to agreements with the Department of Water Resources, BBID has the right to divert up to 50,000 AFY at BBID's diversion facilities located on the intake channel of the State Water Project.

BBID's post-1914 licensed appropriative water right, for 27,000 AFY, has a priority date of April 17, 1916. Its point of diversion is located in "Wicklund Cut," which is in an irrigation inlet off of Old River, a tributary to the San Joaquin River.

BBID's holds two CVP contracts for irrigation, as well as municipal and industrial purposes, totaling 23,100 AFY (20,600 AFY and 2,500 AFY respectively). Groundwater also has been pumped during drought to augment surface supplies. Additionally, BBID also has Warren Act contracts allowing for the conveyance of certain surface water supplies through specific CVP infrastructure. Lastly, BBID holds contracts for supplemental water that it may call on if needed and has received supplemental surface water supplies via temporary transfers during dry years.

Groundwater for the project site is currently pumped from the underlying Tracy Subbasin and Delta-Mendota Subbasin of the San Joaquin Valley Groundwater Basin, the characteristics of which are discussed in greater detail in Chapter 4.8, Hydrology and Water Quality, of this EIR. Groundwater for the existing on-site agricultural operations is pumped from 18 wells with capacities ranging from 50 gallons per minute (gpm) to 1,500 gpm (see Figure 4.11-1).

Figure 4.11-1
Existing and Proposed Well Locations



Source: Todd Groundwater, 2025.

*Figure not OCR compatible.

According to the WSA prepared for the proposed project, the current average estimated annual groundwater use for the project site from the Tracy and Delta-Mendota Subbasins was 2,101 AFY and 279 AFY, respectively, for a total on-site groundwater use of 2,380 AFY. The reported average annual surface water use on-site was 2,158 AFY. Therefore, the total existing on-site water use is 4,538 AFY (2,380 AFY groundwater + 2,158 AFY surface water = 4,538 AFY).

The existing on-site groundwater and surface water demand within each development area of the project site is summarized in Table 4.11-1.

The project site is located adjacent to the Delta-Mendota Canal and the California Aqueduct.

Wastewater Conveyance and Treatment

Sanitary sewer service within San Joaquin County is provided by several special districts that serve individual communities, including community service districts, public utility districts, sanitary districts, and sewer maintenance districts. Some special districts are connected to cities but operate independently, while other districts were created to serve planned developments that were never built. Some agencies provide sewer collection services only, and contract with major sewer districts who have sewer treatment facilities for wastewater treatment and disposal. The cities of Escalon, Ripon, and Tracy primarily provide service to residents in incorporated areas; residents in unincorporated areas rely on private septic systems.

The project site is not currently provided sewer conveyance and treatment services, as the site has only limited utility infrastructure. As such, the proposed project would include the development of a self-contained wastewater system that would not require service from an outside agency. See Impact 4.11-5 below for a more detailed discussion.

Solid Waste

Unincorporated San Joaquin County is divided into six solid waste collection franchise areas, which are serviced by five solid waste collection services, including Central Valley Waste Services, Allied Waste, Gilton Solid Waste Management, Stockton Scavengers Association, and Delta Disposal Services. The San Joaquin County Code requires residential service once a week and commercial and industrial service a minimum of two times per week. In addition to curbside collection services, drop boxes are also provided to collect wastes in the unincorporated communities. According to the General Plan EIR, three active solid waste disposal/landfill facilities are in San Joaquin County, as listed in the California Department of Resources Recycling and Recovery (CalRecycle) Solid Waste Information System (SWIS). The Foothill Sanitary Landfill and North County Landfill are Class III Landfills that are owned and operated by the San Joaquin County Public Works Department. The County also operates Lovelace Materials Recovery Facility and Recycle Center, a Household Hazardous Waste facility. The Forward Landfill is the only Class II landfill in the County and is owned and operated by Forward Inc./Allied Waste North America.

Tracy Delta Solid Waste Management Inc. currently provides solid waste disposal services to the southeastern portion of San Joaquin County and would continue to serve the proposed project. Solid waste is taken to the Tracy Material Recovery Facility and Solid Waste Transfer Station (MRF) before being sent to the Foothill Sanitary Landfill located at 6484 North Waverly Road in Linden, California. The Foothill Sanitary Landfill is a Class III landfill that accepts waste types including, but not limited to, wood, agricultural, construction, and industrial waste.

Table 4.11-1
Existing On-Site Water Demand

APN	Acreage	Groundwater (AFY) Subbasins		Surface Water Deliveries (AFY)		Total (AFY)
		Tracy	Delta Mendota	BBID	DPWD	
Pacific Gateway West						
253-140-090	3.06	9.18	--	--	--	9.2
253-140-100	37.06	14.25	--	96.93	--	111.2
253-140-110	40.13	15.43	--	104.96	--	120.4
253-140-130	25.9	77.70	--	--	--	77.7
253-140-140	14.17	5.45	--	37.06	--	42.5
253-140-150	12.92	38.76	--	--	--	38.8
253-140-160	27.09	10.42	--	70.85	--	81.3
253-140-170	40.11	15.43	--	104.90	--	120.3
253-140-190	6.2	18.60	--	--	--	18.6
253-140-200	34.11	13.21	--	89.21	--	102.3
253-140-210	40.09	15.42	--	104.85	--	120.3
253-140-220	17.83	53.49	--	--	--	53.5
253-140-230	22.3	8.58	--	58.32	--	66.9
253-140-240	9.26	27.78	--	--	--	27.8
253-140-250	30.86	11.87	--	80.71	--	92.6
Pacific Gateway Central						
253-180-020	60.03	180.09	--	--	--	180.1
253-190-210	39.91	--	88.65	--	31.08	119.7
253-190-220	39.98	--	88.80	--	31.14	119.9
253-180-060	4.47	13.41	--	--	--	13.4
253-180-110	182.85	548.55	--	--	--	548.6
253-190-110	61.7	0.0	--	185.10	--	185.1
Pacific Gateway East						
253-260-090	119.46	239.38	--	119.00	--	358.4
253-260-120	119.46	115.48	--	242.90	--	358.4
253-260-130	202.83	194.49	--	414.00	--	608.5
253-290-050	103.00	121.50	--	187.50	--	309.0
253-290-110	40.01	107.08	--	--	12.948	120.0
253-290-120	14.92	39.32	--	--	5.441	44.8
253-290-130	19.0	50.34	--	--	6.662	57.0
Gateway Center						
253-260-050 (Not Planted)	0.99	0.0	--	--	--	0.0
253-260-140 (Not Planted)	59.1	0.0	--	--	--	0.0
University Center						
253-190-040 (Not Planted)	7.65	0.0	--	0.0	--	0.0
253-190-050	66.05	156.30	--	41.85	--	198.2
253-190-190	37.94	--	84.27	--	29.55	113.8
Off-Site Basin						
253-200-190	40.0	--	17.47	--	102.53	120.0
Project Area Subtotal	*1,580*	*2,101*	*279*	*1,938*	*219*	*4,538*
Par County Estates (CSA-16)						
Par County Estates	191	151.70	--	--	--	151.7
Total	**1,772**	**2,253**	**279**	**1,938**	**219**	**4,690**

Source: Todd Groundwater, 2025.

The Foothill Sanitary Landfill includes 800 acres of total area, with approximately 674 acres of landfill area; the Landfill has a maximum permitted throughput of 1,500 tons per day, a permitted design capacity of 138,000,000 cubic yards, and a remaining capacity of 125,000,000 cubic yards as of 2010.[8]

Gas, Electric, and Telecommunication Infrastructure

Electric and natural gas services in the project area are provided by Pacific Gas and Electric (PG&E). PG&E is one of the largest providers of electricity throughout San Joaquin County. PG&E is a San Francisco based, private company, publicly regulated by the California Public Utilities Commission and provides electricity to the majority of Northern California. PG&E has ample resources to meet a wide range of projected growth; however, when the time comes, additional improvements to the facilities may be required to meet future growth demands.

An existing PG&E natural gas pipeline traverses the project site, extending from the northeastern corner of the Pacific Gateway West development area and running along the Delta-Mendota Canal through the Pacific Gateway Central development area before exiting the project site from the southern boundary of the Pacific Gateway East development area, just east of South Chrisman Road. Powerlines run parallel to each roadway that traverses the project site.

Telecommunications and internet infrastructure in the area is provided by AT&T and Comcast.

4.11.3 REGULATORY CONTEXT

The following discussion summarizes the regulatory controls governing public services and utilities, including applicable federal, state, and local laws and ordinances.

Federal Regulations

The federal environmental laws and policies relevant to public services and utilities are primarily related to water quality, which is addressed in Chapter 4.8, Hydrology and Water Quality, of this EIR.

State Regulations

The following are applicable State regulations associated with public services and utilities related to the proposed project.

Uniform Fire Code

The Uniform Fire Code with the State of California Amendments contains regulations related to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code (CFC) include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

[8] California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details, Foothill Sanitary Landfill (39-AA-0004).* Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1424?siteID=3097. Accessed February 2025.

California Health and Safety Code

State fire regulations are set forth in Sections 15000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Code [CBC]), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Proposition 1A/Senate Bill 50

Proposition 1A/Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) is a school construction measure primarily for modernization and rehabilitation of older school facilities and construction of new school facilities. Proposition 1A/SB 50 implemented significant fee reforms by amending the laws governing developer fees and school mitigation.

Proposition 1A/SB 50 also prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act […] involving […] the planning, use, or development of real property" (Government Code 65996[b]). Additionally, a local agency cannot require participation in a Mello-Roos for school facilities; however, the statutory fee is reduced by the amount of any voluntary participation in a Mello-Roos. Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation."

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds.

California Green Building Standards Code

The 2022 California Green Building Standards Code, otherwise known as the CALGreen Code (California Code of Regulations [CCR] Title 24, Part 11) is a portion of the California Building Standards Code (CBSC), which became effective on January 1, 2023. The CBSC is adopted every three years by the Building Standards Commission (BSC).

The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CALGreen standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California. Requirements of the current CALGreen Code include, but are not limited to, the following measures:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' (DWR's) Model Water Efficient Landscape Ordinance (MWELO);



- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;
- Inclusion of electric vehicle (EV) charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. According to Section A4.602 of Appendix A4 of the CALGreen Code, CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs. San Joaquin County does not require compliance with Tier 1 or Tier 2 CALGreen standards at this time.

California Water Code

The California Water Code requires coordination between land use lead agencies and public water purveyors. The purpose of this coordination is to ensure that prudent water supply planning has been conducted and that planned water supplies are adequate to meet both existing demands and the demands of planned development.

Water Code Sections 10910 to 10915 (inclusive), sometimes referred to as SB 610, require land use lead agencies: 1) to identify the responsible public water purveyor for a proposed development project, and 2) to request from the responsible purveyor, a "Water Supply Assessment". The purposes of the WSA are (a) to describe the sufficiency of the purveyor's water supplies to satisfy the water demands of the proposed development project, while still meeting the current and projected water demands of customers, and, (b) in the absence of a currently sufficient supply to describe the purveyor's plans for acquiring additional water. Water Code Sections 10910 to 10915 delineate the specific information that must be included in the WSA.

According to CEQA Guidelines Section 15155, a "water-demand project" means:

A. A residential development of more than 500 dwelling units.
B. A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet (sf) of floor space.
C. A commercial office building employing more than 1,000 persons or having more than 250,000 sf of floor space.
D. A hotel or motel, or both, having more than 500 rooms.
E. An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 sf of floor area.
F. A mixed-use project that includes one or more of the projects specified in subdivisions (a)(1)(A), (a)(1)(B), (a)(1)(C), (a)(1)(D), (a)(1)(E), and (a)(1)(G) of this section.
G. A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.
H. For public water systems with fewer than 5,000 service connections, a project that meets the following criteria:

1. A proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of a public water system's existing service connections; or
2. A mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

The proposed project includes implementation of a Specific Plan that would result in up to 24,675,000 sf of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.5-acre University campus plus 9.8 acres for future expansion, a Veterans of Foreign Wars (VFW) post, and various open space, parks, a new fire station, stormwater management basins, and pedestrian and bicycle facilities within the 1,576.7-acre project site. Therefore, the project meets criterion E.

Assembly Bill 1327

Assembly Bill (AB) 1327, the Solid Waste Reuse and Recycling Access Act of 1991, requires jurisdictions to adopt ordinances requiring development projects to provide adequate storage area for collection and removal of recyclable materials.

Assembly Bill 1881

AB 1881, the Water Conservation in Landscaping Act of 2006 required the DWR to update the MWELO. Furthermore, AB 1881 required local agencies to adopt the updated model ordinance or an equivalent ordinance by January 1, 2010. If local jurisdictions failed to adopt the updated model ordinance or an equivalent by January 1, 2010, the DWR's updated model ordinance would automatically be adopted by statute. San Joaquin County has adopted such an ordinance (County Code of Ordinances Section 9-402.060).

Senate Bill 1016

Enacted in 2007, SB 1016 amended portions of the California Integrated Waste Management Act, allowing the California Integrated Waste Management Board (CIWMB) to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to CalRecycle.

According to CalRecycle's jurisdiction disposal records, unincorporated San Joaquin County disposed of 202,623.94 tons in 2023 (the most recent year for which this data is available).[9] The unincorporated County's per capita waste disposal rate for residents was 6.9 pounds per day (lbs/day); the per capita disposal rate target for residents according to CalRecycle was 1.8 lbs/day. The per capita waste disposal rate for employees in unincorporated San Joaquin County in 2023 was 17.6 lbs/day; the CalRecycle per capita disposal rate target for employees was 24.6 lbs/day.

California Integrated Waste Management Act – Assembly Bill 939

AB 939, the California Integrated Waste Management Act of 1989, contains requirements affecting solid waste disposal in California. According to AB 939, all cities and counties are required

[9] California Department of Resources Recycling and Recovery. *Jurisdiction Diversion/Disposal Rate Detail: San Joaquin County – Unincorporated*. Available at: https://www2.calrecycle.ca.gov/LGCentral/%20DiversionProgram/JurisdictionDiversionDetail/443/Year/2023. Accessed February 2025.

to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated within the respective county plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal. San Joaquin County is responsible for ensuring that the County meets the requirements of AB 939, and is responsible for annual reporting to CalRecycle.

Local Regulations

The following are applicable local public services and utility regulations related to the proposed project.

San Joaquin County General Plan

The San Joaquin County General Plan identifies the following goals and policies related to public services, utilities, and service systems.

Public Facilities and Services Element

Goal IS-1 To provide residents and businesses quality, cost-effective, and sustainable public facilities and services.

Policy IS-1.1 **Essential Facilities and Services.** The County shall strive to ensure that adequate public facilities and services essential for public health and safety are provided to all County residents and businesses and maintained at acceptable service levels. Where public facilities and services are provided by other agencies, the County shall encourage similar service level goals.

Policy IS-1.2 **Infrastructure Standards.** The County shall require new developments that include improvements to existing infrastructure or new infrastructure to meet the requirements and standards of the County or other agencies providing services.

Policy IS-1.3 **Facilities and Services Deficiencies.** The County shall coordinate with other public facilities districts and agencies (e.g., special districts, community service districts) to identify and find solutions to key infrastructure deficiencies in the County.

Policy IS-1.4 **Infrastructure Maintenance.** The County shall work with agencies to maintain, improve, and replace public facilities as necessary to maintain adequate levels of service for existing and future development and reduce the need for new facilities. Where public facilities and services are provided by other agencies, the County shall encourage similar service level goals.

Policy IS-1.5 **Infrastructure and Service Expansions.** The County shall base the expansion of public facilities and services on

current needs and planned or projected development patterns.

Policy IS-1.8 **Infrastructure Financing, Design, and Construction.** The County shall require new development to fund the initial financing, design, and construction of required infrastructure facilities. All financing (including operation and maintenance) and improvement plans shall be subject to County review and approval.

Policy IS-1.13 **Infrastructure Financing.** The County shall approve new development only when financial mechanisms are in place to ensure that adopted County service standards are met and that long-term infrastructure and facility maintenance can be provided.

Policy IS-1.16 **Master Planned Facilities.** The County shall require new development including single-parcel development, to provide necessary on-site and off-site infrastructure improvements. Proposed new developments that cannot be served by an existing service provider shall be required to fund preparation of a master plan or specific plan for the parcel and adjacent areas that includes:

- a large enough area and mix of uses to support self-sustaining infrastructure service systems;
- detailed infrastructure and service plan, financing, and maintenance plan; and
- approval by the Director of Public Works.

Policy IS-1.18 **Landfill Capacity.** The County shall analyze remaining landfill capacity and continue to implement solid waste diversion programs in order to increase the rate of diversion across all communities and increase the usable life of existing landfill disposal facilities. (MMRP)

Goal IS-2 To ensure appropriate public utility agencies are in place for the long-term maintenance of infrastructure and provision of services.

Policy IS-2.6 **New Development Requirements.** The County shall require new development to provide water, sewer, storm water, and/or street lighting service(s), using one of the following methods, subject to County review and approval:

- Obtain a will-serve letter from an existing Special District, Community Service District, Mello-Roos Community Facilities District or other non-city public utility agency and obtain LAFCo approval for annexation or out-of-agency service;

- Obtain a will-serve letter from a city and obtain LAFCo approval for out-of-agency service;
- Fund the formation of a new Community Service District, Mello-Roos Community Facilities District or other non-County public utility agency that would perform ongoing maintenance.; or
- When approved by the Director of Public Works, fund the formation of a new County Service Area (CSA) that would provide ongoing maintenance services.

Goal IS-4 To ensure reliable supplies of water for unincorporated areas to meet the needs of existing and future residents and businesses, while promoting water conservation and the use of sustainable water supply sources.

Policy IS-4.1 **Water Agency Support**. The County shall support efforts of local water agencies, special district, and water conservation districts to ensure that adequate high-quality water supplies are available to support existing and future residents and businesses.

Policy IS-4.2 **Interagency Cooperation**. The County shall work with local water agencies to address existing and future water needs for the County.

Policy IS-4.3 **Water Supply Availability**. The County shall consider the availability of a long-term, reliable potable water supply as a primary factor in the planning of areas for new growth and development.

Policy IS-4.6 **Coordinate Efforts for Adequate Water Supply**. The County shall support coordinated efforts to obtain adequate water supplies and develop water storage facilities to meet expected water demand.

Policy IS-4.7 **Conjunctive Use**. The County shall support conjunctive use of groundwater and surface water by local water agencies to improve water supply reliability.

Policy IS-4.8 **Water Conservation Measures.** The County shall require existing and new development to incorporate all feasible water conservation measures to reduce the need for water system improvements.

Policy IS-4.9 **Groundwater Management.** The County shall continue to support cooperative, regional groundwater management planning by local water agencies, water users, and other affected parties to ensure a sustainable, adequate, safe,

and economically viable groundwater supply for existing and future uses within the County.

Policy IS-4.13 **Water Quality Standards**. The County shall require that water supplies serving new development meet State water quality standards. If necessary, the County shall require that water be treated to meet State standards and that a water quality monitoring program be in place prior to issuance of building permits.

Policy IS-4.14 **Sufficient Water Supply Assessments**. The County shall require new developments over 500 dwelling units in size to prepare a detailed water source sufficiency study and water supply analysis for use in preparing a Water Supply Assessment, consistent with any Integrated Regional Water Management Plan or similar water management plan. This shall include analyzing the effect of new development on the water supply of existing users.

Policy IS-4.19 **Water Efficient Landscaping**. The County shall encourage water efficient landscaping and use of native, drought-tolerant plants consistent with the Model Landscape Ordinance.

Goal IS-5 To maintain an adequate level of service in the water systems serving unincorporated areas to meet the needs of existing and future residents and businesses, while improving water system efficiency.

Policy IS-5.1 **Adequate Water Treatment and Distribution Facilities.** The County shall ensure, through the development review process, that adequate water, treatment and distribution facilities are sufficient to serve new development, and are scalable to meet capacity demands when needed. Such needs shall include capacities necessary to comply with water quality and public safety requirements.

Policy IS-5.4 **Water Infrastructure Fees.** As a condition of approval for new developments, the County shall require verification of payment of fees imposed for water infrastructure capacity per the fee payment schedule from the appropriate local agency prior to the approval of any final subdivision map.

Policy IS-5.6 **Consistent Fire Protection Standards for New Development.** The County, in coordination with local water agencies and fire protection agencies, shall ensure consistent and adequate standards for fire flows and fire protection for new development.

Goal IS-6 To ensure wastewater treatment facilities and septic systems are available and adequate to collect, treat, store, and safely dispose of wastewater.

Policy IS-6.2 **Reclaimed Water**. The County shall encourage public wastewater system operations to upgrade existing wastewater treatment systems to produce reclaimed water suitable for reuse.

Policy IS-6.3 **Adequate Wastewater Facilities.** The County shall ensure through the development review process that wastewater collection, treatment, and disposal facilities are sufficient to serve existing and new development, and are scalable to meet capacity demands when needed.

Policy IS-6.6 **Wastewater Treatment System Standards.** The County shall require that the development, operation and maintenance of wastewater treatment systems meet the requirements and standards of the wastewater treatment agency and the County, including the requirements and standards of the County Environmental Health Department.

Public Health and Safety Element

Goal PHS-1 To maintain a level of disaster preparedness necessary for the protection of public and private property, and the health, safety, and welfare of people living and working in San Joaquin County.

Policy PHS-1.1 **Effective Emergency Response.** The County shall maintain adequate facilities equipment and staffing to respond effectively to emergencies.

Natural and Cultural Resources Element

Goal NCR-8 To develop and maintain a comprehensive system of parklands and protected public recreational areas that achieve County park ratio standards and meet the active and passive recreation needs of San Joaquin County residents and visitors.

Policy NCR-8.2 **Park Ratio Standard.** The County shall encourage and support the development of recreational facilities to serve unincorporated communities at a ratio of 10 acres of regional parks and three acres of local parks per 1,000 residents, except for Mountain House, which has an approved park ratio of not less than five acres of parks per 1,000 population. The County shall consider increasing its park ratio standards to address unmet park needs.

Policy NCR-8.22 **Park Dedication and In-Lieu Fees.** The County shall require dedication of parkland or in-lieu fees for local parks until other methods of sufficient financing are established. In-lieu fees shall:

- be collected for new developments proposed in the county;

- include land acquisition and site development costs, such as grading, access, drainage, and fencing; and
- be given to the agency providing local recreation facilities.

San Joaquin County Public Works Improvement Standards

The purpose of the San Joaquin County Public Works Improvement Standards (Improvement Standards) are to establish minimum design standards and standard plans for the construction of subdivision, commercial, and other types of development projects in unincorporated San Joaquin County. For example, Chapter 4 of the San Joaquin County Improvement Standards establishes minimum design standards for water supply requirements and distribution system design. Similarly, Chapter 5 of the San Joaquin County Improvement Standards establishes minimum design standards for sanitary sewers, sewer pump stations, and sewage treatment plants, including minimum sewer main sizes and treatment capacity.

4.11.4 IMPACTS AND MITIGATION MEASURES

The section below describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential project-specific impacts related to public services and utilities. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, determination of significant impacts is based on whether the proposed project would result in the following:

- 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:
  - Fire protection;
  - Law enforcement;
  - Schools;
  - Parks;
  - Other public facilities;
- 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;
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment;
- Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

Impacts related to groundwater and storm drainage facilities are addressed in Chapter 4.8, Hydrology and Water Quality, of this EIR.

Method of Analysis

In order to determine the potential for the project to result in substantial adverse impacts associated with the provision of new or altered government facilities and utilities, relevant public services and utilities planning documents were reviewed, including the San Joaquin County General Plan and the San Joaquin County General Plan EIR. In addition, information related to water supply was primarily drawn from the WSA (see Appendix K of this EIR) prepared for the proposed project by Todd Groundwater. Information related to the proposed project's water demand and sewer generation was primarily drawn from the Water and Sewer Memo prepared for the proposed project by Schaaf and Wheeler (see Appendix N of this EIR). The method of analysis used in the aforementioned assessment is discussed further below.

Water Supply Assessment

The purpose of the WSA is to document the current water demand of the project site. The proposed project does not contemplate annexation to CSA-16 at this time, however, because the proposed project is located near CSA-16, the WSA includes preliminary demand calculations for CSA-16 in the event consolidation into the district is required in the future. The water supply and demand comparison, conducted for both normal and drought conditions in five-year increments to 2050, is the basis for an assessment of water supply sufficiency in accordance with California Water Code Section 10910 (SB 610).

The WSA incorporates current and future water supply and demand information from the City of Tracy 2020 Urban Water Management Plan (UWMP), groundwater sustainability plans (GSPs), and other available regional documents regarding water supplies, current water use, and estimated water use of the project. The analysis extends to 2050, addresses water demands in five-year increments, and provides information consistent with SB 610 WSA requirements.

Water and Sewer Memo

The methods for determining the water and sewer demand of the proposed project, as well as the methods for estimating the required sizing of utilities infrastructure, are described below.

Water Demand

The proposed project's water demand would include three main land uses: commercial, industrial, and landscape irrigation area. The types of water uses are subdivided into four main categories: light industrial, hotel/commercial/VFW, university, and landscape irrigation. The proposed project would be developed in phases based on market demand.

Table 4.11-2 shows the water demand of Specific Plan Buildout for industrial, hotel/commercial, VFW, and university land uses, as well as landscape irrigation demand. Water demands are listed by development area names, along with the respective groundwater basin, acreage, and

estimated building area. Water demand is reported in terms of gallons per day per acre (gpd/ac), gallons per day (gpd), and AFY.

For industrial land uses, actual water demands depend on the specific industrial activity and vary widely, as do estimates of industrial water demand. For example, the San Joaquin County Improvement Standard recommends a relatively high general value of 1,800 gpd/ac to evaluate all industrial water demand regardless of the specific activity. Another estimate from the City of Tracy Wastewater Master Plan assumes 750 gpd/ac for wastewater generation of industrial land uses. For the proposed project, which involves warehouses with relatively low water demand, Schaaf and Wheeler's estimate was based on observed measurements of nearby light industry; the reasonableness of such assumptions was checked and confirmed by Todd Groundwater. For example, the U.S. Energy Information Administration shows water uses ranging from 405 to 6,000 gpd/ac (including outdoor irrigation) for warehouses to healthcare facilities, respectively. Monterey Peninsula Water Management District (MPWMD) uses 23 gpd/ac for their water supply planning reflecting new warehouse construction. The light industrial warehouses associated with the proposed project would likely be in the lower range for industry. The Water and Sewer Memo estimates 10 gpd per 1,500 sf of industrial space and 10 gpd per 250 sf of office space; the foregoing estimations are per-shift estimates, and it is assumed that industrial developments would be 95 percent warehouse and five percent office space with two shifts per day. The foregoing estimates result in a demand of 726 gpd/ac, which is a reasonable estimate for the proposed type of industrial development.

For proposed hotel/commercial and VFW uses, Schaaf and Wheeler estimated a water demand of 2,000 gpd/ac, consistent with the San Joaquin County Improvement Standard.

For the proposed university, Schaaf and Wheeler presented an estimated indoor water demand based on 12.81 gpd/student. This estimate was assessed independently with reference to reports on water use at various colleges published by the Association for Advancing Sustainability in Higher Education. In brief, community colleges report usage on the Sustainability Tracking, Assessment & Rating System (STARS) and indicate similar water use (8.65 to 17.24 gpd/student). As shown in Table 4.11-2, a rate of 12.81 gpd/student is assumed as a reasonable estimate and applied to the total of 5,000 students expected when the university is fully built. At buildout, the project also includes 1,600 dorm beds for students to live on campus. The on-campus students are assumed to have an additional demand of 67.19 gpd/student for a total 80 gpd/student for on-campus students, also shown in Table 4.11-2. Table 4.11-2 also summarizes the water demand for CSA-16. [10]

Table 4.11-2 also summarizes the landscape irrigation demand as estimated in the Water and Sewer Memo, which assumes that 15 percent of the total parcel area would be irrigated. The methodology to determine irrigation demand is based on an evapotranspiration (ETo) from the Modesto California Irrigation Management Information System (CIMIS) station (53.48 inches per year) and an Evapotranspiration Adjustment Factor (ETAF) to accommodate the expected landscape palette. California's MWELO requires that an ETAF of 0.45 be used for commercial, industrial, and institutional landscaping uses.

[10] The County provided well production data for CSA-16, which has been incorporated into the WSA analysis. Actual water usage by properties in CSA-16 is subject to further validation and may be greater than presently estimated in the WSA. Although physical connection is not currently contemplated by the project, in the event that annexation into CSA-16 is pursued in the future, further technical analysis and demand calculations may be required.

Table 4.11-2
Estimated Project Water Demand

Development Area	Groundwater Subbasin	Land Use	Building Area (acres)	Rate	Average Daily Demand (gpd)	Indoor Use (AFY)	Estimated Irrigation Area (acres)	Irrigation Demand (AFY)	Total Water Demand (AFY)
Pacific Gateway East	Delta-Mendota/Tracy	Industrial	255.4	726 gpd/ac	185,405	207.7	100.0	124.4	332.1
Pacific Gateway Central	Delta-Mendota/Tracy	Industrial	157.4	726 gpd/ac	114,275	128.0	61.7	76.7	204.7
Pacific Gateway West	Tracy	Industrial	141.6	726 gpd/ac	102,815	115.2	55.5	69.0	184.2
Gateway Center	Delta-Mendota/Tracy	Industrial	12.1	726 gpd/ac	8,756	9.8	4.7	5.9	15.7
Gateway Center	Delta-Mendota/Tracy	Hotel/Commercial	2.5	2,000 gpd/ac	5,032	5.6	1.0	1.2	6.9
University Center	Delta-Mendota/Tracy	University	31.7	12.81 gallons per student per day	64,050	71.7	12.4	15.4	87.2
University Center	Delta-Mendota/Tracy	University	N/A	67.19 gallons per student per day	107,504	120.4	N/A	N/A	120.4
University Center	Delta-Mendota/Tracy	VFW	0.3	2,000 gpd/ac	528	0.6	0.1	0.1	0.7
University Center	Delta-Mendota/Tracy	Industrial	2.1	726 gpd/ac	1,550	1.7	0.8	1.0	2.8
University Center	Delta-Mendota/Tracy	Commercial	0.9	2,000 gpd/ac	1,786	2.0	0.3	0.4	2.4
Subtotal Project Demand	--	--	*603.9*	--	--	*662.8*	*236.6*	*294.2*	*957.0*
CSA-16	Delta-Mendota/Tracy	Residential	N/A	N/A	123,290	138.1	N/A	N/A	138.1
Total	**--**	**--**	**603.9**	**--**	**--**	**800.9**	**236.6**	**294.2**	**1,095.1**

Source: Todd Groundwater, 2025.

The recommended ETAF rate is incorporated in irrigation demand values in Table 4.11-2. Irrigation demand is shown separately therein because such demand could be satisfied by recycled water if available.

With respect to fire water demand, Schaaf and Wheeler referred to fire flow demand requirements established in the 2019 CFC. With the large building sizes anticipated, a base fire flow of 8,000 gpm for four hours was assumed. However, it was presumed that the buildings would be equipped with fire suppression systems, which would allow for a significant reduction in fire flow to 2,000 gpm for two hours. The fire demand was conservatively set at 2,000 gpm for four hours.

Total water use for the proposed project is estimated to be 957 AFY.

Water Infrastructure

To determine the required pipe sizing for the domestic water system, a pipe network was created in EPANET, which is a software application used to model water distribution systems. Peak hour water demands were placed strategically at locations to simulate maximum water demands at potential building locations. In addition to the pipes, approximate booster pump station and storage tank sizes were determined. Preliminary pipe sizes were determined using the EPANET model and vary between six-inch through 12-inch pipe within the project.

In addition to the system pipeline, storage tanks would be required for the combined domestic/fire water system. State standards require a minimum domestic storage volume equivalent to eight hours of the maximum day demand (MDD), plus the required fire flow demand. Table 4.11-3 summarizes the proposed project's required domestic storage in million gallons (MG). While only approximately 520,000 gallons of storage is required for domestic purposes, dead storage within tanks and commonly available storage tank requirements lead Schaaf and Wheeler to recommend a minimum of 700,000 gallons of domestic storage. This storage may be split between two reservoirs, depending on project phasing and ultimate pressure zone configuration. A booster pump system would be installed adjacent to the storage tanks to supply water to the domestic system.

With respect to fire flow infrastructure, given that the system would supply domestic and fire water, the fire demand is anticipated to govern the pipe sizing requirements. Schaaf and Wheeler prepared a fire flow model using EPANET and concluded that a 12-inch pipeline would be sufficient to accommodate the required fire flow of 2,000 gpm. State standards require that the project store the fire flow, which would require 480,000 gallons of fire storage. Given dead volume within the storage tanks, it is estimated that a 600,000-gallon storage tank would be required. It may be possible to split the storage volume between multiple tanks, but a fire pump would be necessary at each tank location.

While irrigation requirements are not known at this time, Schaaf and Wheeler estimated that an eight-inch pipe would be sufficient to meet irrigation demands. The irrigation system would consist of a recycled water storage tank and booster station located at the proposed wastewater treatment plant (WWTP).

Sewage Demand

Schaaf and Wheeler estimated that average daily sewage flow generated by the proposed project would be 80 percent of the average daily potable water demand. Table 4.11-4 summarizes anticipated average daily sewage flow for the proposed project.

Table 4.11-3
Required Domestic Water Storage

Development Area	Land Use	Initial Phase Area (sf)	Specific Plan Buildout Area (sf)	Initial Phase Water Storage (MG)	Specific Plan Buildout Water Storage (MG)
Pacific Gateway East	Industrial	3,962,000	11,124,274	0.0484	0.1360
Pacific Gateway Central	Industrial	--	6,856,474	--	0.0838
Pacific Gateway West	Industrial	--	6,168,882	--	0.0754
Gateway Center	Industrial	--	525,370	--	0.0064
Gateway Center	Hotel/Commercial	--	109,592	--	0.0037
University Center	University[1]	25,000	1,379,150	0.0056	0.1258
University Center	VFW[2]	11,500	11,500	0.0004	0.0004
University Center	Industrial	--	93,000	--	0.0011
University Center	Commercial	--	38,908	--	0.0013
CSA-16	Residential[3]	N/A	N/A	0.0904	0.0904
	Total	**3,998,500**	**26,307,150**	**0.1449**	**0.5243**

Notes:

1. University conservatively assumes 600 students in the Initial Phase and 5,000 students at Specific Plan Buildout, with each student accounting for 12.81 GPD. This analysis also assumes that 1,600 student beds are included at Specific Plan Buildout with an additional demand of 67.19 GPD per bed (80 GPD per bed total).
2. VFW is treated as commercial.
3. CSA-16 water usage is based on historical water production data.

Source: Schaaf and Wheeler, 2025.

Table 4.11-4
Average Daily Sewer Generation

Development Area	Land Use	Initial Phase Area (sf)	Specific Plan Buildout Area (sf)	Initial Phase Water Demand (GPD)	Specific Plan Buildout Water Demand (GPD)	Initial Phase Sewer (GPD)	Specific Plan Buildout Sewer (GPD)
Pacific Gateway East	Industrial	3,962,000	11,124,274	66,033	185,405	52,827	148,324
Pacific Gateway Central	Industrial	--	6,856,474	--	114,275	--	91,420
Pacific Gateway West	Industrial	--	6,168,882	--	102,815	--	82,252
Gateway Center	Industrial	--	525,370	--	8,756	--	7,005
Gateway Center	Hotel/ Commercial	--	109,592	--	5,032	--	4,025
University Center	University[1]	25,000	1,379,150	7,686	171,554	6,149	137,243
University Center	VFW[2]	11,500	11,500	528	528	422	422
University Center	Industrial	--	93,000	--	1,550	--	1,240
University Center	Commercial	--	38,908	--	1,786	--	1,429
CSA-16	Residential[3]	N/A	N/A	123,290	123,290	98,632	98,632
	Total	**3,998,500**	**26,307,150**	**197,537**	**714,990**	**59,398**	**473,360**

Notes:

1. University conservatively assumes 600 students in the Initial Phase and 5,000 students at Specific Plan Buildout, with each student accounting for 12.81 GPD. This analysis also assumes that 1,600 student beds are included at Specific Plan Buildout with an additional demand of 67.19 GPD per bed (80 GPD per bed total).
2. VFW is treated as commercial.
3. CSA-16 water usage is based on historical water production data.

Source: Schaaf and Wheeler, 2025.

Sewer Infrastructure

As discussed above, wastewater produced by the proposed project would be treated and disposed of on-site at a WWTP located in the Pacific Gateway East development area, specifically Parcel 10 of the Vesting Tentative Map. The wastewater generated on-site would be collected from each parcel through a traditional wastewater gravity flow pipe system installed in roadway alignments. Schaaf and Wheeler used Manning's equation to generate a preliminary estimate of sewer pipe sizes within the project site and estimated that six- to 12-inch sewer pipes would be adequate for the proposed project.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to public services, utilities, and service systems is based on the implementation of the proposed project in comparison with the standards of significance identified above.

4.11-1 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could

cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. Based on the analysis below, the impact is *less than significant*.

As discussed in the Project Description chapter of this EIR, The proposed project includes implementation of a Specific Plan that would result in up to 24,675,000 sf of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.5-acre University campus plus 9.8 acres for future expansion, a VFW post, and various open space, parks, a new fire station, stormwater management basins, and pedestrian and bicycle facilities within the 1,576.7-acre project site.

Given that development of both the Initial Phase and Specific Plan Buildout would result in similar land uses, and that the footprints of both the Initial Phase and Specific Plan Buildout are currently served by the TRFD and would continue to be served by the TRFD should the project be approved, the following discussion applies to the potential for both components of the overall proposed project to result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection services and/or facilities, the construction of which would result in potential environmental impacts. A discussion of the Off-Site Improvements Study Area is also presented below.

Initial Phase, Specific Plan Buildout

The relevant CEQA threshold for this discussion is whether new or physically altered fire stations are needed to meet response times or other performance objectives, the construction of which could cause environmental impacts. As discussed above, the project site is currently served by TRFD Station 93 and 95, both of which are located within five miles of the project site. The TRFD operates under a joint power agreement with the City of Tracy Fire Department, forming the SSJCFA. Through the governmental structure of the SSJCFA, fire service is delivered to the community without restriction or concern for jurisdictional boundaries of the member agencies. In other words, the full strength of the organization and its closest resources will respond to members and visitors of the community.

Because the proposed project primarily consists of industrial uses, with some commercial and public service uses also proposed, the project would not be anticipated to generate a substantial amount of new population living within the TRFD service area, as the project does not include new residential units. As such, the proposed project would not be expected to substantially increase the need for additional TRFD fire personnel, equipment, and facilities through population growth.

However, the SSJCFA, on behalf of the TRFD, has determined that due to the remote location and significant size of the proposed project, existing fire protection and emergency response facilities are not sufficient to serve the proposed project at full buildout.[11] The project applicant entered an agreement with the TRFD and SSJCFA to include the development of a new fire station within the project site. As a condition

[11] Bradley, Randall, Fire Chief, South San Joaquin County Fire Authority. Personal Communication [letter] with Jennifer Jolley, Director, San Joaquin County Community Development Department. December 23, 2024.

of approval, the proposed project would be required to fund and construct the fire station located on a 2.59-acre parcel east of South Chrisman Road and north of the California Aqueduct, within the Pacific Gateway East development area, once the project site exceeds 6,000,000 sf, which would be after the Initial Phase development. The proposed fire station would be staffed with a three-person ALS engine company. Potential environmental impacts of development of the proposed fire station are analyzed throughout this EIR. The SSJCFA, on behalf of the TRFD, confirmed that with the provision of the on-site fire station, adequate capacity would be available to provide fire protection services for the proposed project.

Furthermore, all structures included as part of the proposed project would be constructed in accordance with the applicable standards set forth by the CBC and CFC. Consistent with the CBC, the design of the proposed buildings would include the installation and use of automatic fire sprinklers. Fire alarm systems would be incorporated pursuant to CFC requirements. The proposed project would also include an adequate fire flow system with requisite on-site storage. Such features would reduce the potential for fires to occur and spread within the proposed structures, thereby reducing the demand for fire protection services associated with the proposed project. In addition, pursuant to Section 9-610.060 of the County's Code of Ordinances, the proposed project would be required to pay applicable fire protection facilities improvement fees. However, according to the personal communication from the SSJCFA Fire Chief, the project developer would be eligible to receive fee credits up to the amount funded for the land, fire station, fire engine, and associated equipment.[12]

Off-Site Improvements Study Area

Because potential development within the Off-Site Improvements Study Area would consist of intersection and roadway improvements, such development is not anticipated to generate additional demand for public services. As such, future development within the Off-Site Improvements Study Area would not 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 fire protection services. Therefore, no impact would occur.

Conclusion

Based on the above, development of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection services and/or facilities, the construction of which could cause significant environmental impacts, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

[12] Bradley, Randall, Fire Chief, South San Joaquin County Fire Authority. Personal Communication [letter] with Jennifer Jolley, Director, San Joaquin County Community Development Department. December 23, 2024.

4.11-2 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services. Based on the analysis below, the impact is *less than significant*.

Given that development of both the Initial Phase and Specific Plan Buildout would result in similar land uses, and that the footprints of both the Initial Phase and Specific Plan Buildout are currently served by the SJCSO and would continue to be served by the SJCSO should the project be approved, the following discussion applies to the potential for both components of the overall proposed project to result in substantial adverse physical impacts associated with the provision of new or physically altered law enforcement services and/or facilities, the construction of which would result in potential environmental impacts. In addition, a separate analysis of the Off-Site Improvements Study Area is provided below.

Initial Phase, Specific Plan Buildout

The proposed project primarily consists of industrial uses, with some commercial and public service uses also proposed. Even with the 1,600 dorm rooms associated with the proposed University, the project would not be anticipated to generate a substantial amount of new permanent residents within the SJCSO service area, as the project does not include new residential units. Nonetheless, the proposed project would be conservatively anticipated to result in an increase in population within the County. While such an increase could incrementally increase demand for police protection services by the SJCSO, in the case *City of Hayward v. Board of Trustees of the California State University,* the First District Court of Appeal affirmed that the focus of CEQA analysis should be limited to physical environmental impacts related to a project.[13] As such, pursuant to the CEQA Guidelines, the incremental increase in demand for SJCSO services generated by the proposed project would not, by itself alone, constitute an impact on the environment.

The proposed project anticipates the need for traditional SJCSO policing services that may be rendered within conventional response times. Privately owned and operated industrial and university uses typically secure sites with fencing and use private security. Larger industrial facilities, generally 400,000 sf or greater, are often fully fenced. Regional distribution and logistics facilities of approximately one million sf or greater often incorporate guarded, shack-controlled truck court access, or site access. In instances where a burglary, robbery, physical threat, or violent crime occur, the proposed project would anticipate a SJCSO response from 911 calls or direct calls to the SJCSO's dispatch.

In a personal communication, the SJCSO stated that the proposed project would not generate the demand for police protection services such that the construction of a new

[13] First District Court of Appeal. *City of Hayward v. Board of Trustees of the California State University*. (November 30, 2015) 242 Cal.App.4th 833.

facility would be required.[14] Therefore, any increase in demand generated by the project would not result in the need for new or physically altered SJCSO facilities to meet response times or other performance objectives, the construction of which could cause environmental impacts.

Off-Site Improvements Study Area

Because potential development within the Off-Site Improvements Study Area would consist of intersection and roadway improvements, such development is not anticipated to generate additional demand for public services. As such, future development within the Off-Site Improvements Study Area would not 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 law enforcement services. Therefore, no impact would occur.

Conclusion

Based on the above, development of the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered police protection services and/or facilities, the construction of which could cause significant environmental impacts, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.11-3 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for schools. Based on the analysis below, the impact is *less than significant*.

The project site is within the boundaries of the TUSD and JESD. The following applies to the potential for both components of the overall proposed project to result in substantial adverse physical impacts associated with the provision of new or physically altered school services and/or facilities, the construction of which would result in potential environmental impacts. In addition, a separate analysis of the Off-Site Improvements Study Area is provided below.

Initial Phase, Specific Plan Buildout

As previously discussed, the proposed project primarily consists of industrial uses, with some commercial and public service uses also proposed. Thus, the project would not be anticipated to result in a direct increase in new school-aged population within the TUSD and JESD boundaries, as the project does not include new residential units.

[14] Taiariol, Nicholas, Lieutenant, San Joaquin County Sherrif's Office. Personal Communication [email] with Nick Pappani, Vice President of Raney Planning and Management, Inc. February 12, 2025.

Full Specific Plan buildout would include the development of an on-site university campus with 1,600 dorm beds, which would be intended to meet a need for higher education in the region. Therefore, the proposed project would not be expected to substantially increase demand for school services provided by the TUSD and JESD, such that the project would necessitate new or expansion of existing facilities, the construction of which would cause environmental impacts.

In addition, pursuant to Government Code Section 65996(b), Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "legislative or adjudicative act involving the planning, use, or development of real property." Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." Therefore, according to SB 50, the payment of the necessary school impact fees for the proposed project would be full and satisfactory CEQA mitigation. Currently, the TUSD development impact fee rate is $4.79 per sf of new residential development, and $0.78 per sf of new commercial/industrial development; the JESD development impact fee rate is $1.1975 per sf of new residential development, and $0.1950 per sf of new commercial/industrial development.[15] The proposed project would be required to pay the TUSD and JESD development impact fees as part of obtaining necessary permits during the project development process.

Off-Site Improvements Study Area

Because potential development within the Off-Site Improvements Study Area would consist of intersection and roadway improvements, such development is not anticipated to generate additional demand for public services. As such, future development within the Off-Site Improvements Study Area would not 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 school services. Therefore, no impact would occur.

Conclusion

Based on the above, through payment of the TUSD and JESD development impact fees, the proposed project would not result in the need for new or altered services related to schools, the construction of which would result in substantial environmental impacts, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.11-4 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable performance objectives for parks or other

[15] Tracy Unified School District. *Facilities*. Available at: https://www.tracy.k12.ca.us/departments/facilities. Accessed February 2025.

government services; or result in an increase in 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, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Based on the analysis below, the impact is *less than significant*.

The following discussion applies to the potential for the Initial Phase and Specific Plan Buildout to result in impacts related to the provision of park and other public facilities. In general, park facilities that could be potentially impacted by the proposed project would be those provided by the County; the other public facilities beyond those associated with the aforementioned public service providers would be library services and/or facilities provided by the Tracy Branch Library, as well as public roads. The following applies to the potential for both components of the overall proposed project to result in substantial adverse physical impacts associated with the provision of new or physically altered park or other government services and/or facilities, the construction of which would result in potential environmental impacts. In addition, a separate analysis of the Off-Site Improvements Study Area is provided below.

Initial Phase, Specific Plan Buildout

As previously discussed, the proposed project primarily consists of industrial uses, with some commercial and public service uses also proposed. Thus, the project would not be anticipated to generate a substantial increase in population within the County, as the project does not include new residential units. In addition, non-residential development employees are expected to use park and library facilities at a lesser rate than residents.

As shown in Figure 3-5, Conceptual Location of Public Parks, in Chapter 3, Project Description, of this EIR, the proposed project includes 51.7 acres dedicated to open space and parks. The project would provide open space areas and community amenities, as well as recreational and park facilities throughout the project site, including the approximately 11.87-acre Gateway Park (public) within the Pacific Gateway Central development area. Gateway Park would include community amenities such as open space gathering areas, picnic areas, sport courts (e.g., pickleball and basketball), and parking spots for food trucks. The parks and open spaces would be integrated throughout the project site and would be connected by way of the proposed pedestrian and bicycle networks. While the County has an adopted countywide park ratio standard of 10 acres of regional park and three acres of local parks per 1,000 residents, the County's park standards only apply to residential uses and do not apply to the proposed industrial and retail development. Therefore, the proposed project is not required to provide any parkland. Furthermore, the university would include recreational amenities, such as indoor and outdoor sports facilities and gathering areas. On-site students, as well as employees and visitors to the site, would have access to the aforementioned 51.7 acres of open space and parks rather than travel to existing off-site recreational facilities. As such, the project would not result in an increase in 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. Furthermore, the potential environmental impacts of such development are analyzed throughout this EIR.

As previously discussed, the Stockton-San Joaquin County Public Library system provides public library services throughout the County, with the nearest library being the Tracy Branch Library, located approximately five miles north of the project site. While employees, students, and visitors of the project site would have the potential to travel to the Tracy Branch Library, any increase in demand would likely be minimal. In addition, the proposed on-site University campus would include a library that could offset any additional demand generated for such services. Thus, any new residents within the region indirectly induced by the proposed project would reasonably be assumed not to result in the need for new or physically altered Stockton-San Joaquin County Public Library system facilities to meet performance objectives.

Due to the industrial nature of the majority of the proposed project, project operations are anticipated to generate additional traffic on local roadways, including large trucks. Over time, such operations could result in damage to roads maintained by the County and other local jurisdictions, such as the City of Tracy. Pursuant to Measure K, sales tax revenue generated by development within the County would help fund transportation improvements in San Joaquin County.[16] Measure K is a half-cent sales tax that funds transportation improvements in the County and is operated by the San Joaquin Council of Governments (SJCOG). Measure K is estimated to generate $2.552 billion for programs, including local street repairs and roadway safety. In addition, the County receives revenue from gas taxes for the purpose of roadway repairs and maintenance.

Off-Site Improvements Study Area

Because potential development within the Off-Site Improvements Study Area would consist of intersection and roadway improvements, such development is not anticipated to generate additional demand for public services. As such, future development within the Off-Site Improvements Study Area would not 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 recreational or library services. In addition, future development within the Off-Site Improvements Study Area would result in the improvement of existing roadways and, thus, would have a beneficial impact on such public services. Therefore, no impact would occur.

Conclusion

Based on the above, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered park or library services and/or facilities, the construction of which could cause significant environmental impacts, and a ***less-than-significant*** impact would occur.

[16] San Joaquin Council of Governments. *Measure K Renewal: 2024 Ordinance and Expenditure Plan*. Amended June 2024.

Mitigation Measure(s)
None required.

4.11-5 Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Based on the analysis below, the impact is *less than significant*.

The following discussions apply to the potential for development of the Initial Phase and Specific Plan Buildout to require the relocation or construction of new utility infrastructure, the construction or relocation of which could cause significant environmental effects. In addition, a separate analysis of the Off-Site Improvements Study Area is provided below.

Initial Phase, Specific Plan Buildout

Individual discussions on the water, wastewater treatment, electric power, natural gas, and telecommunications facilities improvements that would be necessary to serve the project site are provided below. It is noted that long-term operation and maintenance of project infrastructure would be supported by a site-specific Community Service District (CSD) and related financing mechanisms formed in accordance with a project-wide public facilities financing plan developed in compliance with State planning laws and regulations.

Water Supply Infrastructure

As previously discussed, the proposed project's domestic water needs would be met primarily through surface water supplied by BBID, with supplemental use of groundwater, if needed, through installation of one or more new wells. Surface water supplies would enter the development from existing turnouts off of the Delta Mendota Canal that currently serve the property. Water storage would be needed for the Initial Phase of the project. It is anticipated that necessary facilities would be constructed to serve the entire pressure zone for the Initial Phase and the proposed University and VFW sites. The potable water storage would be expanded as the project builds out. The water supplies would be pumped to the on-site treatment system before the water enters the storage tank. The water would be pumped from the storage tank into the distribution system, using the booster pump station. The above-described water treatment and storage facilities would be located within the Pacific Gateway East development area on Parcel 8 of the Initial Phase Vesting Tentative Map (see Figure 3-6 of this EIR).

Between domestic and fire storage requirements, approximately 1.3 mgd of water storage is anticipated. It may be possible to split this storage volume between pressure zones, but booster pumps capable of meeting domestic and fire flow requirements would be necessary at each tank location. The proposed location for the storage tank(s) and pump station would be located within the Initial Phase boundaries, on Parcel 8 of the Initial Phase Vesting Tentative Map (see Figure 3-6 of this EIR).

Installation of the new water supply infrastructure would occur in areas proposed for disturbance as part of development of the proposed project. All potential physical environmental impacts that could result from development of the proposed project, including the new water distribution infrastructure, have been evaluated throughout the technical chapters of this EIR. In addition, the new water infrastructure would be designed and constructed in accordance with the applicable standards set forth in the San Joaquin County Improvement Standards, ensuring the new water lines are constructed in conformance with proper materials and sizing. All necessary water conveyance infrastructure for the proposed project would be financed by the project applicant. Furthermore, based on the analysis presented under Impact 4.11-6 below, sufficient water supplies exist to serve the proposed project.

Based on the above, development of the proposed project would not require or result in the relocation or construction of new or expanded water facilities, the construction or relocation of which could cause significant environmental effects, and a less-than-significant impact would occur.

Wastewater Infrastructure

As previously discussed, the project site is not currently provided sewer conveyance and treatment services, as the site has only limited utility infrastructure. As such, the proposed project would include the development of a self-contained wastewater system that would not require service from an outside agency. Wastewater produced by the proposed project would be treated on-site at a WWTP located in the Pacific Gateway East development area, specifically Parcel 10 of the Initial Phase Vesting Tentative Map (see Figure 3-6 of this EIR). The wastewater generated on-site would be collected from each parcel through a traditional wastewater gravity flow pipe system installed in roadway alignments. Schaaf and Wheeler estimated that six- to 12-inch sewer pipes would be adequate for the proposed project. The gravity system would be supplemented with sewer lift stations, as needed, and all wastewater would be routed to the on-site WWTP.

The WWTP is anticipated to be a prepackaged facility. An operating permit issued by the Central Valley Regional Water Quality Control Board (CVRWQCB) would establish operating, performance, and reporting requirements for on-site treatment and disposal facilities. The WWTP would treat wastewater to tertiary standards, allowing treated wastewater to be used throughout the project site for landscape irrigation. Generally, the WWTP would use membrane bioreactor (MBR) technology in above-ground steel tank systems to produce treated wastewater suitable for irrigation and waste activated sludge suitable for landfill disposal.

The irrigation system would consist of a recycled water storage tank and booster pump station, located south of the WWTP (Parcel 11), with associated recycled water piping (“purple pipe”) to deliver recycled water from the WWTP to landscaped areas throughout the project.

To serve the Initial Phase of the proposed project, the sewer collection system and package wastewater treatment facility would be constructed, as would the recycled water storage and pump station. Any expansions to the wastewater system over the

years of project operations would be accomplished by the addition of treatment package units.

All potential physical environmental impacts that could result from development of the proposed project, including new sewer infrastructure, have been evaluated throughout the technical chapters of this EIR. In addition, the new sewer infrastructure would be designed and constructed in accordance with the applicable standards set forth in the San Joaquin County Improvement Standards, ensuring the new sewer infrastructure is constructed in conformance with proper materials and sizing. All necessary sewer conveyance infrastructure for the proposed project would be financed by the project applicant. Furthermore, based on the analysis presented under Impact 4.11-7 below, sufficient treatment capacity would be developed to serve the proposed project.

Based on the above, development of the proposed project would not require or result in the relocation or construction of new or expanded sewer facilities, the construction or relocation of which could cause significant environmental effects, and a less-than-significant impact would occur.

Electricity, Natural Gas, and Telecommunications Infrastructure

Electrical service would be provided by the PG&E. Overhead electric lines would be placed underground within the proposed roadways during the Initial Phase and any following construction phases. PG&E has sufficient existing facilities to serve the Initial Phase of the development; however, as the proposed development expands, PG&E may need to build additional substations. While focused on fire facilities, *City of Hayward vs. Board of Trustees of California State University* (1st District 2012) Cal.App.4th 446 is instructive when considering the potential environmental effects of future electrical substation construction. In *Hayward vs. Board of Trustees*, the court found that:

> The record supports the conclusion in the EIR that additional or expanded fire facilities will not have a significant environmental impact...the Master Plan EIR explains why it concluded that the physical environmental impacts from the construction of such a facility would likely be less than significant. A new fire station would of necessity be located within the city limits of Hayward and since most of the city is highly developed, the site of a fire station would likely be an infill vacant lot. Even if it were to be located in a less intensely developed portion of the city such as parts of Hayward hills, the development of a fire station would disturb between 0.5 and 1 acre of land. The development at the scale (a two-story high fire station on less than 1 acre of land) is unlikely to result in significant unavoidable environmental impacts. Given the nature of the project (fire station) and its size, environmental documents for fire station construction or expansion are typically categorical exemptions or negative declarations (Note that some lead agencies have determined that fire station expansions qualify for a categorical exemption under section 15301 of the CEQA guidelines).

The court found that this explanation was reasonable and sufficient. Given the unknown size and precise location of the future facilities and the absence of control by the Trustees over the future decision-making process, a more detailed analysis was not possible at the time. But in view of the known size requirements of a fire station and the general area within which the additional facilities would necessarily be placed,

the determination that the new facilities would not result in a significant environmental impact is supported by substantial evidence. Similarly, future development of a new electrical substation within the project site would require less than a one-acre site, which would likely be already disturbed. As such, consistent with the conclusions of *Hayward vs. Board of Trustees*, potential future development of a PG&E substation would not be anticipated to result in a significant environmental impact.

Natural gas would also be provided by PG&E through two natural gas pipelines north and south of the proposed development. Connections to the existing pipelines would be extended from both South Chrisman Road (to serve the Initial Phase) and South Tracy Boulevard.

Installation of the new electricity, natural gas, and telecommunications infrastructure would occur either in areas that have been previously disturbed or in areas proposed for disturbance as part of development of the proposed project.

Based on the above, development of proposed project would not require or result in the relocation or construction of new or expanded electricity, natural gas, and telecommunications facilities, the construction or relocation of which could cause significant environmental effects, and a less-than-significant impact would occur.

Off-Site Improvements Study Area

As previously discussed, future development within the Off-Site Improvements Study Area would include a range of intersection and roadway improvements that would be triggered by full buildout of the proposed project. Such development would not include any uses that would require the construction of new or expanded utilities infrastructure; however, some future roadway improvements may require the relocation of existing utilities infrastructure. For example, potential improvements along South Chrisman Road may require the relocation or replacement of the existing power lines that run parallel to the roadway. All such relocations would be coordinated with the applicable service provider, as well as the County or City of Tracy, depending on whose jurisdiction the improvements study area is located. Because any such expansion or relocation of utilities infrastructure would be limited to the established development footprints of the Off-Site Improvements Study Area, environmental effects of such development would not be anticipated to occur beyond what is already anticipated and analyzed throughout the technical chapters of this EIR. As such, a less-than-significant impact would occur.

Conclusion

Based on the above, development of the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater, electricity, natural gas, and telecommunications facilities, the construction or relocation of which could cause significant environmental effects, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.11-6 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Based on the analysis below, the impact is *less than significant*.

The WSA prepared for the proposed project evaluated total buildout of the project site in accordance with the proposed land uses. Thus, the following discussion applies to the Initial Phase and Specific Plan Buildout, as well as reasonably foreseeable future development during normal, dry, and multiple dry years. In addition, a separate discussion of the Off-Site Improvements Study Area is provided below.

Initial Phase, Specific Plan Buildout

The WSA includes a comparison of water demand and supply projections for the proposed project in five-year increments to 2050 for normal years. Table 4.11-5 shows the current (2025) water demand and supply at the project site, including the existing agricultural water demand as well as anticipated project demand.

Table 4.11-5
Projected Total Water Demand and Supply for the Proposed Project (AFY)

Source	2025 (Existing Uses)	2030	2035	2040	2045	2050
Total Surface Water Supplies	2,158	2,158	1,704	1,228	1,201	801
Proposed Project	0	198	332	532	540	663
*CSA-16**	0	138	138	138	138	138
Agriculture	2,158	1,822	1,233	558	522	0
Total Groundwater Supplies	2,670	2,138	1,448	655	613	0
CSA-16 (Tracy Subbasin)	138	0	0	0	0	0
Agriculture (Tracy Subbasin)	2,253	1,902	1,288	583	546	0
Agriculture (Delta-Mendota Subbasin)	279	236	160	72	68	0
Total Recycled Water Supplies	0	41	114	197	202	266
Total Water Supplies**	**0**	**378**	**585**	**868**	**880**	**1,067**
Total Demand	**4,828**	**4,338**	**3,266**	**2,081**	**2,016**	**1,067**

*CSA-16 future demand is shown as possible surface water supply. Existing estimated demand is included in the groundwater supply. Higher surface water demand in 2030 is due to lower availability of recycled water while project is developed.
**Subtotal Project Water Supplies includes Project, CSA-16, and Recycled Water.

Source: Todd Groundwater, 2025.

Agricultural uses are expected to continue on parcels in the project area that have not yet begun construction. Once under development, the agricultural demand would be replaced by construction water demand and then finally project demand. Because the existing demand of the agricultural parcels is substantially higher than the project demand, the project would also result in substantial decrease in water demand. On average, agricultural water use is 3.0 AFY/ac whereas project area water demand is 1.45 AFY/ac (excluding landscape irrigation that is expected to be satisfied by recycled water). Todd Groundwater notes that construction water demand is expected to be negligible, short-term, potentially trucked in on a temporary basis, and will be significantly less than the replaced agricultural water use. As such, construction water demand is not factored into the analysis. Finally, the future phasing is based on the economic analysis projections for the proposed project but may differ based on market demand.

According to the WSA, water demand is not expected to change in dry or multiple dry years; much of the demand would be for commercial and industrial uses that would remain constant and already include water conservation measures. Outdoor irrigation demand would be primarily met by recycled water, which would not be affected by drought conditions. As shown in Table 4.11-5, adequate water supply would be available to serve the demand of the proposed project.

The proposed project's future demand for groundwater depends on surface water availability, which can vary by water year type. During wet and normal years, water demand for the proposed project is expected to be met using surface water from BBID. Depending on future regulatory requirements, surface water supplies may be sufficient to meet project demands in dry and critically dry years. Based on the sustainability projections in the relevant GSPs, and the project's total water demand, the project demand can also be met with groundwater. The projected future demand for primary supply sources is 801 AFY, which is below the current demand of existing agricultural uses at the project site of 4,538 AFY and below the total existing groundwater use within the project site of 2,380 AFY (2,101 AFY for the portion of the project site within the Tracy Subbasin and 279 AFY for the portion of the project site within the Delta-Mendota Subbasin).

The proposed project would result in a reduction in water pumped from the Delta-Mendota and Tracy Subbasins when compared to existing use of groundwater for agriculture at the project site, which would contribute to long-term sustainability of the groundwater basins. Given that the proposed project would use less surface water than is currently being used for on-site agricultural uses, additional surface water supplies may be available to serve other off-site growers currently relying on groundwater in both basins. Groundwater pumping from the Delta-Mendota Subbasin would need to comply with any restrictions on groundwater extractions imposed by the Groundwater Sustainability Agencies (GSAs) or by the State Water Resources Control Board (SWRCB), unless specifically excluded. Neither Groundwater Sustainability Plan (GSP) prepared for the two subbasins currently limits groundwater pumping for municipal and industrial uses. The currently proposed supply well is located within the Delta-Mendota Subbasin; however, the project applicant is assessing an existing well location in the Tracy Subbasin pending water quality testing. If the water supply well for the proposed project relies on the Delta-Mendota Subbasin, steps would be taken to reduce existing water demand in the Subbasin so that, pursuant to regulatory



requirements, a net increase in groundwater demand would not occur. Three existing wells in the Delta Mendota Subbasin would become curtailment wells and pumping would be reduced, as needed (see Appendix B to the WSA). Accordingly, adequate groundwater is available to supply the project, even if surface water is unavailable, as long as the existing pumping in the Delta-Mendota Subbasin is decreased to avoid a net increase.

Off-Site Improvements Study Area

As previously discussed, future development within the Off-Site Improvements Study Area would include a range of intersection and roadway improvements that would be triggered by full buildout of the proposed project. Completion of future development within the Off-Site Improvements Study Area would not result in any increase in water demand. However, water may be consumed during construction activities for the purpose of dust control. Such water use would be temporary and of short duration and, as discussed above, the WSA determined that water used during construction of the proposed project would be negligible. Therefore, it is reasonable to conclude that future construction within the Off-Site Improvements Study area would not result in the generation of significant water demand, and a less-than-significant impact would occur.

Conclusion

Based on the above, sufficient water supplies would be available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.11-7 Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Based on the analysis below, the impact is *less than significant*.

The Water and Sewer Memo prepared for the proposed project by Schaaf and Wheeler evaluated total buildout of the project site in accordance with the proposed land uses. Thus, the following discussion applies to the potential for both the Initial Phase and Specific Plan buildout to generate wastewater flows in excess of the capacity of the proposed wastewater system.

Initial Phase, Specific Plan Buildout

As discussed above, wastewater produced by the proposed project would be treated and disposed of on-site at a WWTP located in the Pacific Gateway East development area, specifically Parcel 10 of the Initial Phase Vesting Tentative Map (see Figure 3-6 of this EIR). The proposed WWTP would be centered around a MBR in above-ground steel tank systems to produce treated wastewater suitable for irrigation and waste

activated sludge suitable for landfill disposal. The WWTP would consist of the following components, in quantities corresponding with the level of buildout:

1. A flow equalization system (sewage pump station wet well);
2. Rotary drum screens for screenings removal;
3. Compactor for screenings disposal at landfill;
4. Packaged MBR-based wastewater treatment train;
5. Recycled water disinfection system;
6. Recycled water pump station;
7. Diesel engine-driven emergency generator; and
8. Ancillary supporting equipment, as required.

The irrigation system would consist of a recycled water storage tank and booster pump station, located south of the WWTP (Parcel 11), with associated recycled water piping ("purple pipe") to deliver recycled water from the WWTP to landscaped areas throughout the project. According to Schaaf and Wheeler, in the case that sewage generation exceeds on-site irrigation demands, excess recycled water would be supplied to surrounding farms rather than stored on-site.

To serve the Initial Phase of the proposed project, the sewer collection system and package wastewater treatment facility would be constructed, as would the recycled water storage and pump station. Any expansions to the wastewater system over the years of project operations would be accomplished by the addition of treatment package units. Because wastewater generated by the proposed project would be treated in an on-site WWTP, specifically sized to serve the proposed project, and which could be expanded to match buildout of the Specific Plan, adequate capacity would be available to treat wastewater flows generated by the proposed project.

Off-Site Improvements Study Area

Future development within the Off-Site Improvements Study area would not generate wastewater flows. As such, future development within the Off-Site Improvements Study Area would not result in potential impacts related to wastewater treatment, and no impact would occur.

Conclusion

Based on the above, the proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate wastewater treatment capacity to serve the project's projected demand in addition to the provider's existing commitments. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.11-8 Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, State, and local management and

reduction statutes and regulations related to solid waste. Based on the analysis below, the impact is *less than significant*.

Solid waste generated as part of construction and operation of the project site would be disposed of at the Foothill Sanitary Landfill. Thus, the following discussion applies to the potential for the proposed Initial Phase and Specific Plan Buildout to result in impacts related to solid waste disposal. In addition, a separate the analysis of future development of the Off-Site Improvements Study Area is provided below.

Initial Phase, Specific Plan Buildout

As previously discussed, solid waste from the project vicinity is disposed of at the Foothill Sanitary Landfill. The waste delivered to the landfill is from municipal and industrial sources, with a maximum permitted throughput of 1,500 tons per day. According to CalRecycle, the Foothill Sanitary Landfill has a permitted design capacity of 138,000,000 cubic yards, and a remaining capacity of 125,000,000 cubic yards, as of 2010.[17] The landfill is anticipated to cease operations by 2082.

Following full Specific Plan Buildout, the proposed project would result in a maximum building square footage of 26,307,150 sf. According to the U.S. Environmental Protection Agency (USEPA) report, Estimating 2003 Building-Related Construction and Demolition Materials Amounts, non-residential construction activities generate an average of 4.34 pounds per sf (lbs/sf) of waste.[18] Therefore, applying such an amount to buildout of the Specific Plan would produce approximately 114,173,031 lbs (57,086.5 tons) of construction waste (4.34 lbs/sf X 26,307,150 sf).

The construction waste estimate presented above represents a conservative analysis of the maximum potential waste production from construction of the proposed project. The CALGreen Code requires at least 65 percent diversion of construction waste for projects permitted after January 1, 2017. As such, a minimum of 37,106.2 tons of waste would be diverted away from landfill disposal during construction. Considering the applicable CALGreen Code requirements, buildout of the proposed project would be anticipated to produce up to 19,980.3 tons of waste during construction. Construction waste generation represents a short-term increase in waste generation. Considering that, as of 2010, the Foothill Sanitary Landfill has a remaining capacity of 90.6 percent of the total permitted capacity of the landfill, the proposed project's construction waste would represent only an incremental contribution to the waste received at the landfill, and a less-than-significant impact would occur.

Operational solid waste generation from Specific Plan Buildout has been estimated based on average waste generation rates for employees of industrial and commercial uses, students, and hotels, as published by CalRecycle.[19] As discussed in further

[17] California Department of Resources Recycling and Recovery. *SWIS Facility/Site Activity Details, Foothill Sanitary Landfill (39-AA-0004).* Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1424?siteID=3097. Accessed February 2025.

[18] U.S. Environmental Protection Agency. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts.* 2009.

[19] California Department of Resources Recycling and Recovery. *Estimated Solid Waste Generation Rates*. Available at: https://www2.calrecycle.ca.gov/wastecharacterization/general/rates. Accessed February 2025.

detail in Chapter 4.13, Urban Decay, of this EIR, employee counts include 14,955 industrial workers, 300 University workers, 94 retail workers, and 60 hotel workers. The proposed hotel would include 100 rooms, and the University would have a maximum of 5,000 students. Based on the foregoing information, the proposed project would be anticipated to generate 135,603 lbs/day of operational solid waste from on-site employment, 200 lbs/day from hotel operations (including hotel employees), and 2,500 lbs/day from students, for an overall total of 138,303 lbs/day (69.2 tons/day) of operational solid waste.[20] Considering that the Foothill Sanitary Landfill has a maximum permitted throughput of 1,500 tons per day and a 90.6 percent remaining capacity, the proposed project's operational waste would represent only an incremental contribution to the waste received at the landfill.

In addition to the foregoing operational solid waste, operation of the proposed WWTP would generate dewatered sludge "cake." According to Schaaf and Wheeler, operation of the Initial Phase of the proposed project would generate approximately 100 lbs/day and operational solid waste generation from Specific Plan Buildout would be approximately 700 lbs/day. The dewatered sludge "cake" would most likely be disposed of at the Central Valley Compost Facility.

Based on the above, Specific Plan Buildout would not generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. In addition, the project would not conflict with applicable federal, State, and local management and reduction statutes and regulations related to solid waste. Thus, a less-than-significant impact would occur.

Off-Site Improvements Study Area

As previously discussed, future development within the Off-Site Improvements Study Area would include a range of intersection and roadway improvements that would be triggered by full buildout of the proposed project. Completion of future development within the Off-Site Improvements Study Area would not result in any increase in solid waste generation. However, should existing roadways need to be demolished (e.g., asphalt removal) and replaced, such construction activity would generate solid waste. Similar to the discussion above, consistent with the CALGreen Code, at least 65 percent of construction waste would be required to be diverted. Solid waste generation associated with future development within the Off-Site Improvements Study Area would be temporary and of short duration. In addition, future development would be less extensive than Specific Plan Buildout. As discussed above, Specific Plan Buildout would result in the generation of solid waste within the capacity of the Foothill Sanitary Landfill. Therefore, it is reasonable to conclude that construction within the Off-Site Improvements Study area would not result in the significant generation of solid waste, and a less-than-significant impact would occur.

Conclusion

Based on the above, the proposed project would not generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure, or

[20] 14,955 industrial employees x 8.93 lbs/employee/day = 133,548.15 lbs/day; 300 University workers x 3.55 lbs/employee/day = 1,065 lbs/day; 94 retail workers x 10.53 lbs/employee/day = 989.82 lbs/day; 100 hotel rooms x 2 lbs/room/day = 200 lbs/day; 5,000 University students x 0.5 lbs/student/day = 2,500 lbs/day.

otherwise impair the attainment of solid waste reduction goals. In addition, the project would not conflict with applicable federal, State, and local management and reduction statutes and regulations related to solid waste. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The cumulative setting for impacts related to public services and utilities encompasses buildout of the applicable service areas of public service and utility providers discussed in this chapter. Additional detail regarding the cumulative project setting can be found in Chapter 6, Statutorily Required Sections, of this EIR.

4.11-9 Cumulative impacts to public services. Based on the analysis below, the cumulative impact is *less than significant*.

The following discussion provides an analysis of potential cumulative impacts related to public services associated with development of the Initial Phase, Specific Plan Buildout, and development within San Joaquin County General Plan and City of Tracy General Plan areas. Given that future development within the Off-Site Improvements Study Area would not indirectly induce population growth such that new or expansion of existing public facilities would be required, the construction of which would result in potential environmental impacts, further discussion of such impacts is not required.

Initial Phase, Specific Plan Buildout

Potential cumulative impacts related to fire and police protection services, schools, public services and government facilities, and parks and recreation are discussed below.

Fire Protection Services

Cumulative development, in conjunction with the proposed project, would increase the demand for fire protection services provided by the TRFD. The County funds the TRFD budget, in part, through revenues generated from payment of application fees for applicable permits and clearances by new development. In addition, new development within the TRFD is subject to applicable development impact fees to ensure a fair-share contribution is made to finance the purchase of new or expansion of existing fire protection facilities, apparatus, and equipment necessary for the purposes of maintaining adequate service levels. Similar to the proposed project, cumulative development within the County's General Plan policy area would be subject to applicable taxes and fees, including, but not limited to, property taxes, franchise taxes, business license taxes, and license and permit fees. Additionally, pursuant to Section

9-610.060 of the County's Code of Ordinances, new residents generated by cumulative development would be subject to local sales taxes. Thus, revenues generated through fee payments associated with cumulative development would pay fair shares toward any new fire protection facilities deemed necessary by the County, all of which would be required to be designed and constructed in accordance with applicable regulations and standards, and if necessary, undergo CEQA review. Based on the foregoing information, and given compliance with all applicable General Plan goals and policies, the San Joaquin County General Plan EIR and the Tracy General Plan EIR concluded that a less-than-significant impact would occur related to fire protection services.

As discussed above, through the automatic aid agreement between fire agencies within the SSJCFA, the most efficient fire protection and emergency medical services are available to properties throughout the area. All structures included as part of buildout of the adopted General Plan would be constructed consistent with the CBC and CFC. Compliance with the CBC and CFC would reduce the potential for fires to occur within the policy area, which would reduce the demand for fire protection services in the County. Furthermore, the proposed project would include the development of a new on-site fire station, which would ensure that the proposed project would not create additional demand for other SSJCFA fire stations, which could, in turn, affect the SSJCFA's ability to adequately serve other areas. Potential environmental impacts associated with development of the proposed fire station are addressed throughout this EIR.

Based on the above, cumulative development within San Joaquin County and/or the City of Tracy, in conjunction with the proposed project, would result in a less-than-significant impact related to the need for new or improved fire protection facilities, the construction of which could cause significant environmental impacts.

Law Enforcement Services

Cumulative development, in conjunction with the proposed project, would increase the demand for law enforcement services provided by the SJCSO. As discussed above, the SJCSO does not have an adopted officer-to-resident ratio, but unofficially, the SJCSO recommends a ratio of 1.5 line deputies per 1,000 residents Countywide. Additionally, the County General Plan does not establish a specific response time standard for emergency calls for the SJCSO.

Cumulative development within the General Plan policy area would be subject to applicable permit application and development impact fees. Additionally, new residents generated by cumulative development would be subject to local sales taxes. Thus, revenues generated through permit application and development impact fee payments associated with cumulative development would pay fair shares toward any new SJCSO facilities deemed necessary by the County, all of which would be required to be designed and constructed in accordance with applicable regulations and standards, and if necessary, undergo CEQA review. As such, the San Joaquin County General Plan EIR concluded that a less-than-significant impact would occur related to law enforcement services. Similarly, the Tracy General Plan EIR concluded that buildout of the City of Tracy planning area would result in a less-than-significant impact related to increased demand for Tracy Police Department services.



Based on the above, cumulative development within San Joaquin County or the City of Tracy would not result in the need for new or improvements to existing police protection facilities, the construction of which could cause significant environmental impacts, and a less-than-significant impact would occur.

School Facilities

Cumulative development, in conjunction with the proposed project, would increase the demand for school services provided by the TUSD and JESD. However, as discussed above, development as part of cumulative buildout of the General Plan policy area would be subject to development impact fees, which fund the cost of improving and expanding school facilities and equipment needed to accommodate additional student population induced by new development. Payment of the fees would be deemed to be "full and complete mitigation," as established by Proposition 1A/SB 50.

Based on the above, cumulative development within San Joaquin County or the City of Tracy would not result in the need for new or improvements to existing school facilities, the construction of which could cause significant environmental impacts, and a less-than-significant impact would occur.

Parks and Other Public Facilities

Cumulative development would increase the demand for park facilities. However, pursuant to Section 9-507.030 of the County's Code of Ordinances, residential development facilitated by buildout of the General Plan policy area would be subject to payment of an in-lieu park fee. Revenues generated through projects' payments of the in-lieu park fee would pay the projects' fair share toward any new park facilities deemed necessary by the County, all of which would be required to be designed and constructed in accordance with applicable regulations and standards, and if necessary, undergo CEQA review. Based on the above, the San Joaquin County General Plan EIR concluded that a less-than-significant impact would occur. Similarly, the Tracy General Plan EIR concluded that given that all new development includes parkland or pays in-lieu park fees, a less-than-significant impact would occur.

Neither the San Joaquin County General Plan EIR nor the City of Tracy General Plan EIR identified potentially significant impacts related to the provision of library services as a result of buildout of their respective policy areas. As discussed above, the proposed project would not result in an increase in demand for library services such that new facilities would need to be constructed. As such, a less-than-significant impact would occur.

Consistent with the discussion above, pursuant to Measure K, sales tax revenue generated by existing and future development within the County and the City of Tracy would be used to fund transportation improvements in the County. Similar to the proposed project, payment of Measure K taxes would help reduce potential impacts to roadway systems due to increased traffic.

Based on the above, cumulative development within San Joaquin County or the City of Tracy, in conjunction with the proposed project, would result in a less-than-significant impact related to the need for new or improved parks and/or other facilities, the construction of which could cause significant environmental impacts.



Conclusion

Based on the above, the proposed project, in combination with future buildout of the General Plan policy area, would result in a ***less-than-significant*** cumulative impact related to public services and recreation.

Mitigation Measure(s)

None required.

4.11-10 Increase in demand for utilities and service systems associated with the proposed project, in combination with future buildout of the San Joaquin County General Plan and City of Tracy General Plan. Based on the analysis below, the cumulative impact is *less than significant*.

The following discussion provides an analysis of potential cumulative impacts related to utilities and service systems associated with development of the proposed Initial Phase, Specific Plan Buildout, future development of the Off-Site Improvements Study Area, and development within the San Joaquin County General Plan and City of Tracy General Plan planning areas.

Initial Phase, Specific Plan Buildout, and Off-Site Improvements Study Area

The following discussions provide an analysis of the proposed project's contribution to cumulative impacts associated with water supply, wastewater treatment, dry utilities, and solid waste within San Joaquin County and the City of Tracy.

Water Supply

Cumulative development, in conjunction with the proposed project, would result in increased demand for water supplies. Pursuant to the historical demands and supplies for the Tracy and Delta-Mendota subbasins documented by the respective GSPs, the Tracy Subbasin relies on groundwater for 37 percent of the total demand on average, increasing to 39 percent during dry years when surface water allocations are reduced; the Delta-Mendota Subbasin relies on groundwater for 20 percent of total demand on average.

Both Tracy and Delta-Mendota subbasin GSPs focus on groundwater demand and the associated change in storage into the future for their respective subbasins. The forecasted pumping and storage with climate change (including the groundwater management projects outlined in the GSP) are shown in Table 4.11-6 for both Tracy and Delta-Mendota (North Central) subbasins.

As shown in Table 4.11-6, both GSPs anticipate an increase in groundwater pumping over the next 10 years (to 2033) but ultimately envision a decrease in groundwater pumping as new supplies, projects, and management actions are implemented. The Tracy Subbasin shows an increase in storage under all years, indicating a sustainable groundwater supply to meet demand. The Delta-Mendota Subbasin forecasts a negative change in storage during dry years. The subbasin is already deemed to be critically overdrafted, and the continued negative storage change indicates that overdraft conditions are not likely to improve without additional action in the future.

However, according to the WSA, while both the Tracy and Delta-Mendota subbasins anticipate an increase in groundwater pumping over the next 10 years, adequate supplies would be available to serve the region in normal, single dry, and multiple dry years through 2050.

Table 4.11-6
Future Groundwater Pumping by Subbasin (with Climate Change and Projects)

Source	2020	2025	2030	2035	2040	2045
Tracy Subbasin						
Groundwater Pumping (AFY)	182,100	200,477	240,325	217,861	201,081	167,655
Change in Storage (AFY)	221,012	32,076	15,510	16,828	197,505	149,414
Delta-Mendota Subbasin (North Central)						
Groundwater Pumping (AFY)	115,000	78,000	144,000	61,000	100,000	84,000
Change in Storage (AFY)	-129,000	60,000	-90,000	68,000	-74,000	37,000

Source: Todd Groundwater, 2025.

Based on the above, adequate water supply would be available to serve cumulative development within San Joaquin County, in conjunction with the proposed project, and a less-than-significant impact would occur.

Wastewater Treatment

As discussed above, the project site is not currently provided sewer conveyance and treatment services, as the site has only limited utility infrastructure. As such, the proposed project would include the development of a self-contained wastewater system that would not require service from an outside agency. The proposed wastewater system would be sized to serve only the proposed project, and would be expanded to keep pace with buildout of the Specific Plan. As such, the proposed project would not contribute to the cumulative increase in demand for wastewater services associated with buildout of the San Joaquin County General Plan policy area. Therefore, a less-than-significant impact would occur.

Electricity, Natural Gas, and Telecommunications Facilities

Environmental effects associated with the construction of new or expanded electricity, propane, and telecommunications facilities would primarily be project-specific, rather than cumulative. As noted under Impact 4.11-5, while the project would include new connections to existing electrical, natural gas, and telecommunications infrastructure located in the project vicinity, substantial extension of existing off-site infrastructure would not be required. Therefore, the proposed project would result in a less-than-significant cumulative impact related to construction of new or expanded electricity, natural gas, and telecommunications facilities.

Solid Waste

As noted previously, according to CalRecycle, the Foothill Sanitary Landfill has a remaining capacity of 125,000,000 cubic yards, as of 2010, and is anticipated to cease

operations in 2082. Construction waste generated by development facilitated by buildout of the General Plan policy area would be required to comply with the applicable provisions of the CALGreen Code. The CALGreen Code requires at least 65 percent diversion of construction waste for projects permitted after January 1, 2017. Considering the remaining capacity at the landfill to serve future development, adequate capacity would be available to serve cumulative development within San Joaquin county, in conjunction with the proposed project, and a less-than-significant impact would occur.

Conclusion

Based on the above, the proposed project, in conjunction with buildout of the General Plan policy area, would not result in any significant cumulative impacts related to increased demand for utilities and service systems within San Joaquin County and the City of Tracy. Thus, a ***less-than-significant*** cumulative impact would occur.

Mitigation Measure(s)

None required.

4.12 TRANSPORTATION

4.12 TRANSPORTATION

4.12.1 INTRODUCTION

The Transportation chapter of the EIR discusses the existing transportation and circulation facilities within the project vicinity, as well as applicable policies and guidelines used to evaluate operation of such facilities. Where development of the proposed project would conflict with applicable policies or guidelines, mitigation measures are identified. The information contained within this chapter is primarily based on the Transportation Impact Analysis (TIA) (see Appendix O)[1] prepared for the proposed project by Fehr & Peers, as well as the San Joaquin County General Plan,[2] San Joaquin County General Plan EIR,[3] and the City of Tracy General Plan.[4]

As discussed further below, the current California Environmental Quality Act (CEQA) Guidelines require lead agencies such as San Joaquin County to use vehicle miles traveled (VMT), rather than Level of Service (LOS), as the primary metric for assessing transportation impacts under CEQA (CEQA Guidelines Section 15064.3). The State's requirement to transition from LOS to VMT is aimed at promoting infill development, public health through active transportation, and a reduction in greenhouse gas (GHG) emissions. Pursuant to the Guidelines, any project that did not initiate CEQA public review prior to July 1, 2020 must use VMT rather than LOS as the metric to analyze transportation impacts. Both a VMT analysis and LOS analysis were prepared for the proposed project. Pursuant to CEQA Guidelines Section 15064.3, impact significance in this chapter is based upon VMT, whereas the results of the LOS analysis presented in the Local Transportation Analysis will be used separately by the County to address consistency with San Joaquin County General Plan goals and policies related to transportation, including adopted LOS policies.

4.12.2 EXISTING ENVIRONMENTAL SETTING

The section below describes the physical and operational characteristics of the existing transportation system within the study area, including the surrounding roadway network, and transit, bicycle, and pedestrian facilities.

Existing Roadways

The roadway system in the vicinity of the project site consists of a series of freeways, highways, and surface streets. The following sections provide a summary of the existing roadways within the project vicinity, as shown in Figure 4.12-1 and Figure 4.12-2.

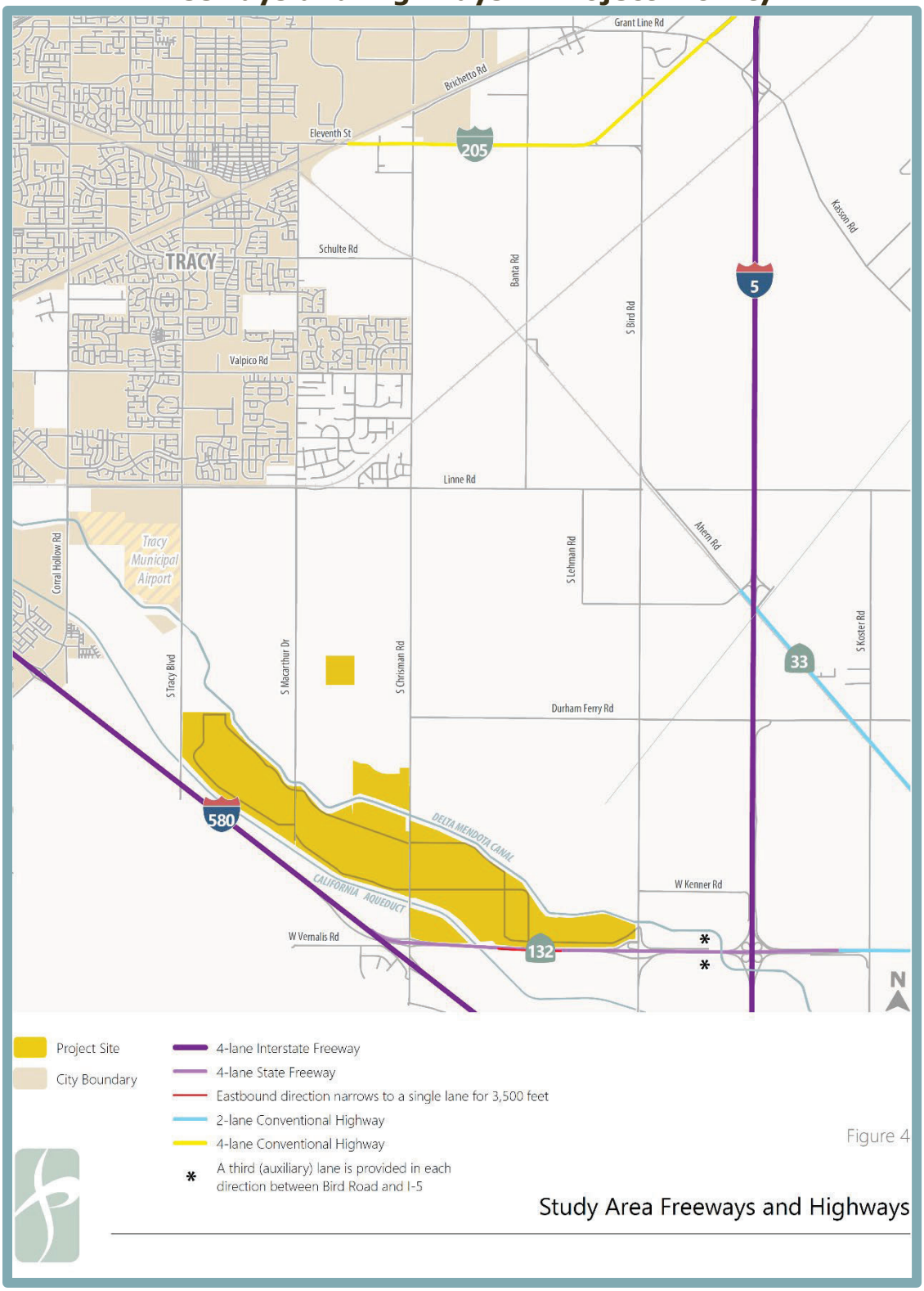
Interstate 5

As shown in Figure 4.12-1, Interstate 5 (I-5) is the primary north-south freeway serving San Joaquin County, connecting Stockton to Tracy, and passing through Lathrop and Manteca.

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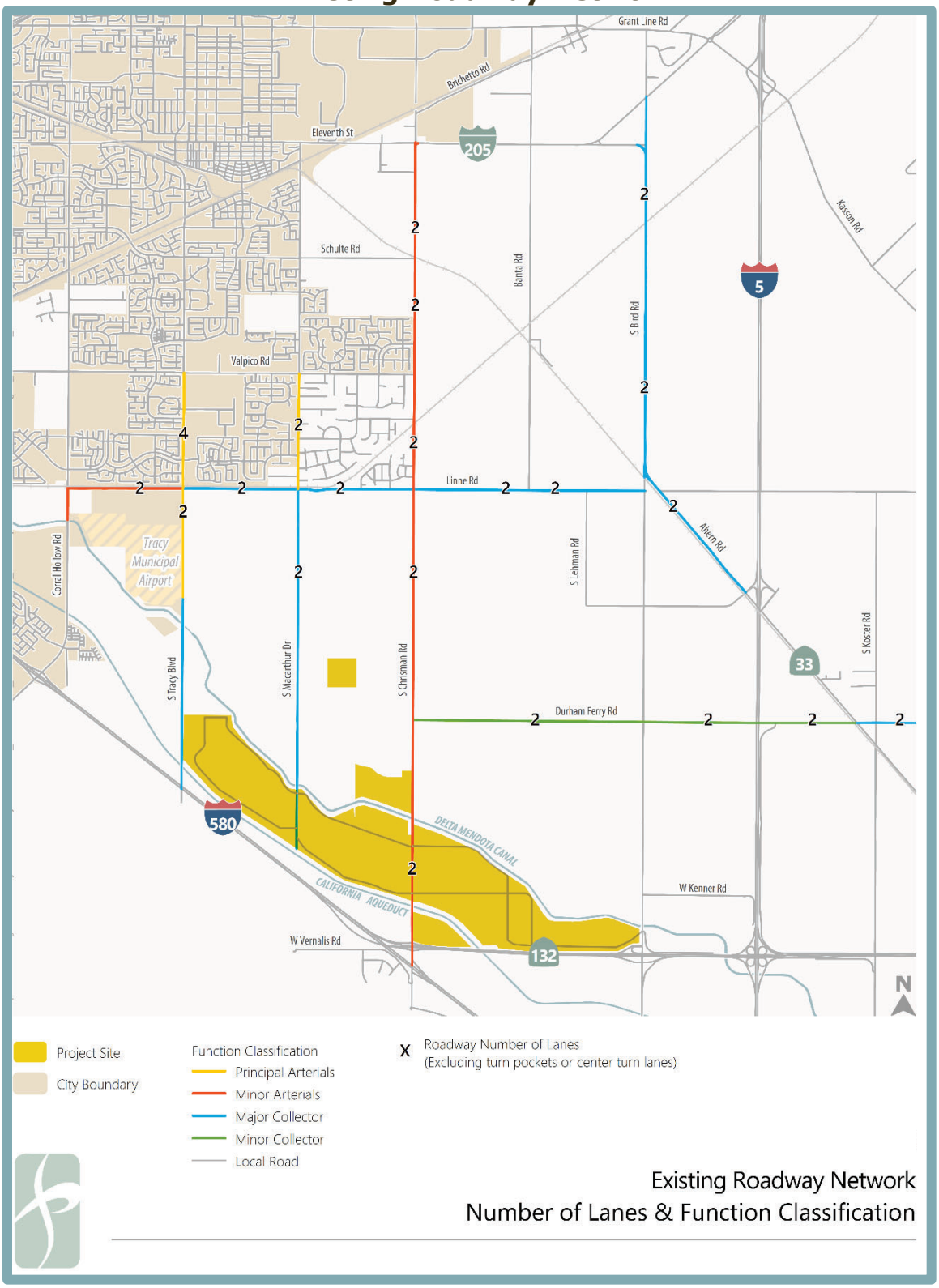
1 Fehr & Peers. *CEQA Transportation Impact Analysis Report for Pacific Gateway*. September 2025.
2 San Joaquin County. *San Joaquin County General Plan*. Adopted December 2016.
3 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report*. Certified October 2014.
4 City of Tracy. *City of Tracy General Plan*. February 1, 2011.

Figure 4.12-1
Freeways and Highways in Project Vicinity



Source: Fehr & Peers, 2025.

Figure 4.12-2
Existing Roadway Network



Source: Fehr & Peers, 2025.

Trucks account for approximately 15 to 33 percent of the total volume. I-5 is classified in the San Joaquin County General Plan as an Interstate and has a posted speed limit of 70 miles per hour (mph).

Interstate 580

Interstate 580 (I-580) is a four-lane freeway that passes through the southwestern portion of the County for 15 miles and connects to I-5. Trucks account for approximately 16 percent of the total volume. I-580 is classified in the San Joaquin County General Plan as an Interstate and has a posted speed limit of 70 mph.

State Route 132

State Route (SR) 132 is a highway that passes through the southern portion of the County between I-580 and Stanislaus County over a distance of approximately seven miles. Trucks account for approximately 16 to 18 percent of the total volume. The eastbound direction of SR 132 features an approximate 3,500-foot segment that is a single lane within the two mile distance between the South Chrisman Road and Bird Road interchanges. SR 132 is classified in the San Joaquin County General Plan as a Principal Arterial and has a speed limit of 55 mph.

State Route 33

SR 33 is a two-lane conventional highway that connects I-5 with Stanislaus County over a distance of approximately five miles. Trucks account for approximately 16 to 21 percent of the total volume. SR 33 is classified in the San Joaquin County General Plan as a Major Collector and has a posted speed limit of 55 mph.

Eleventh Street

Eleventh Street, running east to west, is a major roadway in the City of Tracy west of South Chrisman Road with a road width varying from four to six lanes, with most segments containing a median and bicycle lanes. East of South Chrisman Road, it is under the jurisdiction of San Joaquin County. The posted speed limit varies from 35 mph in the urban areas of the City to 55 mph east of South Chrisman Road. Eleventh Steet is classified as a Surface Transportation Assistance Act (STAA) truck route (see Figure 4.12-3).

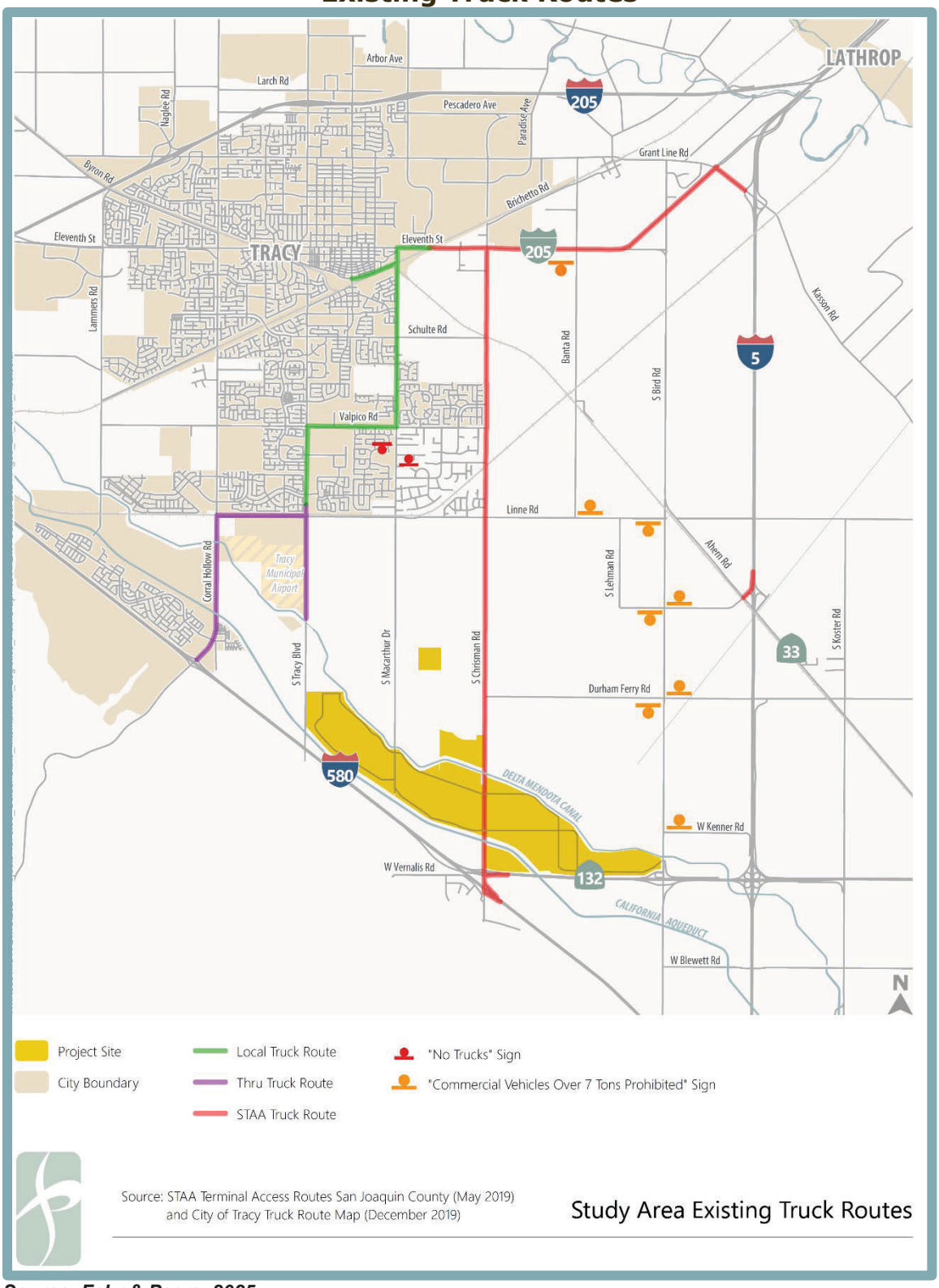
Tracy Boulevard

Tracy Boulevard, running north to south, is located east of Corral Hollow Road. Within the City of Tracy north of Linne Road, the roadway has four travel lanes. South of Linne Road for 1.2 miles to the Delta Mendota Canal, it remains in the jurisdiction of the City of Tracy and has two travel lanes. South of the Delta Mendota Canal, it is within San Joaquin County. The posted speed limit is 45 mph within the City segments and has an unsigned prima facie speed of 55 mph in the County. Tracy Boulevard is designated in the San Joaquin County General Plan as a Principal Arterial from Valpico Road to the Tracy Municipal Airport, and a Major Collector from the Tracy Municipal Airport to I-580.

MacArthur Drive

MacArthur Drive is located to the east of Tracy Boulevard with a road width of two travel lanes. The posted speed limit is 35 mph north of Linne Road. South of Linne Road, it is within San Joaquin County and has an unsigned prima facie speed of 55 mph. MacArthur Drive is designated in the San Joaquin County General Plan as a Principal Arterial from Valpico Road to Linne Road, and a Major Collector from Linne Road to the California Aqueduct.

Figure 4.12-3
Existing Truck Routes



Source: Fehr & Peers, 2025.

South Chrisman Road

South Chrisman Road is a two-lane road with a posted speed limit varying from 45 to 55 mph. South Chrisman Road is designated in the San Joaquin County General Plan as a Minor Arterial. South Chrisman Road between SR 132 and Eleventh Street is a STAA truck route. Between 1,000 and 1,100 trucks per day travel along portions of South Chrisman Road between SR 132 and Eleventh Street. Just north of SR 132, trucks comprise approximately 27 percent of the 3,900 average daily traffic (ADT) on South Chrisman Road. The proportion of traffic consisting of trucks steadily decreases to the north along South Chrisman Road as more auto traffic is present.

Linne Road

Linne Road is the southernmost road of the City of Tracy. The road has two travel lanes with a posted speed limit varying from 35 to 55 mph. Linne Road is classified in the San Joaquin County General Plan as a Major Collector from Bird Road to Tracy Boulevard, and a Minor Arterial from Tracy Boulevard to Corral Hollow Road.

Durham Ferry Road

Durham Ferry Road is located to the north and northeast of the project site and is classified in the San Joaquin County General Plan as a Minor Collector. The roadway has two travel lanes and a posted speed limit varying from 45 to 55 mph. Durham Ferry Road does not include truck travel restrictions east of South Chrisman Road. Of the 1,500 ADT measured on the segment of Durham Ferry Road to South Chrisman Road, trucks represented approximately six percent of the total, or about 85 trucks per day.

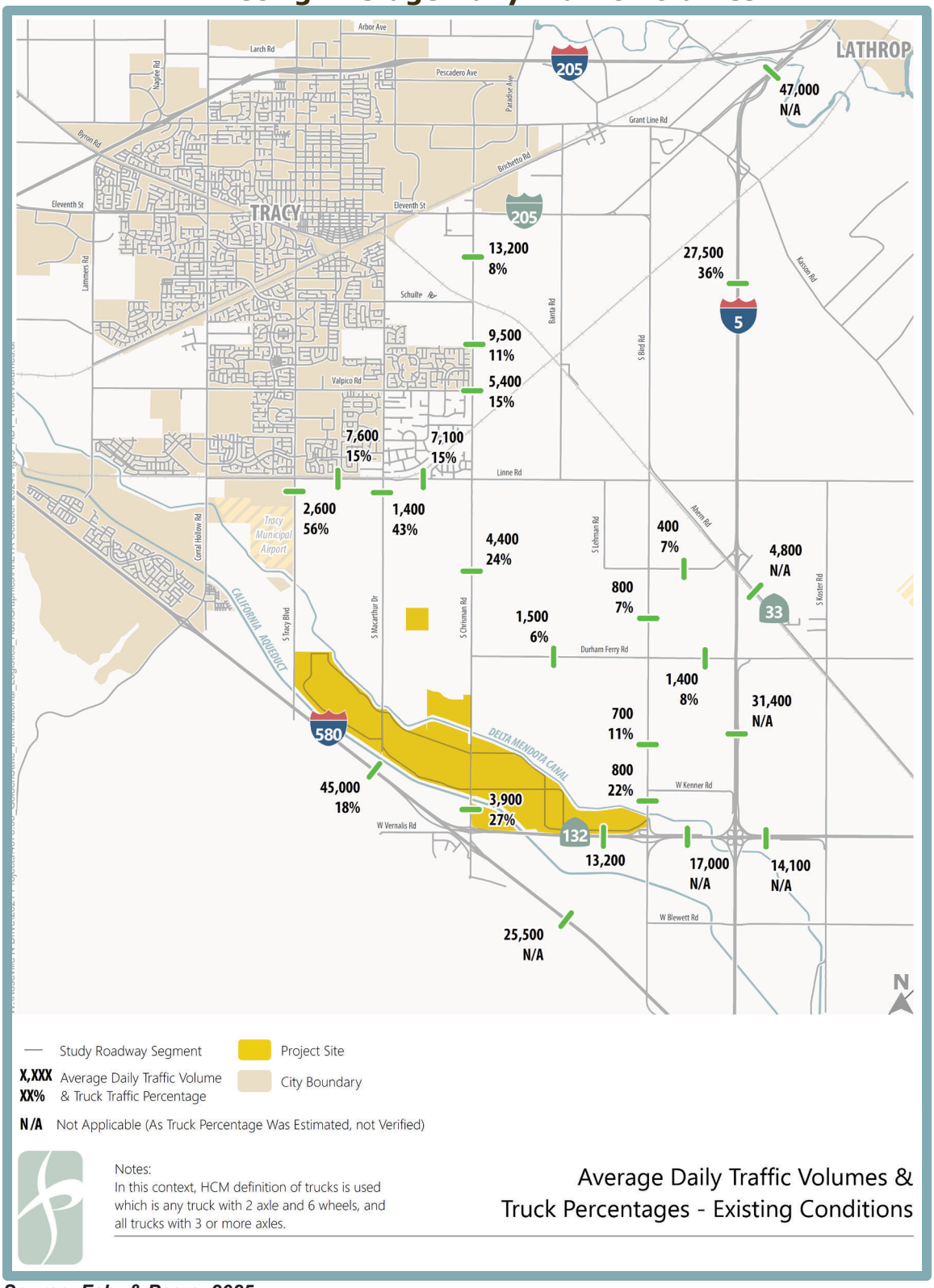
Existing Traffic Volumes

Figure 4.12-4 displays the existing ADT on roadways in the project vicinity based on traffic counts performed at most locations in fall of 2024. In some cases, counts from 2022 were used in instances where comparisons of 2022 to 2024 volumes at adjacent locations did not yield any traffic growth. Schools were in session, the weather was clear, and unusual traffic conditions were not noted during the counts. The roadway counts included both the volume of traffic and number of axles, collected during two mid-weekdays.

The data presented in Figure 4.12-4 is not directly used for any type of operational analysis. Rather, the data is intended for informational purposes only and as inputs for other parts of the EIR. Figure 4.12-4 indicates that South Chrisman Road carries approximately 3,900 ADT north of SR 132 with volumes gradually increasing to 13,200 ADT south of Eleventh Street. Durham Ferry Road east of South Chrisman Road carries 1,500 ADT.

Trucks are defined by the Highway Capacity Manual (HCM) as vehicles consisting of three or more axles as well as vehicles with two axles and dual tires on the rear axle. Figure 4.12-4 shows the percentage of daily trips that are trucks on roadways in the project vicinity. As shown therein, truck volumes are a large percentage of existing traffic on several roadways near the project site. Table 4.12-1 below shows the number of daily trucks on such roadways. As shown in the table, truck traffic on South Chrisman Road varies from about 1,030 to 1,100 trucks per day depending on the segment. Truck traffic is also considerable on portions of other roadways including Linne Road, MacArthur Drive (south of Linne Road) and Tracy Boulevard (south of Linne Road). Approximately 85 trucks per day were observed on Durham Ferry Road east of South Chrisman Road.

Figure 4.12-4
Existing Average Daily Traffic Volumes



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

Table 4.12-1
Truck Traffic on Surface Streets – Existing Conditions

Segment[1]	Average Daily Traffic (All vehicles)[1]	Percent Trucks[2]	Number of Trucks Per Day[2]
South Chrisman Road north of SR 132	3,902	26.5%	1,034
South Chrisman Road between Eleventh Street and Schulte Road	13,188	8.3%	1,095
Tracy Boulevard south of Linne Road	2,644	55.3%	1,462
MacArthur Drive south of Linne Road	1,382	43.2%	597
Bird Road between Durham Ferry Road and Kenner Road	740	10.8%	80
Durham Ferry Road east of South Chrisman Road	1,470	5.8%	85
Linne Road west of South Chrisman Road	7,124	14.7%	1,047

1 Based on counts collected in 2022 or fall of 2024.
2 Trucks shown herein are based on the HCM definition of trucks which is vehicles with three or more axles and vehicles with two axles and dual tires on the rear axle.

Source: Fehr & Peers, 2025.

Pedestrian, Bicycle and Transit Facilities

The sections below describe the existing pedestrian, bicycle and transit facilities located within the vicinity of the project site.

Sidewalks and Paths

Due to the rural nature of the project site and adjacent areas, pedestrian facilities are limited. The nearest pedestrian facilities are crosswalks at three of the four legs of the signalized South Chrisman Road/Linne Road intersection, which is adjacent to Jefferson School, approximately two miles to the north of the project site.

Bicycle Facilities and Trails

The Transportation Impact Analysis provides the following classifications of bicycle facilities:

- Class I Bikeway (Bicycle Path) provides an off-street pathway for pedestrians and bicyclists, and no automobiles.
- Class II Bikeway (Bicycle Lane) provides a dedicated on-street space for bicyclists, delineated by white stripes and signage.
- Class III Bikeway (Bicycle Route) provides a designated route for bicyclists that share travel lanes with automobiles.
- Class IV Bikeway (Separated Bikeways) provides a fully protected on-street space for bicyclists. Protection is provided by planter boxes, parked cars, raised curbs, or flexible posts.

Existing bicycle facilities in the vicinity of the project site primarily include Class II bike lanes.

Appendix A of the 2022 San Joaquin County Bicycle Master Plan Update includes a list of proposed bikeways, including the following in the vicinity of the project site:[5]

5 San Joaquin County. *San Joaquin County Bicycle Master Plan Update*. November 2020.

- Class II bicycle lane on South Chrisman Road from Eleventh Street to Linne Road.
- Class II bicycle lane on Linne Road from MacArthur Drive to South Chrisman Road.
- Class III bicycle route on South Chrisman Road from Linne Road to Durham Ferry Road.
- Class III bicycle route on Durham Ferry Road from South Chrisman Road to SR 33.
- Class IV separated bikeway on Linne Road from Corral Hollow Road to MacArthur Drive.

This document was adopted prior to the proposed project's application being received; as such, future updates to it could potentially include changes in the project site vicinity.

The 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), prepared by the San Joaquin Council of Governments (SJCOG), project list does not explicitly include the above projects. However, the 2022 RTP/SCS does indicate that specific projects listed in the Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan are included. The Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan included 'vision' projects near the project site including a Class III bike route on South Chrisman Road from Eleventh Street to the California Aqueduct, and a Class III bike route on Durham Ferry Road from South Chrisman Road to Kasson Road.

Transit System

Transit facilities or routes do not exist in the immediate vicinity of the project site. However, transit services are provided outside of the immediate vicinity by the Altamont Commuter Express (ACE) train service, the City of Tracy TRACER bus service, and the San Joaquin Regional Transit District (RTD).

The ACE train operates as a commuter rail service between Stockton and San Jose. A station is located in the northeast quadrant of the Tracy Boulevard/Linne Road intersection. On weekdays, four westbound trains stop at this station in the morning (4:41 AM, 6:06 AM, 7:11 AM, and 8:03 AM) and four eastbound trains stop at this station in the evening (at 5:11 PM, 6:11 PM, 7:11 PM, and 8:14 PM).

TRACER operates several bus routes within the City of Tracy. The majority of the TRACER routes operate north of Linne Road with the exception of Route H, which services the neighborhood of Tracy Hills (along Corral Hollow Road). Two different commuter routes and one local route within City of Tracy stop at the ACE Station on Tracy Boulevard. San Joaquin RTD operates three routes that have stops in Tracy at its main transit station located on Central Avenue south of Eleventh Street.

It is noteworthy that bus services do not currently operate in the International Park of Commerce (IPC) located approximately 6.75 miles to the north of the project site along I-580. RTD Routes 90 and 97 include three stops in each direction of Grant Line Road between MacArthur Drive and Eleventh Street, adjacent to the Northeast Industrial (NEI) warehousing area.

Vehicle Miles Traveled

VMT is a measure of the total amount of vehicle travel occurring on a given roadway system. VMT is a metric that accounts for the number of vehicle trips generated and the length or distance of those trips. For analysis purposes, VMT refers to automobile VMT, specifically passenger vehicles and light trucks; heavy truck traffic is excluded. VMT does not directly measure traffic operations; instead, VMT is a measure of transportation network use and efficiency, especially when expressed as a function of population (e.g., VMT per capita or per employee).



As a result of Senate Bill (SB) 743, passed in 2013, local jurisdictions may not rely on vehicle LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA. Thus, consistent with the CEQA Guidelines, VMT is the primary metric used to identify transportation impacts to roadway systems within this chapter. While not formally adopted, the San Joaquin County VMT Thresholds Study provides guidelines for assessing VMT within the County.

According to the TIA prepared for the proposed project, employees within unincorporated San Joaquin County have an average home-based work (HBW) auto VMT of 38.6 miles.

Nearby Schools

The following schools are located in the project vicinity:

- Jefferson School – situated in the southeast quadrant of the South Chrisman Road/Linne Road intersection, approximately two miles north of the project site's northern boundary. A middle school serving grades 5-8, Jefferson School is part of the Jefferson School District.
- New Jerusalem Elementary School – situated in the northeast quadrant of the Durham Ferry Road/Koster Road intersection, approximately four miles east of the project site. Serving grades K-8, the school is part of the New Jerusalem Elementary School District.
- Delta Charter Elementary School – situated along Koster Road, north of New Jerusalem Elementary School. Serving grades K-8, the school is part of the New Jerusalem Elementary School District.

Jefferson School

On regular school days, instructions begins at 8:15 AM and concludes at 3:00 PM. The current school building, which opened in approximately 2016, features a 'north' parking lot along Linne Road and a 'south' parking lot along South Chrisman Road. Each parking lot is described below:

- North Parking Lot Along Linne Road – features 79 parking spaces. The westerly driveway (located 480 feet east of South Chrisman Road) on Linne Road permits inbound movements only. The easterly driveway permits both inbound and outbound movements. The north parking lot is the primary location for student pick-up and drop-off. To provide space for student drop-off and pick-up from private vehicles, the westerly driveway widens to two inbound lanes for a distance of approximately 300 feet, with the outside lane reserved for student pick-up and drop-off and the inside lane for through traffic. The easterly driveway features stop-control approaching Linne Road.
- South Parking Lot Along South Chrisman Road – features 58 parking spaces. The northern driveway (located 365 feet south of Linne Road) permits outbound movements only, while the southern driveway permits both inbound and outbound movements. The parking lot is used for some student pick-up and drop-off, bus loading, and staff parking. Similar to the north parking lot, the south parking lot features a counterclockwise on-site drive aisle for student pick-up and drop-off. The northern driveway features stop-control approaching South Chrisman Road.

Linne Road approaching and along the school frontage has the following characteristics:

- One lane in each direction separated by centerline double-yellow line striping (i.e., passing prohibited). A dedicated left-turn lane on westbound Linne Road is not provided at either school driveway.
- "SCHOOL ZONE" and "SCHOOL SPEED LIMIT 25 WHEN CHILDREN ARE PRESENT" (with flashing light) signs are posted on eastbound Linne Road west of South Chrisman Road and westbound Linne Road east of the school. A 330-foot right-turn lane is provided on eastbound Linne Road at the westerly driveway. "NO STOPPING ANY TIME" signs are posted along the turn lane, to presumably discourage parents/guardians from waiting in this lane to drop-off/pick-up their student.

South Chrisman Road approaching and along the school frontage has the following characteristics:

- One lane in each direction separated by centerline double-yellow line striping (i.e., passing prohibited). A dedicated left-turn lane is not provided at either school driveway.
- "SCHOOL ZONE, SPEED LIMIT 45," and "SCHOOL SPEED LIMIT 25 WHEN CHILDREN ARE PRESENT" sign (with flashing light) signs are posted on northbound Chrisman Road approaching the school and on southbound Chrisman Road north of Linne Road.

Pavement markings showing a 45 mph speed limit are in place on portions of South Chrisman Road south of the school and Linne Road west of the school.

Field observations were performed at Jefferson School on a weekday in December 2023. The afternoon peak hour condition was chosen for observation because the afternoon typically has more severe queuing (than the morning) due to parents waiting in queue to pick-up students. Key observations at the north parking lot included the following:

- Motorists began to queue at the westerly driveway on Linne Road at about 2:45 PM, 15 minutes prior to the school instruction ending. The queue eventually spilled back into the eastbound right-turn lane on Linne Road. During the observations, no vehicles were observed waiting in the westbound through lane on Linne Road to turn into the westerly driveway (though such occurrences likely happen on occasion).
- School staff were present in the north parking lot to urge motorists to pull forward to pick-up students, thereby lessening the queue. At one point, school staff were positioned at the easterly driveway to direct outbound traffic onto Linne Road. Traffic levels and queuing subsided about 3:15 PM, 15 minutes after students were released for the day.

Key observations at the south parking lot included the following:

- The severity and duration of queuing was generally less than at the north parking lot. The driveway was used by school buses. Although queues did not spill back onto South Chrisman Road during the observation day, it is conceivable such occurrences do occur.

New Jerusalem and Delta Charter Elementary Schools

The following subsection describes the Durham Ferry Road/Koster Road intersection including its traffic controls, lane configurations, nearby school facilities, relevant street signs, bicycle/pedestrian facilities, traffic volumes, and collision history:

- Traffic Control: All Way Stop.

- Lane Configuration: Single (shared left/through/right) lane on all four approaches.
- Nearby School Facilities: the southeast and northwest quadrants of the intersection are used for staff/parent parking and school bus staging. Multiple driveways are located along Durham Ferry Road serving both of the unpaved lots.
- Relevant Street Signs: "SCHOOL ZONE" signs are located in both directions of Durham Ferry Road approaching Koster Road and on southbound Koster Road approaching the schools. "SPEED LIMIT 25 MPH (when children are present)" signs are located on all four approaches to the intersection.
- Bicycle/Pedestrian Facilities: Sidewalks or bicycle facilities do not exist in the intersection vicinity. High visibility (striped yellow) crosswalks are located on the north and east legs of the intersection to accommodate travel between the schools and parking lots in the northwest and southeast corners of the intersection. The northeast corner crosswalk treatment is atypical given the proximity of a northbound one-way only drive aisle that begins at Durham Ferry Road.
- Traffic Volumes: In 2024 (while schools were in session), Durham Ferry Road west of Koster Road was measured to carry (in both directions) 315 AM peak hour vehicles and 290 PM peak hour vehicles.
- Collision History: The Traffic Injury Management System database indicates that reported injury collisions did not occur at the Durham Ferry Road/Koster Road intersection between January 1, 2018 and December 31, 2022.

4.12.3 REGULATORY CONTEXT

Existing federal, State, and local transportation policies, laws, and regulations that would apply to the proposed project are summarized below and provide a context for the impact discussion related to the project's consistency with the applicable regulatory conditions.

Federal Regulations

The following are the regulations pertinent to the proposed project at the federal level.

Surface Transportation Assistance Act

The STAA of 1982 allows large trucks to operate on the Interstate and certain primary routes called collectively the National Network. STAA trucks are longer than California legal trucks. As a result, STAA trucks have a larger turning radius than most local roads can accommodate. On surface streets, STAA routes are designated either as Terminal or Service Access routes. Terminal routes are approved by the agency with jurisdiction over the roadway to enable the truck to reach its ultimate destination. Service Access routes allow STAA trucks to exit the interstate onto a local road, for one mile only, for food, fuel, lodging, or repair.

State Regulations

The following are the regulations pertinent to the proposed project at the State level, organized chronologically.

Assembly Bill 32

Assembly Bill (AB) 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that "(a) the statewide GHG emissions limit shall remain in effect unless otherwise amended or repealed; (b) it is the intent of the Legislature that the statewide GHG emissions limit continues in existence

and be used to maintain and continue reductions in emissions of GHGs beyond 2020; and (c) the CARB shall make recommendations to the Governor and the Legislature on how to continue reductions of GHG emissions beyond 2020."

While AB 32 does not contain specific expectations related to individual land use projects, it does set statewide expectations for GHG reduction that have influenced VMT reduction expectations from land development projects as part of SB 375 and SB 743.

Senate Bill 375

SB 375 requires metropolitan planning organizations (MPO) to prepare a sustainable communities strategy (SCS) as part of their regional transportation plans (RTP). The SCS demonstrates how the region could meet its GHG reduction targets through integrated land use, housing, and transportation planning. Specifically, the SCS must identify land use and transportation strategies that combined with the RTP project list will reduce GHG emissions from automobiles and light trucks in accordance with targets set by the California Air Resources Board (CARB). The RTP/SCS for San Joaquin County is discussed below under Local Regulations.

Senate Bill 743

SB 743 creates or encourages several statewide changes to the evaluation of transportation and traffic impacts under the CEQA. First, SB 743 directs the Governor's Office of Planning and Research (OPR), which has since been renamed to the Governor's Office of Land Use and Climate Innovation (LCI), to amend the CEQA Guidelines to establish new metrics for determining the significance of transportation impacts of projects within transit priority areas (TPA) and allows LCI to extend use of the new metrics beyond TPAs. In the amended CEQA Guidelines, LCI selected automobile VMT as the preferred transportation impact metric and applied their discretion to recommend its use statewide. The California Natural Resources Agency certified and adopted the amended CEQA Guidelines in December 2018. The amended CEQA Guidelines state that "generally, VMT is the most appropriate measure of transportation impacts" and the provisions requiring the use of VMT apply statewide as of July 1, 2020. The amended CEQA Guidelines further state that land use "projects within 0.5 mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less-than-significant transportation impact."

SB 743 establishes that aesthetic and parking impacts of residential, mixed-use residential, or employment center projects on an infill site within a TPA are not considered significant impacts on the environment. SB 743 added Section 21099 to the California Public Resources Code (PRC), which states that automobile delay, as described by LOS or similar measures of vehicular capacity or traffic congestion, is not considered a significant impact on the environment upon certification of the CEQA Guidelines by the California Natural Resources Agency. Following certification of the amended CEQA Guidelines in December 2018, LOS or similar measures of vehicular capacity or traffic congestion are not considered a significant impact on the environment.

Technical Advisory on Evaluating Transportation Impacts in CEQA

In December of 2018, the OPR (now LCI) published the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), which is a guidance document to provide advice and recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. The Technical Advisory is intended to be a resource for the public to use at their discretion, and the LCI does not enforce any part of the recommendations contained therein. The Technical Advisory includes recommendations regarding methodology, screening



thresholds, and recommended thresholds per land use type. Lead agencies may consider and use these recommendations at their discretion.

The Technical Advisory identifies screening thresholds to quickly identify when a project is expected to cause a less-than-significant impact without conducting a detailed study. The Technical Advisory suggests that projects meeting one or more of the following criteria should be expected to have a less-than-significant impact on VMT:

- Small projects – Projects that generate or attract fewer than 110 trips per day;
- Projects near major transit stops – Certain projects (residential, retail, office, or a mix of these uses) proposed within 0.5 mile of an existing major transit stop or an existing stop along a high-quality transit corridor;
- Affordable residential development – A project consisting of a high percentage of affordable housing may be a basis to find a less-than-significant impact on VMT;
- Local-serving retail – Local-serving retail development tends to shorten trips and reduce VMT. The Technical Advisory encourages lead agencies to decide when a project will likely be local-serving, but generally acknowledges that retail development including stores larger than 50,000 square feet might be considered regional-serving. The Technical Advisory suggests lead agencies analyze whether regional-serving retail would increase or decrease VMT (i.e., not presume a less-than-significant impact); and
- Projects in low-VMT areas – Residential and office projects that incorporate similar features (i.e., density, mix of uses, transit accessibility) as existing development in areas with low VMT will tend to exhibit similarly low VMT.

The Technical Advisory also identifies recommended numeric VMT thresholds for residential, office, and retail projects, as described below:

- Residential development that would generate vehicle travel exceeding 15 percent below existing residential VMT per capita may indicate a significant transportation impact. Existing VMT per capita may be measured as regional VMT per capita or as city VMT per capita;
- Office projects that would generate vehicle travel exceeding 15 percent below existing regional VMT per employee may indicate a significant transportation impact; and
- Retail projects that result in a net increase in total VMT may indicate a significant transportation impact.

For mixed-use projects, the Technical Advisory suggests either evaluating each component independently and applying the significance threshold for each project type included (e.g., residential and retail), or evaluating VMT associated only with the project's dominant use.

The Technical Advisory also provides guidance on impacts on transit. Specifically, the Technical Advisory suggests that lead agencies generally should not treat the addition of new transit users as an adverse impact. As an example, the Technical Advisory suggests that "an infill development may add riders to transit systems and the additional boarding and alighting may slow transit vehicles, but it also adds destinations, improving proximity and accessibility. Such development also improves regional vehicle flow by adding less vehicle travel onto the regional network."

Vehicle Miles Traveled-Focused Transportation Impact Study Guide

In May of 2020, the California Department of Transportation (Caltrans) adopted the Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG) to provide direction to lead agencies regarding compliance with SB 743. The TISG replaces the Caltrans' 2002 Guide for the Preparation of Traffic Impact Studies and is for use with local land use projects, not for transportation projects on the State Highway System. The objectives of the TISG are to provide:[6]

a) Guidance in determining when a lead agency for a land use project or plan should analyze possible impacts to the State Highway System, including its users.
b) An update to the Guide for the Preparation of Traffic Impact Studies (Caltrans, 2002) that is consistent with SB 743 and the CEQA Guidelines adopted on December 28, 2018.
c) Guidance for Caltrans land use review that supports state land use goals, state planning priorities, and GHG emission reduction goals.
d) Statewide consistency in identifying land use projects' possible transportation impacts, to the State Highway System, and to identify potential non-capacity increasing mitigation measures.
e) Recommendations for early coordination during the planning phase of a land use project to reduce the time, cost, and/or frequency of preparing a Transportation Impact Study or other indicated analysis.

Caltrans has jurisdiction over State highways. Therefore, Caltrans controls all construction, modification, and maintenance of State highways, and any improvements to such roadways require Caltrans approval.

Local Development Review Safety Review Practitioners Guidance

The 2024 Caltrans Local Development Review (LDR) Safety Review Practitioners Guidance advises practitioners how to evaluate project-related safety impacts on the State highway system. The analytical approach described in the guidance focuses on vulnerable road users (i.e., bicyclists and pedestrians) and underserved communities; enhancing safety for pedestrians, bicyclists, transit, and vehicular modes; and applying both reactive and systemic perspectives. Lastly, the guidance reiterates Caltrans support for shifting away from using delay-based metrics for analysis in CEQA.

The guidance outlines how queuing should be reviewed for traffic safety impacts. Appendix B "Freeway Exit-Ramp Queuing Analysis" provides practitioners with specific guidance on analysis of project effects on freeway off-ramp queuing. The following test is applied at freeway off-ramps:

- If the Project adds two or more car lengths to the ramp queue that will extend into the freeway mainline, then the location must be reviewed for traffic safety impacts. The review must evaluate speed differential between the off-ramp queue and the mainline of the freeway during the same period.

Traffic safety mitigation may be requested if freeway exit ramp queuing does not occur under the existing condition, but project-generated traffic volumes will cause a queue to extend onto the freeway mainline, creating a speed differential of 30 mph or greater. When the speed differential increases above the 30-mph threshold, rear-end collisions increase resulting in an increase in severe injury and fatal collisions. Traffic safety mitigation shall not be requested under conditions

[6] California Department of Transportation. *Vehicle Miles Traveled-Focused Transportation Impact Study Guide*. May 20, 2020.

where queuing already exists on a freeway exit ramp. The significance of the traffic safety impact by the project must be determined on a case-by-case basis.

The guidance does not offer suggested practices for evaluating queuing at turn lanes on the State highway system. However, queues that spill out of a left-turn lane on a conventional highway can present similar safety concerns as a freeway off-ramp. Vehicle queuing is analyzed using 95th percentile queues for key turning movements at turn lanes and off-ramps on the state highway system. Because the queuing results are reported on State highway facilities, the precise (non-rounded) 95th percentile queue (in feet) is reported in accordance with Caltrans District 10 preferences.

Lastly, the guidance identifies the following six challenge areas as high priorities in California as they represent the greatest opportunity to reduce fatalities and severe injuries: lane departures, impaired driving, speed management, pedestrians, bicyclists, and intersection.

Intersection Safety and Operational Assessment Process (ISOAP) Guide

This September 2024 document describes the performance-based, data-driven framework developed by Caltrans to evaluate and select intersection improvement alternatives. It incorporates the Safe System Approach to improve safety and operations for all users. ISOAP's purpose is to screen and identify the most viable intersection control and geometric design alternatives, ensuring they fit within the surrounding land use context and available resources. The Guide aims to reduce severe crashes and support Caltrans' long-term goal of eliminating traffic fatalities and serious injuries. ISOAP analysis is required if a land development or infrastructure project would create a new connection to the State Highway System or make major physical changes to intersection approaches, including at interchange ramp terminals.

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act Report

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act Report by the California Department of Justice is intended to help lead agencies pursue CEQA compliance and promote environmentally-just development for warehouse project proposals. The document provides information on feasible best practices and mitigation measures. The report describes how truck traffic from warehouses can present substantial safety issues, especially if truck traffic passes through residential areas, school zones, or other places where pedestrians are common. The following measures included in the report to be considered for such conditions are as follows:

- Design, clearly mark, and enforce truck routes that keep trucks out of residential neighborhoods and away from other sensitive receptors;
- Install signs in residential areas noting that truck and employee parking is prohibited;
- Require preparation and approval of a truck routing plan describing the facility's hours of operation, types of items to be stored, and truck routing to and from the facility to designated truck routes that avoids passing sensitive receptors. The plan should hold facility operators responsible for violations of the truck routing plan, and a revised plan should be required from any new tenant that occupies the property before a business license is issued. The approving agency should retain discretion to determine if changes to the plan are necessary, including any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility;

- Construct new or improved transit stops, sidewalks, bicycle lanes, and crosswalks, with special attention to ensuring safe routes to schools;
- Consult with the local public transit agency and secure increased public transit service to the project area;
- Designate areas for employee pickup and drop-off;
- Implement traffic control and safety measures, such as speed bumps, speed limits, or new traffic signs or signals;
- Place facility entry and exit points on major streets that do not have adjacent sensitive receptors;
- Restricting the turns trucks can make entering and exiting the facility to route trucks away from sensitive receptors;
- Construct roadway improvements to improve traffic flow; and
- Prepare a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.

Local Regulations

Local rules and regulations applicable to the proposed project are discussed below.

San Joaquin County General Plan

The following goals and policies from the San Joaquin County General Plan are applicable to the proposed project:

Public Facilities and Services Element

Goal TM-1 To maintain a comprehensive and coordinated multimodal transportation system that enhances the mobility of people, improves the environment, and is safe, efficient, and cost effective.

Policy TM-1.1 **Transportation System Safety.** The County shall manage the transportation system to ensure safe operating conditions.

Policy TM-1.2 **Emergency Services.** The County shall coordinate the development and maintenance of all transportation facilities with emergency service providers to ensure continued emergency service operation and service levels.

Policy TM-1.3 **Multimodal System.** The County shall encourage, where appropriate, development of an integrated, multi-modal transportation system that offers attractive choices among modes including pedestrianways, public transportation, roadways, bikeways, rail, waterways, and aviation, and reduces air pollution and greenhouse gas emissions.

Policy TM-1.6 **Automobile Dependency Alternatives.** The County shall support public and private efforts where appropriate to provide alternative choices to single occupant driving.

Policy TM-1.7 **Energy Conservation.** The County shall develop the transportation system to reduce vehicle miles traveled, conserve energy resources, minimize air pollution, and reduce greenhouse gas emissions.

Policy TM-1.10 **Eliminate Gaps.** The County shall strive to eliminate "gaps" in roadways, bikeways, and pedestrian networks by planning and seeking funding to construct grade-separated crossings of rail lines, canals, creeks, and other barriers to improve connectivity and encourage construction of new bikeways and pedestrianways in and between existing communities where appropriate.

Policy TM-1.11 **Transportation System Improvements.** The County shall require new development to provide transportation system improvements necessary to serve the development.

Policy TM-1.12 **Transportation and Land Use.** The County shall ensure that transportation system investments and improvements support existing and future sustainable land use patterns.

Policy TM-1.13 **Smart Growth.** The County shall encourage "smart growth" and sustainable planning principles where appropriate, including the development of high-density and commercial development near inter-modal transit facilities.

Policy TM-1.15 **Transportation Funding.** The County shall support transportation system improvements by collecting fair share transportation impact fees from new development, supporting ballot measures to maintain existing and/or establish new sales tax revenue for the maintenance and improvement of transportation infrastructure, and applying for Federal and State discretionary transportation funds.

Policy TM-1.16 **Transportation Capacity and Development.** The County shall schedule transportation improvements to coordinate with land use development and transportation demand. Transportation investments and service capacity shall be planned to correspond to the development and travel demand identified by plans of local communities.

Goal TM-2 To improve County roadways to include pedestrian, bicycle, and transit facilities to better serve people who use these active transportation modes.

Policy TM-2.1 **Urban Complete Streets.** The County shall require new streets within Urban Communities to be designed and constructed to serve all users, including pedestrians, bicyclists, and transit passengers, of all ages and abilities. This includes:

- creating multi-modal street connections in order to establish a comprehensive, integrated, and connected transportation network for all modes of travel;
- minimizing curb cuts along non-local streets to improve safety and capacity;
- planting street trees adjacent to curbs and between the street and sidewalk to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- constructing sidewalks and bike lanes on both sides of streets, where feasible;
- including parking options to provide a buffer between pedestrians and vehicular traffic, where appropriate;
- coordinating with local jurisdictions and SJCOG to ensure multimodal connections are established and maintained between jurisdictions; and
- incorporating traffic-calming devices such as roundabouts, bulb-outs at intersections, and traffic tables into the transportation system where appropriate to improve safety and encourage travel by active transportation modes.

Policy TM-2.2 **Reconstructed Urban Complete Streets.** The County may require, based on community support and financial feasibility, reconstructed streets in Urban Communities to accommodate pedestrians and bicyclists, except where pedestrian or bicycle facility improvements are not feasible or determined to be cost prohibitive. New and reconstructed streets in Urban Communities shall be designed to create an environment that provides opportunities for pedestrian and bicycle activity and complementary development and land uses.

Policy TM-2.3 **Land Use Patterns.** The County shall encourage the development of uses in Urban Communities that support the use of public transit, bicycling, walking, and other alternatives to the automobile.

Policy TM-2.4 **Rural Complete Streets.** The County shall strive to serve all users on rural roadways in the County and shall design and construct rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:

- constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
- removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and

- coordinating with local jurisdictions and SJCOG to ensure multimodal connections are established and maintained between jurisdictions.

Policy TM-2.5 **Reconstructed Rural Complete Streets.** The County may require, based on community support and feasibility and the County's Bicycle Master Plan, reconstructed streets in rural areas to accommodate bicyclists and agricultural machinery, except where facility improvements are determined to be cost prohibitive.

Policy TM-2.7 **New Development.** The County shall require all new developments to provide their fair share of roadway facilities for alternative transportation modes to reduce automobile demand.

Policy TM-2.8 **Private Complete Streets.** The County shall encourage large private developments (e.g., office parks, apartment complexes, retail centers) to provide internal complete streets that connect to the existing roadway system.

Goal TM-3 To maintain a safe, efficient, and cost-effective roadway system for the movement of people and goods.

Policy TM-3.2 **Urban Roadways.** The County shall require, where feasible, new development in Urban Communities to construct roadways to County standards and complete streets principles, including curb, gutter, and sidewalks. Bike lanes shall be required, where feasible, for improvements identified in the San Joaquin County Bicycle Master Plan.

Policy TM-3.3 **Onsite Circulation Systems.** The County shall require new development to design on-site circulation systems and parking facilities to minimize backup on County roadways.

Policy TM-3.7 **Frontage Standards.** For developments that are located adjacent to a County roadway, the County shall require access onto County roads.

Policy TM-3.12 **Development Rights-of-Way.** The County shall require dedication and improvement of necessary on and off-site rights-of-way at the time of new development, in accordance with the County's Functional Classification, Standard Drawings, and Level of Service Standards.

Goal TM-4 To maintain and expand a safe, continuous, and convenient bicycle system and pedestrian network.

Policy TM-4.1 **Pedestrian and Bicycle Network Continuity.** The County shall strive to eliminate gaps in the rural bicycle network by constructing or designating new bike facilities, where appropriate, and in accordance with the San Joaquin County Bicycle Master Plan.

Policy TM-4.4 **Safe Pedestrian Crossings.** The County shall continue to enhance pedestrian safety at intersections in Urban and Rural Communities and City Fringe Areas by providing safe, well-placed pedestrian crossings, bulb-outs that reduce crossing widths, and/or audio sound warnings, where applicable, warranted, and financially feasible.

Policy TM-4.5 **Bicycle Storage.** The County shall encourage bicycle storage facilities (i.e., bicycle racks, lockers) at all new major transportation terminals and employment centers consistent with Development Title, Section 9.

Policy TM-4.9 **Parking Facility Design.** The County shall ensure that new automobile parking facilities are designed to facilitate safe and convenient pedestrian access, including clearly defined corridors and walkways connecting parking areas with buildings.

Policy TM-4.12 **Sidewalk Design.** The County shall require that sidewalks in Urban Communities and City Fringe Areas be developed at sufficient width to accommodate pedestrians in accordance with the Americans with Disabilities Act.

Goal TM-5 To maintain a public transit system that meets the needs of all County residents while providing a convenient, reliable alternative to automobile travel.

Goal TM-6 To maintain congestion management strategies to reduce single-occupant automobile use.

Policy TM-6.5 **Transportation Management Associations.** The County shall encourage large commercial, retail, and residential developments to participate in or create Transportation Management Associations (i.e., a public/private partnership to address regional transportation issues).

Policy TM-6.7 **Bicyclist Amenities.** The County shall encourage new large employers to provide bicycle racks.

Goal TM-7 To maintain an efficient transportation network to facilitate the movement of goods within and through the County.

Policy TM-7.2 **Critical Facilities Access.** The County shall require new development to provide adequate access to facilities critical to goods movement, including railroad yards, intermodal



facilities, the Port of Stockton, the Stockton Metropolitan Airport, and Interstate highways.

Policy TM-7.5 **Mode Conflicts and Hazards.** The County shall strive to minimize traffic conflicts among automobiles, trucks, and trains, and shall strive to ensure adequate safety measures are in place to protect residents from truck and rail hazards.

San Joaquin Council of Governments 2022 Regional Transportation Plan and Sustainable Communities Strategy

The SJCOG is comprised of the County of San Joaquin and the cities of Stockton, Lodi, Manteca, Tracy, Ripon, Escalon and Lathrop. SJCOG serves as the regional transportation planning agency and a technical and informational resource for these jurisdictions. In August 2022, the SJCOG Board voted to adopt the 2022 RTP/SCS, which serves as the region's long-range transportation plan and provides guidance for decisions about transportation spending priorities through 2046. The RTP/SCS is intended to help the County achieve the goals of SB 375 and convey the region's statement of priorities for future transportation systems.

San Joaquin County Regional Congestion Management Program

The Federal Congestion Management Process requires metropolitan planning organizations such as SJCOG to develop and implement a Regional Congestion Management Program (RCMP) to fulfill SJCOG's requirements as a metropolitan area with a population exceeding 200,000. The focus of the RCMP is to reduce single occupant vehicle (SOV) travel while minimizing the need for increasing roadway capacity, as well as providing additional resources for the development and deployment of new congestion management technologies.

The SJCOG RCMP 2022 Monitoring Report measures regional congestion and multimodal performance measures through ongoing systematic monitoring. Performance measures serve to gauge system performance and track progress toward achieving congestion management objectives. The RCMP focuses on multimodal performance metrics for bicycling, walking, and transit as well as VMT, travel reliability, pavement management, and safety.

SJCOG Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan

The SJCOG Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan was developed to identify bikeways and pedestrian projects of regional significance in order to prioritize funding and facilitate project implementation. The plan's vision is to the meet the needs for people of all ages and abilities in San Joaquin County by improving and enhancing the existing bicycle and pedestrian network. Goals include increasing bicycle and pedestrian travel throughout the County, improving bicycle, pedestrian, and school access safety, and increasing education and awareness of bicycling and walking in San Joaquin County. The objectives are to increase the mileage of bicycle and pedestrian facilities in San Joaquin County by 20 percent between 2012 and 2022, and increase the competitiveness of local jurisdictions for grant funding for bicycle, pedestrian, and Safe Routes to School improvements.

San Joaquin County Bicycle Master Plan Update

The San Joaquin County Bicycle Master Plan Update (2020) is intended to provide a bicycle network that is well connected, safe, and enjoyable for County residents and visitors. The 2020 update of the prior 2010 plan included an updated vision, goals, and policies, updated existing

conditions and current best practices, presentation of a network of high-quality bikeways serving "all ages and abilities", recommendations for decreasing automobile/bicycle conflicts; and means to improve the quality of bikeways.

Appendix A to the 2020 update includes a list of proposed bikeways, including the following in the vicinity of the project site:

- Class II bike lane on South Chrisman Road from Eleventh Street to Linne Road.
- Class II bike lane on Linne Road from MacArthur Drive to South Chrisman Road.
- Class III bike route on South Chrisman Road from Linne Road to Durham Ferry Road.
- Class III bike route on Durham Ferry Road from South Chrisman Road to SR 33.
- Class IV separated bikeway on Linne Road from Corral Hollow Road to MacArthur Drive.

Chapter 2 of the Bicycle Master Plan describes each of the four classes of bicycle facilities in detail. It should be noted that the 2020 RTP/SCS project list does not explicitly include the above projects. However, the 2020 RTP/SCS does indicate that specific projects listed in the Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan are included. The Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan document included 'vision' projects near the project site including a Class III bike route on South Chrisman Road from Eleventh Street to the California Aqueduct, and a Class III bike route on Durham Ferry Road from South Chrisman Road to Kasson Road.

Measure K Sales Tax

Measure K is a 0.5 cent sales tax that helps fund transportation improvements in San Joaquin County. The program is operated by SJCOG. Measure K was originally approved by voters in 1990, and renewed by a 2006 vote, which extends the sales tax through 2041. Major improvements target San Joaquin County freeways, streets and roads, public transit networks, pedestrian, and bicycle friendly programs. According to the Measure K interactive project map,[1] the widening of Linne Road from two to four lanes between Tracy Boulevard and South Chrisman Road is included in the program. Improvements are not shown along South Chrisman Road. The map also shows a passenger rail station (to support expansion of ACE service) to be built near the Linne Road/Tracy Boulevard intersection.

San Joaquin County Regional Transportation Impact Fee

The Regional Transportation Impact Fee (RTIF) is a County-wide, multi-jurisdiction capital improvement funding program that covers a portion of the costs for new transportation facilities required to serve new development within the County. New development throughout the County is subject to the fee. The funding derived from the RTIF program is used in combination with other funding available to complete the needed transportation and transit improvements. The RTIF capital project list does not show any planned, funded transportation improvements within the vicinity of the project site, though partial funding is included for the I-205/ South Chrisman Road interchange.

San Joaquin County Traffic Impact Mitigation Fee Program

The San Joaquin County Traffic Impact Mitigation Fee (TIMF) Program applies to new development in unincorporated San Joaquin County. The fee schedule can be found on the County's website (at: https://sjgov.org/traffic-fees). The San Joaquin County TIMF Program Annual Report (2023) describes various planned improvements that the TIMF would help fund.

The only improvement within the project area included in the program is a roundabout at the Eleventh Street/Bird Road intersection.

San Joaquin Regional Transit District Short-Range Transit Plan

The San Joaquin Regional Transit District Short-Range Transit Plan (SRTP) for fiscal years 2018-2019 to 2027-2028 serves as a guide for the development of the goals objectives, and policies for future transit services in the Stockton Metropolitan Area (SMA) and unincorporated San Joaquin County over the next 10 years. Official RTD boundaries do not include the incorporated San Joaquin County cities of Lodi, Lathrop, Manteca, Escalon, Ripon and Tracy. The SRTP proposes strategies that will guide transit development while containing costs within available revenues.

The SRTP outlines over $20 million in operating improvements and an additional $200 million in capital improvements to benefit San Joaquin County and County residents. The SRTP identifies various service objectives to "provide the highest level of transit service to the greatest number of people within RTD's financial means," which includes enhanced service within the Stockton area, improved mobility for persons with disabilities, improved quality of intercity commuter service, and coordination with local jurisdictions and developers to incorporate transit services and amenities within land use planning to establish transit-oriented development. The SRTP does not explicitly cite any planned transit system improvements within the project vicinity.

San Joaquin County Local Road Safety Plan

The San Joaquin County Local Road Safety Plan (LRSP) provides a framework to develop a comprehensive transportation safety management program that proactively identifies potential safety issues in the unincorporated County and applies strategic and proven solutions to address issues. The LRSP assesses roadway safety in the County, identifies locations for improvements, and recommends engineering countermeasures. An LRSP is a multi-disciplinary approach to traffic safety that creates the opportunity for the County to partner with stakeholders and other agencies who may have a role in implementing recommendations.

The LRSP adopts a Safe System Approach and encourages forward thinking strategies, addressing the fact that historical approaches to traffic safety have not been effective enough in preventing fatal and serious injuries. Commitment from County staff and road safety partners to prioritize safety in their efforts and implement both proven and innovative ideas are key to the LRSP being impactful and in line with recent commitments at the national and State level. The County's roadway network is large and complex, but incremental efforts focused on safety that are already occurring and expected to expand in future years aim to reduce collision risk on County roadways. The County is committed to reaching its goal of eliminating all preventable roadway fatalities and serious injuries by 2050.

Driving or biking under the influence was the most cited primary collision factor for fatal and serious injuries (45 percent), higher than the statewide average of 28 percent. A total of 1,428 DUI collisions occurred between 2015 and 2019, of which, 219 (15 percent) resulted in a fatal or serious injury outcome.

Table 4 of the LRSP shows a list of priority intersections by collision severity score. The Eleventh Street/Bird Road intersection is within the study area and ranks first overall. The LRSP cites a planned safety project at that location (though details of its components are not provided). The fifth ranked intersection is Eleventh Street/Kasson Road/Grant Line Road, with the LRSP

mentioning that the roundabout present at the intersection was restriped in 2016. San Joaquin County is designing a realignment of Grant Line Road that will include improvements to the 11th Street/Bird Road intersection.

Figure 30 of the LRSP shows priority intersections and segments for investment given their collision severity score. Facilities were not identified within this project's vicinity, aside from the two intersections mentioned above.

San Joaquin County VMT Thresholds Study

The San Joaquin County VMT Thresholds Study describes how San Joaquin County will implement Senate Bill 743. The study has not yet been formally adopted by the San Joaquin County Board of Supervisors. Nonetheless, the study has previously been applied on various studies requiring VMT analysis. The San Joaquin County VMT Thresholds Study describes how, in large part, the County is endorsing the majority of the recommendations from the OPR (now LCI) Technical Advisory. The study summarizes the analytical methodologies, assumptions and data used within San Joaquin County to establish recommended VMT analysis methodologies and thresholds that are consistent with the State's guidelines and regulatory framework, and that reflect the travel behavior of its residents and employees.

San Joaquin Valley Air Pollution Control District Rule 9410

San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 9410 requires major employers (with 100 or more employees) in the region to develop and implement transportation demand management (TDM) strategies. Adopted in 2009, the Employer Trip Reduction Implementation Plan (eTRIP) encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. These strategies can include employee shuttles, staggered work hours, telecommuting options, transit subsidies, carpool/vanpool programs, and many other strategies.

City of Tracy General Plan

The proposed project would add traffic to roadways in the vicinity, including roadways within the City of Tracy. Any such roadways/intersections would be subject to the City of Tracy regulations. The relevant goals and policies from the City of Tracy General Plan related to transportation are presented below.

Goal CIR-1 A roadway system that provides access and mobility for all of Tracy's residents and businesses while maintaining the quality of life in the community.

Objective CIR-1.1 Implement a hierarchical street system in which each street serves a specific, primary function and is sensitive to the context of the land uses served.

Policy P1 The City should develop context-based street designs that allow for variations based on the expected function and location of the facility, and the surrounding land use context. These context-sensitive designs should have the following aims:

- Create aesthetically attractive streetscapes

- Enhance multi-modal transportation by increasing mobility and improving safety for autos, trucks, transit, pedestrians and bicyclists.

Policy P3 The City shall continue to apply traffic mitigation fee programs to fund transportation infrastructure, based on fair share of facility use.

Policy P4 The City should continue to pursue regional, County and State funding to fund roadway projects. These potential funding sources may include Measure K sales tax revenues, a regional or countywide transportation impact fee, and other existing and future revenue sources.

Policy P5 The City shall continue to participate in regional transportation funding decisions, including Measure K reauthorization, regional or countywide transportation fees, and prioritization of State funded projects.

Policy P6 The Roadway Master Plan update shall identify necessary improvements to various interchanges on I-205 and I-580 based on land use designations and with particular attention to Terminal Access Routes in accordance with Surface Transportation Assistance Act of 1982 (STAA).

Action A3 Consult with San Joaquin County and the City of Lathrop to ensure that adequate rights-of-way are preserved in the City's Sphere of Influence.

Objective CIR-1.4 Protect residential areas from commercial truck traffic

Policy P1 Significant new truck traffic generating uses shall be limited to locations along designated truck routes, in industrial areas or within ¼-mile of freeways.

Policy P2 The City shall enforce designated truck routes based on the existing City ordinance.

Action A1 Update the truck route designations periodically as needed.

Objective CIR-1.5 Protect residential areas from through traffic and high travel speeds by facilitating free flow of traffic on major streets.

Policy P1 Use of local residential streets by non-local and commercial traffic shall be discouraged. The City may consider techniques such as route signs and route maps. This policy should not restrict the ability of local vehicle and nonmotorized transportation to utilize residential collectors as an effort to encourage higher levels of roadway connectivity.

City of Tracy Transportation Master Plan

The City of Tracy Transportation Master Plan was updated in August 2022 and builds upon the goals and objectives as defined in the Circulation Element of the City's General Plan and Sustainable Action Plan. The Transportation Master Plan provides a comprehensive review of the City's transportation system. The plan also serves as a comprehensive planning document to identify and implement required improvements to the existing roadway system, as well as expand upon the system to accommodate future development consistent with the City's General Plan update. In addition, the plan balances existing and future transportation infrastructure needs with safe access for all user groups (motorists, pedestrians, bicyclists, and transit users) by incorporating strategies, principles and design elements such as Smart Growth design elements, Context-Sensitive Design, and Complete Streets guidelines. The plan also includes a detailed description of the City of Tracy travel demand model.

City of Tracy Draft Infrastructure Master Plan Impact Fee Nexus Study

The City of Tracy Draft Infrastructure Master Plan Impact Fee Nexus Study, which is currently in draft form, would update impact fees for new development within the City of Tracy. The plan identifies $665 million in transportation improvements that would be funded by the plan. The following improvements within the project area are included in this program:

- South Chrisman Road widening from two to four lanes from Eleventh Street to Schulte Road ($16.2 million);
- South Chrisman Road widening from two to four lanes from Schulte Road to Valpico Road ($12.8 million);
- Linne Road widening from two to four lanes from Corral Hollow Road to Tracy Boulevard ($16.2 million);
- Linne Road widening from two to four lanes from Tracy Boulevard to east City limits (0.25-mile west of MacArthur Drive) ($11.0 million);
- Widen South Chrisman Road to four lanes (across railroad tracks) at Schulte Road ($1.7 million);
- Widen Corral Hollow Road to four lanes (across railroad tracks) north of Linne Road ($1.7 million);
- Widen Tracy Boulevard to four lanes (across railroad tracks) north of Linne Road ($1.7 million;
- Corral Hollow Road/Linne Road intersection improvements ($5.5 million);
- Tracy Boulevard/Linne Road intersection improvements ($4.7 million;
- South Chrisman Road/Eleventh Street intersection improvements ($2.2 million; and
- South Chrisman Road/Valpico Road intersection improvements ($1.6 million).

4.12.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to transportation and circulation.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the proposed project would be considered to result in a significant adverse impact on the environment in relation to transportation and circulation if the project would result in any of the following:

- Conflict with a program, plan, ordinance, or policy, addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

Vehicle Miles Traveled Standard of Significance

While not formally adopted, the San Joaquin County VMT Thresholds Study has previously been applied on various studies requiring VMT analysis, and is therefore used herein. For project land use components whose VMT impacts are otherwise not presumed to be less-than-significant based on the San Joaquin County VMT Thresholds Study, the applicable VMT threshold are as follows:

- Warehouse and Office: Average VMT per employee exceeds 85 percent of the unincorporated countywide average. The unincorporated countywide average VMT per employee is 38.6 under baseline conditions; therefore, the applicable threshold of significance would be 32.8 VMT per employee.
- University Campus: According to the TIA, San Joaquin County does not have quantitative thresholds for universities; thus, the applicable threshold of significance is whether the University Campus' VMT generation rate is considered efficient based on its placement and on-site amenities.
- University Center Retail, Veterans of Foreign Wars (VFW) Facility, and Gateway Center Retail/Restaurant/Service: The applicable threshold of significance would be whether the uses would qualify as local-serving retail pursuant to the San Joaquin County VMT Thresholds Study.

Hazards Standard of Significance

The thresholds used to evaluate whether the proposed project could result in a hazard to State facilities is focused on vehicle queue lengths exceeding freeway off-ramp or left-turn lane storage on state highways and is based on guidance from the Caltrans 2024 LDR Safety Review Practitioners Guidance. The more specific thresholds are as follows:

- Cause the 95th percentile queue length at a freeway off-ramp to extend beyond the gore point onto the mainline (or exacerbate a current or future deficient condition by increasing the 95th percentile queue by two or more vehicles).
- Cause the 95th percentile queue length in the left-turn lane at an at-grade intersection on the State Highway System to exceed the available storage (or exacerbate a current or future deficient condition by increasing the 95th percentile queue by two or more vehicles).

Method of Analysis

The analysis methodology provided in the TIA prepared for the proposed project by Fehr & Peers. is discussed below.

Project Trip Generation

The trip generation for the industrial component of the proposed project was estimated based on locally collected data for 39 existing warehouse/logistics operations in San Joaquin County.[7] The

[7] Fehr & Peers. *San Joaquin Countywide Warehousing Data Collection and Travel Behavior Study*. 2021.

trip generation of the other project components was estimated using trip rates from the ITE 2021 Trip Generation Manual (TGM), 11th Edition. More detail regarding the trip generation methodology for the non-industrial land uses is included in Appendix O to the EIR.

San Joaquin Countywide Warehousing Data Collection and Travel Behavior Study (Fehr & Peers, 2021)

The San Joaquin Countywide Warehousing Data Collection and Travel Behavior Study, henceforth referenced as the "San Joaquin Countywide Warehousing Travel Behavior Study," was a fundamental part of estimating the proposed project's travel characteristics. The study is described in detail below. Fehr & Peers undertook the San Joaquin Countywide Warehousing Travel Behavior Study in 2021 to better understand the travel behavior of existing warehousing buildings across San Joaquin County. The study was prepared in response to an initial review of local and regional planning efforts, which had revealed a lack of data and understanding of the travel characteristics of these types of facilities. This data was used to estimate the trips generated by the industrial component of the proposed project.

Fehr & Peers collected 72 hours of driveway vehicle classification count data at 39 warehousing buildings across San Joaquin County in June 2021.[8] The data collection was performed by National Data & Surveying Services (NDS) using cameras to count and classify vehicles entering and exiting the individual building driveways. The 39 warehousing buildings totaled over 25.7 million square feet, representing roughly 28 percent of all warehousing building space in San Joaquin County based on Colliers 21Q1 estimates. This data was used to develop weighted average trip generation rates per thousand square feet (ksf) for warehousing uses in San Joaquin County, including within the cities of Tracy, Stockton, Lathrop, Manteca, and Lodi. The 39 warehousing buildings, including their tenant, type of warehouse, and square footage, are shown in Image 3 of Appendix O to the EIR.

Trip generation data collected at each warehouse was classified as generated either by autos (which include light and medium duty trucks) or heavy-duty trucks. These trip rates were used to estimate the number of auto and truck trips generated by the project's industrial uses. More detail regarding the trip generation methodology for the industrial land use is included in Appendix O to the EIR.

Trip Generation Estimates for Initial Phase Vs. Specific Plan Buildout

Table 4.12-2 displays the number of new trips generated by the Initial Phase of development. As shown in the table, the Initial Phase would generate 6,976 new trips per day, with approximately 26 percent of the trips (1,784) being trucks. The Initial Phase would generate 800 AM peak hour trips and 920 PM peak hour trips.

Table 4.12-3 displays the number of new trips generated by the three proposed industrial areas, University Center, and Gateway Center. As shown therein, Specific Plan Buildout would generate 52,900 new trips per day with about 21 percent (11,200) being trucks. Specific Plan Buildout would generate 5,900 new AM peak hour trips and 6,600 new PM peak hour trips.

[8] Six of the 39 sites were also counted in June 2019 prior to the onset of the COVID-19 pandemic. All but one of these locations was situated in the International Park of Commerce (IPC). Together, the locations total just over 5 million sf of warehouse space. Comparison of the June 2021 to June 2019 trip generation totals revealed that the June 2021 weighted average daily trip rate was 16 percent greater than the June 2019 rate, which implies that the use of trip generation data collected during the COVID-19 pandemic did not understate trips (and if anything, resulted in a more conservative trip generation total due to increased ecommerce during the pandemic).

Table 4.12-2
Initial Phase Trip Generation

District	Land Use & Amount	Daily						AM Peak Hour						PM Peak Hour					
		Autos			Trucks			Autos			Trucks			Autos			Trucks		
		In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
Gateway East	3,962 ksf Limited Industrial	2,120	2,120	4,240	891	891	1,782	404	190	594	60	60	120	294	459	753	40	40	80
University Center	400 students	311	311	622	1	1	2	47	13	60	0	0	0	19	41	60	0	0	0
	11.5 ksf VFW Tracy Post	165	165	330	0	0	0	14	7	21	0	0	0	13	14	27	0	0	0
Gross (New) Trips[1]		**2,596**	**2,596**	**5,192**	**892**	**892**	**1,784**	**465**	**210**	**675**	**60**	**60**	**120**	**326**	**514**	**840**	**40**	**40**	**80**

Notes:
[1] Due to non-complementary nature of uses, no internalization expected.
Values may not sum exactly due to rounding.

Source: Fehr & Peers, 2025.

Table 4.12-3
Specific Plan Buildout Trip Generation

District	Daily New Trips			AM Peak Hour New Trips			PM Peak Hour New Trips		
	Autos	Trucks	Total	Autos	Trucks	Total	Autos	Trucks	Total
Gateway West, Central, and East	25,840	10,867	36,707	3622	725	4,347	4,589	482	5,071
University Center	9536	48	9,584	938	4	942	973	4	977
Gateway Center	6,360	256	6,615	594	16	610	558	10	568
Total New Trips	**41,736**	**11,171**	**52,906**	**5,154**	**745**	**5,899**	**6,120**	**496**	**6,616**

Note: Refer to Tables 6 and 7 of the Transportation Impact Analysis report in Appendix O to the EIR for information regarding how internal trip-making and pass-by trip adjustments were made.

Source: Fehr & Peers. 2025.

The three industrial areas would be responsible for 69 percent of all new daily trips generated (including 97 percent of new truck trips). The University Center would generate 18 percent of all new daily trips, while the Gateway Center would generate 13 percent.

Table 4.12-4 compares the new trips generated by the Initial Phase versus Specific Plan Buildout. As shown in the table, project trip generation associated with the Initial Phase would represent approximately 13 percent of the total buildout trips generated.

Table 4.12-4
Project Trip Generation

Phase	Daily New Trips			AM Peak Hour New Trips			PM Peak Hour New Trips		
	Autos	Trucks	Total	Autos	Trucks	Total	Autos	Trucks	Total
Initial Development Phase	5,192	1,784	6,976	675	120	795	840	80	920
Specific Plan Buildout	41,736	11,171	52,907	5,154	745	5,899	6,120	496	6,616

Source: Fehr & Peers. 2025.

Project Trip Distribution/Assignment

The San Joaquin Countywide Warehousing Travel Behavior Study included the purchase of multiple Big Data datasets from StreetLight Data, Inc. for the warehousing sites. These data sources are derived from location-based services (LBS) data and complex machine learning algorithms to understand travel behavior across the country.[9]

Mobile device data was obtained for warehouses located within and near the City of Tracy (i.e., consisting of IPC, NEI, and Patterson Pass collectively referred to as the "Central Valley Gateway"). By studying where mobile devices are located over the course of the day (i.e., during overnight vs. daytime hours), it was possible to determine which devices were associated with employee trips versus visitor trips. Global Positioning System (GPS)-based freight metrics for medium to heavy duty commercial trucks were also obtained to understand the origin-destination and length of commercial vehicle trips. Trip origins and destinations were then tracked at a Census Block Group level.

Figure 4.12-5 displays the expected residence location of employees that would work at the proposed project's warehouses. These percentages were derived from the closely located Central Valley Gateway employee residence locations, but also took into consideration the project's location. To accomplish this, a statistical model was built to calibrate the relative proportion of Central Valley Gateway employee residence locations for both major and minor cities in the region against the StreetLight data.

The modeling relied on 2020 US Census statistics (related to population, age, employed persons, and college educated) and travel time/distance. Once the model was adequately calibrated to

[9] StreetLight Data, Inc. processes approximately 40 billion anonymized location records per month from smart phones and navigation devices in connected cars and trucks and uses machine learning to transform these records into aggregated and normalized route-based travel patterns. Data is validated using permanent traffic counters and embedded sensors, and normalized with multiple data sources, including parcel data, digital road network data, and census information.

match Central Valley Gateway employee residence locations, it was then applied to the proposed project in consideration of its specific location.

Figure 4.12-5 indicates that the largest share of employees is expected to come from the City of Tracy (26 percent), followed by Stockton (20 percent), Modesto (14 percent), and Manteca (13 percent). Among those passenger vehicle trips that would utilize I-5 between SR 120 and the City of Tracy, employees would have the choice of several competing routes to access the project site. The Local Transportation Analysis prepared for the proposed project provided a detailed analysis (based on travel time surveys) of which routes project trips would be likely to use.

Figure 4.12-6 displays the expected distribution of trucks generated by the proposed project's warehousing buildings. Truck access is provided from South Chrisman Road, which is an STAA route between SR 132 and Eleventh Street. The percentages in Figure 4.12-6 were derived from the San Joaquin Countywide Warehousing Travel Behavior Study. As shown in the figure, 50 percent of truck trips are expected to be distributed to/from the north on I-5 toward Stockton. Another 15 percent would be distributed to/from south on I-5 and 15 percent would be distributed to/from the northwest on I-580 (toward the Bay Area). Heavy duty truck trips are expected to utilize designated truck routes, which are shown on Figure 4.12-3. Heavy duty trucks were not assumed to use roads that have current weight restrictions.

Durham Ferry Road between South Chrisman Road and SR 33 is a special circumstance (as it relates to trucks) that warrants further discussion. The roadway segment does not currently have any truck weight restrictions. Trucks were observed using the roadway segment (85 of the 1,500 daily trips are trucks). Based on input from San Joaquin County Department of Public Works Department staff, should the proposed project be approved and constructed, signage would be placed on this segment of Durham Ferry Road prohibiting through truck travel. However, according to the TIA, some truck drivers may not adhere to these signs. Accordingly, the analysis conservatively assumes some project-related trucks would use this segment of Durham Ferry Road despite the presence of such signs. The number of trucks estimated to be added to Durham Ferry Road is presented below, under the Traffic Forecasts section.

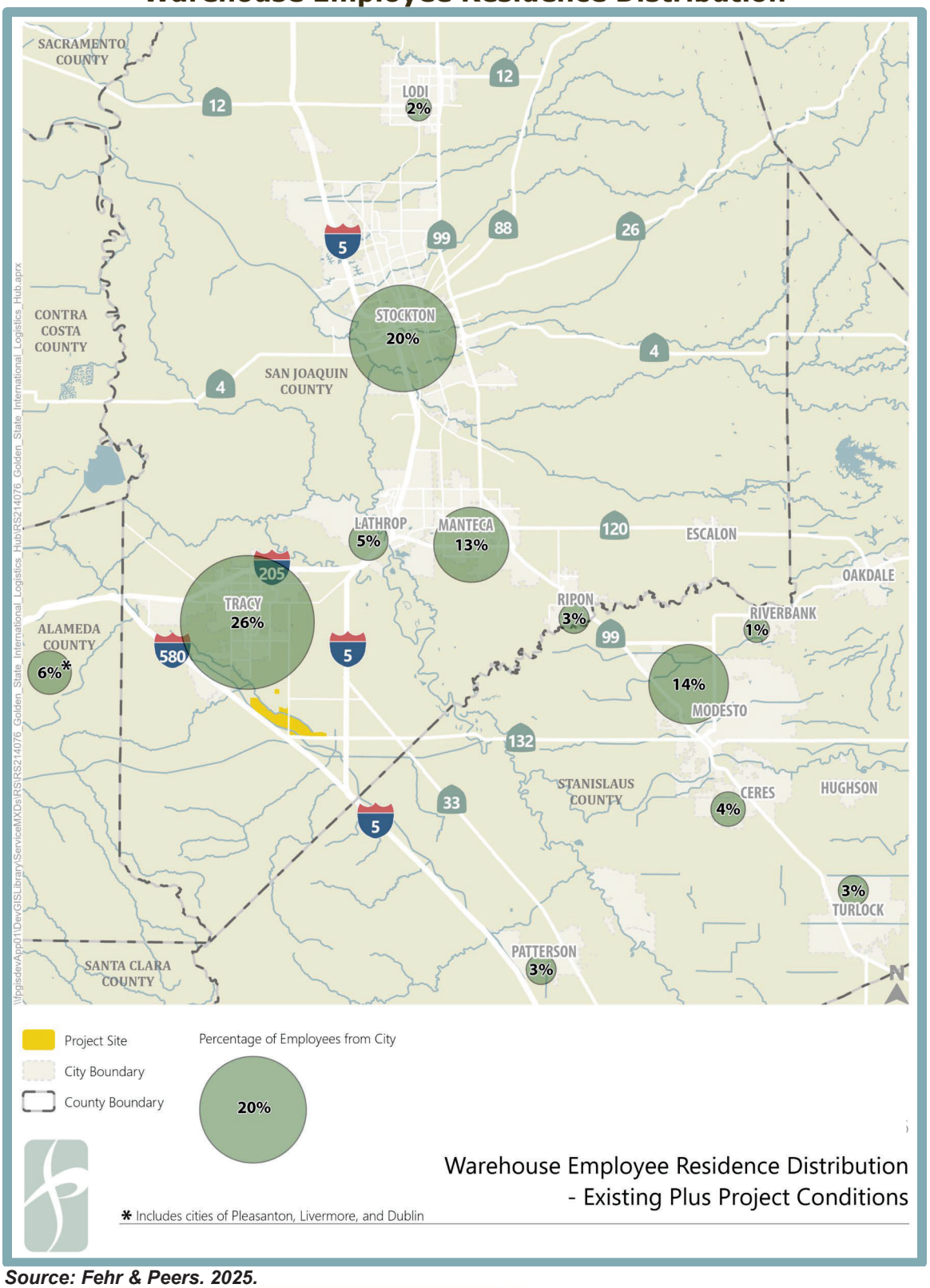
The retail, business park, and university land uses were entered into the City of Tracy travel demand model. The model was then applied to estimate their expected distribution of trips for each land use. Nearly half of the retail and university trips are expected to be distributed to/from the north on South Chrisman Road toward the City of Tracy.

Traffic Forecasts

Project Buildout and Initial Phase trips were assigned to the surrounding roadway system based on each scenario's expected trip generation, distribution, and assignment procedures. Figure 4.12-7 shows volumes on the existing street network for Existing Plus Initial Phase conditions, and Figure 4.12-8 shows the ADT on existing study roadways under Existing Plus Specific Plan Buildout conditions.

To understand the distribution of trips for all land uses combined, Fehr & Peers calculated the net increase in trips between Existing and Existing Plus Specific Plan Buildout conditions for each of the five gateway streets that would be used to access the project site. This data is shown below in Table 4.12-5.

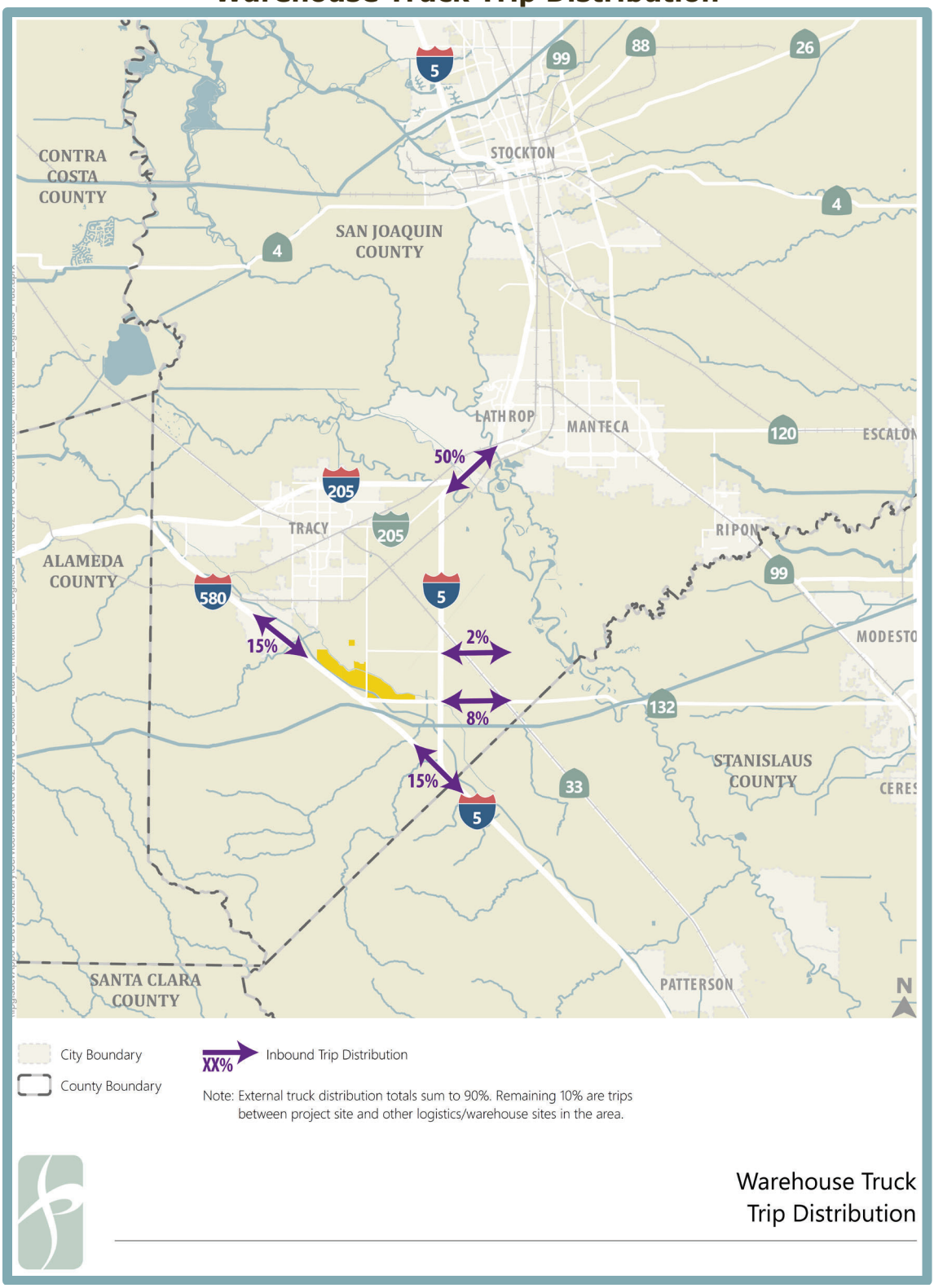
Figure 4.12-5
Warehouse Employee Residence Distribution



Source: Fehr & Peers. 2025.

*Figure not OCR compatible.

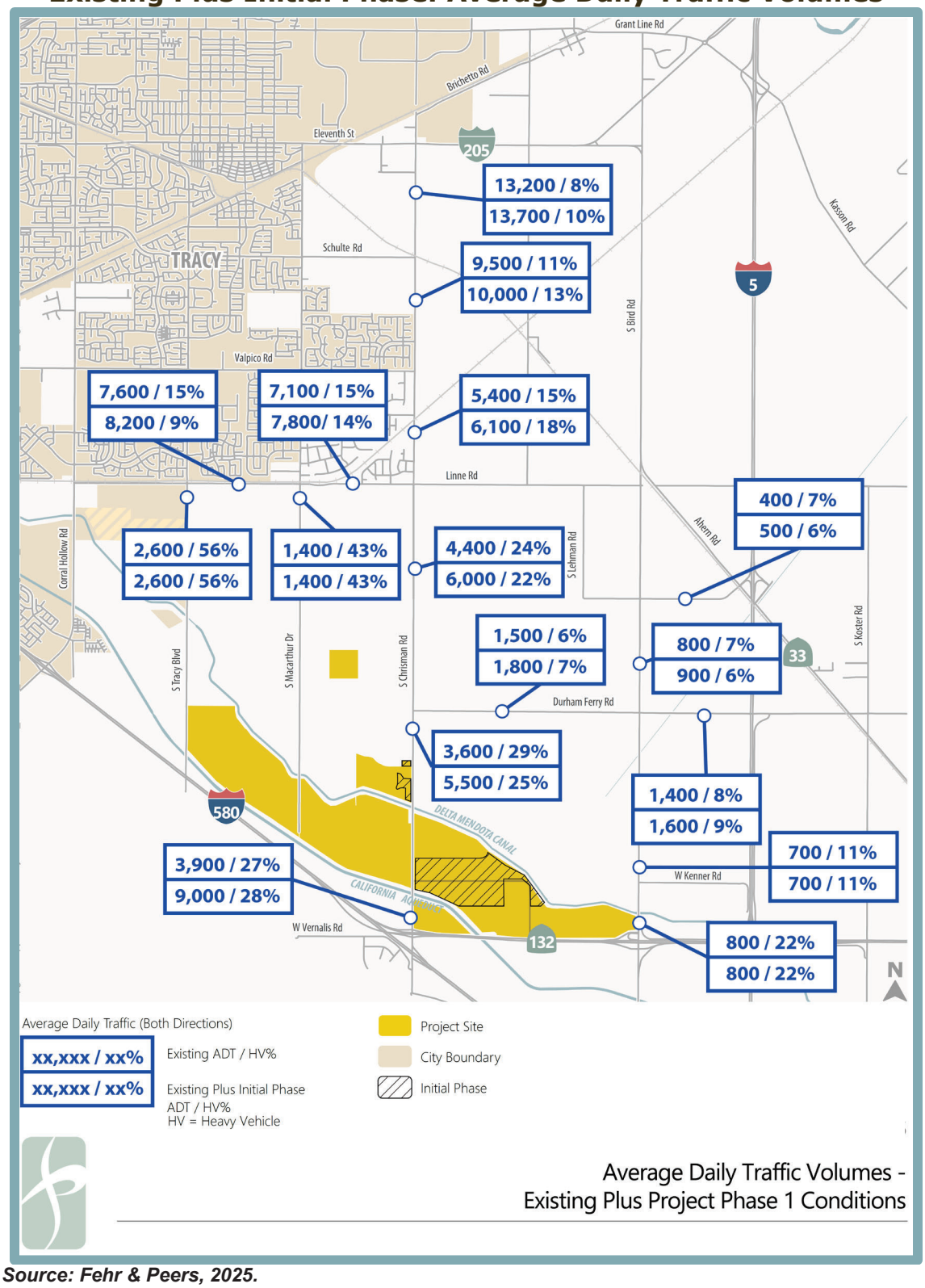
Figure 4.12-6
Warehouse Truck Trip Distribution



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

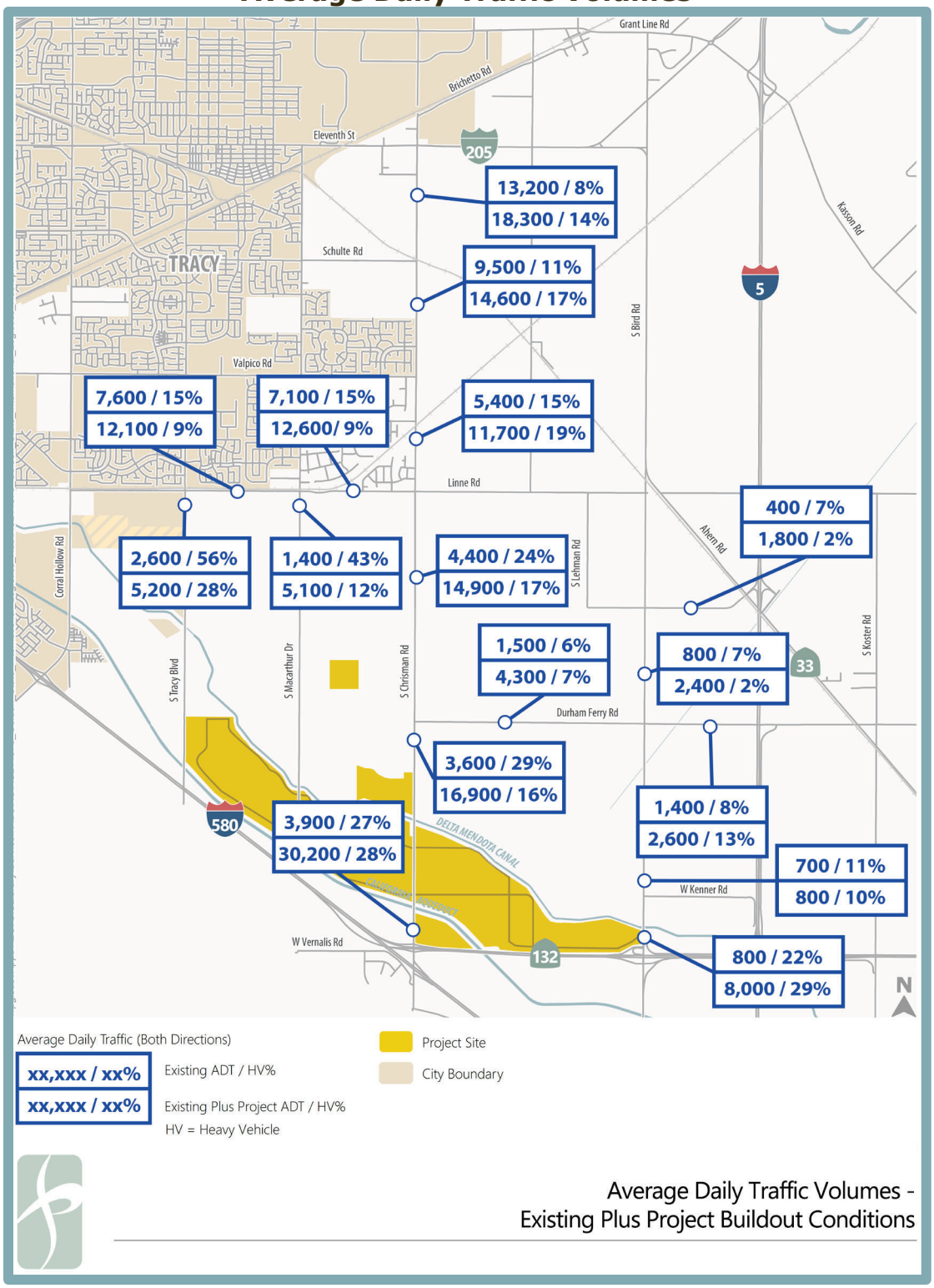
Figure 4.12-7
Existing Plus Initial Phase: Average Daily Traffic Volumes



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

Figure 4.12-8
Existing Plus Specific Plan Buildout Conditions: Average Daily Traffic Volumes



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

Table 4.12-5
Distribution of Daily Project Buildout Trips – Existing Plus Specific Plan Buildout Conditions

Project Gateway Access	Project Buildout Trips Only					
	Autos		Trucks		Total	
	#	%	#	%	#	%
Tracy Boulevard south of Linne Road	2,550	6%	0	0%	2,550	5%
MacArthur Drive south of Linne Road	3,670	9%	0	0%	3,670	7%
South Chrisman Road south of Durham Ferry Road	11,650	28%	1,640	15%	13,290	25%
C Street west of Bird Road	5,040	12%	2,160	19%	7,200	14%
South Chrisman Road north of SR 132	18,880	45%	7,420	66%	26,300	50%
Total	**41,790**	**100%**	**11,220**	**100%**	**53,010**	**100%**

Note:
Values are rounded to the nearest 10 vehicles.

Source: Fehr & Peers, 2025.

The following key conclusions are derived from Table 4.12-5:

- Auto trips are well-distributed across the various gateway streets. The majority (73 percent) of auto trips are expected to use South Chrisman Road from the north or south to access the project site. The secondary accesses of Tracy Boulevard, MacArthur Drive and C Street west of Bird Road would each serve between six percent and 12 percent of project trips.
- Approximately two-thirds of truck trips are expected to enter/exit the project site by way of South Chrisman Road north of SR 132. Truck trips would pass through the SR 132/South Chrisman Road interchange.
- South Chrisman Road north of SR 132 would experience the largest increase in traffic of any roadway segment. Project buildout would add 26,300 daily trips (28 percent trucks), which is about 50 percent of all external project trips.

Specific Plan Buildout would add 2,800 vehicles to Durham Ferry Road east of Chrisman Road, of which trucks would constitute 220 of those trips. The Initial Phase would add 300 vehicles to this segment, with 25 being trucks.

Project VMT

As part of the TIA prepared for the proposed project, Fehr & Peers calculated VMT separately for all land use components in order to determine the significance of project impacts by land use type for the Initial Phase and Specific Plan Buildout. Fehr & Peers estimated project VMT using guidance provided in the San Joaquin County VMT Thresholds Study, which adopts many of the recommended technical approaches and guidance contained in the OPR (LCI) Technical Advisory. The SJCOG travel demand model was used to conduct the VMT analysis of employment uses, with the baseline year being 2016 and the cumulative buildout year being 2046.

The 2016 base year SJCOG model yields an average VMT per employee within unincorporated San Joaquin County that is within 1.3 percent of the existing average VMT per employee of 38.1 for unincorporated San Joaquin County (provided to Fehr & Peers by San Joaquin County staff), meaning a consistent approach is attained by using the travel demand model.

According to Fehr & Peers, the SJCOG travel demand model is regional in nature and may not be best suited to calculate the VMT for some of the proposed project's smaller land use components. Accordingly, the City of Tracy Refined travel demand model was used to calculate the VMT of the university, VFW facility, and retail uses. The aforementioned land uses do not require a comparison against a countywide VMT per employee threshold. The base year for the City of Tracy Refined model was 2019 and the future year was 2042.

All VMT calculations reported in this chapter are "project-generated VMT," not "project effect on VMT". Project-generated VMT refers to the amount of travel its users would generate. In contrast, project effect on VMT refers to how the VMT of an entire area would change if a project was approved and constructed. Project effect on VMT is mentioned prominently in the Technical Advisory, but only raised in the San Joaquin County VMT Thresholds Study in the context of studying the effects of adding new retail uses. Project effect on VMT is not calculated in this study because no such analysis is necessary to achieve consistency with the San Joaquin County VMT Thresholds Study.

The proposed project would involve the use of heavy trucks to move goods. However, as described in further detail below, an analysis of VMT from heavy truck trips is not required pursuant to SB 743 and the CEQA Guidelines and, thus, was not included in this EIR.

Section 1 of SB 743 reads:

> "[w]ith the adoption of Chapter 728 of the Statutes of 2008, popularly known as the Sustainable Communities and Climate Protection Act of 2008 [SB 375], the Legislature signaled its commitment to encouraging land use and transportation planning decisions and investments that reduce vehicle miles traveled and contribute to the reductions in greenhouse gas emissions required in the California Global Warming Solutions Act of 2006 [AB 32]"

As demonstrated in the excerpt above, SB 743 directly states that the analysis of VMT is required to achieve the goals established in SB 375, which is based on the greenhouse gas (GHG) emissions goals set forth in Assembly Bill (AB) 32.

Section 1(b) of SB 375, enacted in 2008, states that:

> "[i]n 2006, the Legislature passed and the Governor signed Assembly Bill 32 (Chapter 488 of the Statutes of 2006; hereafter AB 32), which requires the State of California to reduce its greenhouse gas emissions to 1990 levels no later than 2020. According to the State Air Resources Board, in 1990 greenhouse gas emissions from automobiles and light trucks were 108 million metric tons, but by 2004 these emissions had increased to 135 million metric tons."

Likewise, Section 1(c) of SB 375 states that:

> "[g]reenhouse gas emissions from automobiles and light trucks can be substantially reduced by new vehicle technology and by the increased use of low carbon fuel. However, even taking these measures into account, it will be necessary to achieve significant additional greenhouse gas reductions from changed land use patterns and improved transportation. Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32."

As such, SB 375 was focused on reducing GHG emissions through changing land use patterns and transportation policy in a way that reduces automobile and light truck use, rather than by reducing the use of heavy trucks for the movement of goods. Based on the above, the legislative intent of SB 743 and the associated CEQA Guidelines Section 15064.3 is to ensure that lead agencies analyze VMT for passenger car and light truck trips related to land use projects.

In December 2018, OPR issued guidance ("OPR Guidance") on implementation of SB 743 and the related CEQA Guideline Section 14 California Code of Regulations (CCR) Section 15064.3. The OPR Guidance clearly acknowledges the purpose of the VMT methodology is to reduce emission of GHG pursuant to the strategies set forth in SB 375:

> "employing VMT as the metric of transportation impact statewide will help to ensure GHG reductions planned under SB 375 will be achieved through on-the-ground development, and will also play an important role in creating the additional GHG reductions needed beyond SB 375 across the State. Implementation of this change will rely, in part, on local land use decisions to reduce GHG emissions associated with the transportation sector, both at the project level, and in long-term plans (including general plans, climate action plans, specific plans, and transportation plans) and supporting sustainable community strategies developed under SB 375." (OPR Guidance, p. 3.)

The new CEQA Guidelines Section 15064.3 does not specifically state what type of vehicles are to be include or excluded from the VMT analysis, and merely states "[f]or the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." (14 CCR Section 15064.3(a).)

On the question of what types of vehicles are to be included in the VMT analysis, OPR stated in its 2018 Guidance that:

> "[p]roposed Section 15064.3, subdivision (a), states, 'For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project.' Here, the term 'automobile' refers to on-road passenger vehicles, specifically cars and light trucks. Heavy-duty truck VMT could be included for modeling convenience and ease of calculation (for example, where models or data provide combined auto and heavy truck VMT)." (OPR Guidance, p. 4.)

Accordingly, OPR advises that the term "automobile" was not meant to include heavy trucks, but lead agencies could include heavy trucks where doing so was convenient under the applicable traffic model. Additionally, the OPR Guidance addresses numerical transportation impact thresholds for a "land use project," but then only specifically describes residential, office, and retail projects, providing further evidence that movement of goods/materials in heavy trucks was meant to be excluded from the VMT requirement. (OPR Guidance, pp. 11-16.)

San Joaquin County has not adopted VMT traffic analysis guidelines and the draft report (San Joaquin County VMT Thresholds Study (GHD, 2020)) does not expressly require analysis of heavy truck VMT. Other jurisdictions throughout the State have approved guidance indicating that heavy truck trucks may be excluded from VMT analysis pursuant to SB 743. For instance, the City of Irvine Traffic Study Guidelines include the following direction:

> "3.1 Screening Criteria
> OPR Guidance Regarding Goods Movement: Section 3 of the Guidelines for Implementation of the California Environmental Quality Act specifies that VMT to be

> analyzed is defined as the amount and distance of automobile travel attributable to a project. SB 743 therefore does not require the inclusion of heavy-duty truck trips, utility vehicles or other types of vehicles in the VMT analysis. In the case of trucks, the State's strategy for the goods movement sector is not in VMT reduction, but in advances in technology (zero and near-zero emission control strategies).
>
> City of Irvine Recommendation: VMT analysis will be performed for automobile trips only, which is consistent with State policy."

Similar language regarding excluding truck VMT from the evaluation of transportation impacts under CEQA has been incorporated into the Traffic Study Guidelines adopted by other cities, including San Marcos (July 1, 2020), Long Beach (June 2020), Clovis (July 1, 2020), San Diego (March 20, 2020), and San Mateo (July 16, 2020). In December 2020, Placer County adopted the County of Placer Transportation Study Guidelines. While the County of Placer Transportation Study Guidelines do not explicitly address the exclusion of heavy trucks for VMT analysis, County staff have indicated that Placer County concurs with the aforementioned methodology, and would not require a project-specific analysis of heavy truck VMT.

Overall, SB 743 and the associated CEQA Guidelines Section 15064.3 were established in order to reduce statewide GHG emissions, and do not require an analysis of VMT related to heavy truck use for the movement of goods. San Joaquin County has not yet adopted transportation analysis guidelines for heavy trucks, but other jurisdictions in the State have supported the exclusion of heavy truck trips from VMT analysis. As such, this EIR does not include heavy truck trips associated with operations of the proposed project in the VMT analysis. Importantly, non-transportation effects of heavy truck VMT are evaluated where appropriate in this EIR, such as air quality and GHG emissions.

The results of the travel demand model calculations for VMT associated with each of the proposed land use type are discussed in detail below.

Warehouse Uses

Table 4.12-6 displays the estimated HBW auto VMT per employee for the warehouse uses under baseline (Initial Development Phase and full Specific Plan Buildout) and cumulative conditions (full Specific Plan Buildout).

Table 4.12-6
Warehouse Auto VMT Generated

Scenario	Home-based Work Auto VMT Per Employee[1]	Number of Employees[2]	Home-based Work Auto VMT Generated by Employees[3]
Baseline Plus Initial Phase	59.1	2,401	141,899
Baseline Plus Specific Plan Buildout	46.5	14,953	695,315
Cumulative Project Buildout	43.3	14,953	647,465

1 Calculated using the 2016 and 2046 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and residence.
2 Number of employees based on assumption of 1,650 sq. ft. per employee. Buildout total includes 24,149,000 sq. ft. in the West, Central, and East districts, and 525,000 sq. ft. in the Gateway Center.
3 Calculated by multiplying average VMT per employee by number of employees. VMT shown is only associated with employee travel between the project and home.

Source: Fehr & Peers, 2025.

As shown in the table, under Baseline Plus Specific Plan Buildout conditions, approximately 46.5 VMT per employee would be generated. Because most employees do not leave the worksite during their shift, the VMT would amount to a pair of 23-mile one-way commutes between the job site and residence. The reasonableness of such value was checked by calculating the average commute distance for warehouse employees based on the employee residence data, as shown in Figure 4.12-5. The TIA determined that VMT per employee would decrease by approximately seven percent under cumulative buildout conditions due to the introduction of additional residential land uses in Tracy, which would result in shorter overall commute distances to the project site.

Office Uses

Table 4.12-7 includes the estimated HBW auto VMT per employee for the office component within the University Center under baseline and cumulative conditions. The SJCOG model has a different employment input for office versus industrial employees.

Table 4.12-7
Office Auto VMT Generated

Scenario	Home-based Work VMT Per Employee[1]	Number of Employees[2]	Home-based Work Auto VMT Generated by Employees[3]
Baseline Plus Specific Plan Buildout	66.8	372	24,850
Cumulative Project Buildout	62.1	372	23,101

1 Calculated using the 2016 and 2046 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and residence.
2 Number of employees based on assumption of 250 sq. ft. per employee (93,000 sq. ft/250 sq. ft per emp=372 employees).
3 Calculated by multiplying average VMT per employee by number of employees. VMT shown is only associated with employee travel between the project and home.

Source: Fehr & Peers, 2025.

The result of the different classification is greater VMT per office employee versus warehouse employee, which is aligned with academic research showing that all else being equal, trip lengths tend to increase as employee salary increases (i.e., greater willingness to drive further if higher salary offered). Similar to the warehouse VMT, TIA determined that VMT per employee would decrease by approximately seven percent under cumulative buildout conditions due to the introduction of additional residential land uses in Tracy, which would result in shorter overall commute distances to the project site.

University Campus

Neither the Technical Advisory on Evaluating Transportation Impacts in CEQA nor the San Joaquin County VMT Thresholds Study provide guidance on how to analyze VMT associated with a new university. Therefore, with the overall intent of SB 743 in mind, the significance of VMT generated by the proposed university was examined relative to the expected VMT characteristics of other universities in San Joaquin County and in consideration of the proposed university's land uses and location. Nonetheless, for disclosure purposes, Table 4.12-8 includes the total estimated auto VMT generated by the university.

Table 4.12-8
University Campus Auto VMT Generated

Scenario	Measure	External Daily Auto Trips[1]	Average Trip Length[2]	Total Auto VMT Generated[3]
Baseline Plus Initial Phase	VMT Generated by Autos	622	15.7	9,765
Baseline Plus Specific Plan Buildout		7,272	15.7	114,170
Cumulative Project Buildout		7,272	15.9	115,625

1 Calculated based on university (non-internalized) auto trip generation estimates within TIA.
2 Average trip length calculated from the base year and future year City of Tracy travel demand model.
3 VMT generated is the product of the non-internalized university auto trips and the average trip length.

Source: Fehr & Peers, 2025.

University Center Shopping Plaza

Table 4.12-9 includes the estimate for the total auto VMT generated by the University Center Shopping Plaza.

Table 4.12-9
University Center Shopping Plaza Auto VMT Generated

Scenario	Measure	External Daily Auto Trips[1]	Average Trip Length[2]	Total Auto VMT Generated[3]
Baseline Plus Specific Plan Buildout	VMT Generated by Autos	916	11.2	10,259
Cumulative Project Buildout		916	12.6	11,542

1 Calculated based on non-internalized, non-pass-by trips.
2 Average trip length calculated from the base year and future year City of Tracy travel demand model.
3 VMT generated is the product of the non-internalized, non-pass-by retail auto trips and the average trip length.

Source: Fehr & Peers, 2025.

Gateway Center Commercial Uses

Table 4.12-10 presents the estimate for the total auto VMT generated by the anticipated commercial uses in Gateway Center, including a potential convenience store/gas station, fast-food, sit-down, and fast casual restaurants, a bank, a business hotel, and an electric vehicle (EV) charging lot.

Veterans of Foreign Wars Facility

Table 4.12-11 presents the estimate for the total auto VMT generated by the VFW Facility.

Table 4.12-10
Gateway Center Commercial Uses Auto VMT Generated

Scenario	Measure	External Daily Auto Trips[1]	Average Trip Length[2]	Total Auto VMT Generated[3]	Diverted-Link Trips – Auto VMT Generated[4]
Baseline Plus Specific Plan Buildout	VMT Generated by Autos	5,798	11.2	64,938	10
Cumulative Project Buildout		5,798	12.6	73,055	10

1 Includes new auto trips generated by convenience store/gas station, fast-food, sit-down, and fast casual restaurants, bank, business hotel and EV charging lot. Auto trips associated with industrial are excluded here and instead shown in Table 19.
2 Average trip length calculated from the base year and future year City of Tracy travel demand model.
3 VMT generated is the product of the non-internalized, non-pass-by retail auto trips and the average trip length.
4 20 diverted-link auto trips that would come from SR 132, which would be approximately 0.5 mile in length, resulting in 10 added VMT.

Source: Fehr & Peers, 2025.

Table 4.12-11
VFW Facility Auto VMT Generated

Scenario	Measure	External Daily Auto Trips[1]	Average Trip Length[2]	Total Auto VMT Generated[3]
Baseline Plus VFW Facility[4]	VMT Generated by Autos	330	11.2	3,696
Cumulative Project Buildout		330	12.6	4,158

1 Calculated based on trip generation estimates within TIA.
2 Because model does not have a 'community center/VFW Building' land use category, average trip length assumed to be the same as for retail, which is a similar type of trip attractor.
3 VMT generated is the product of the non-internalized auto trips and the average trip length.
4 VMT result for the VFW Facility is the same whether part of the Initial Phase or Specific Plan Buildout.

Source: Fehr & Peers, 2025.

Project Vehicle Queuing

The TIA included an analysis of vehicle queuing for freeway off-ramps and State Highway System surface street intersections that could potentially be adversely affected by the proposed project. Traffic volumes, lane configurations, vehicle fleet mix, traffic controls, and many other inputs were entered into a Simtraffic microsimulation model, which then reported the 95th percentile queues for critical movements. The 95th percentile vehicle queue, which is often used for design purposes (along with the need for deceleration), represents the length of queued traffic for which a five percent or less chance exists that the actual queue would be greater. Because trucks represent a considerable portion of the vehicle fleet mix in the project vicinity, the proportion of trucks and their average lengths were entered into the model. According to the TIA, such methodology is consistent with procedures described in the Transportation Research Board 2022 HCM. Because

the queuing results are reported on State highway facilities, the precise (non-rounded) 95th percentile queue (in feet) is reported in accordance with Caltrans District 10 guidance.

The SimTraffic models were validated to existing conditions using performance metrics such as volume served and 95th percentile queue length (as measured during the traffic counts). Consistent with Caltrans District 10 requirements, SimTraffic analysis results are the average of 12 SimTraffic runs.

The following State Highway System intersections were selected for vehicle queuing analysis (based on expected usage by project trips):

- Ahern Road/SR 33/I-5 Southbound Ramps/Lehman Road – I-5 southbound off-ramp and SR 33 southbound left-turn
- Ahern Road/SR 33/I-5 Northbound Ramps/Lehman Road – SR 33 southbound left-turn
- South Chrisman Road/SR 132 Westbound Ramps – off-ramp
- South Chrisman Road/SR 132 Eastbound Ramps – off-ramp
- South Chrisman Road/I-580 Westbound Ramps – off-ramp
- Bird Road/SR 132 Eastbound Ramps – off-ramp
- Bird Road/SR 132 Westbound Ramps – off-ramp

Figure 4.12-9 shows the AM and PM peak hour traffic volumes, lane configurations, and traffic controls at the intersections on the State Highway System analyzed for vehicular queuing under Existing, Initial Phase, and Existing Plus Project Buildout Conditions.

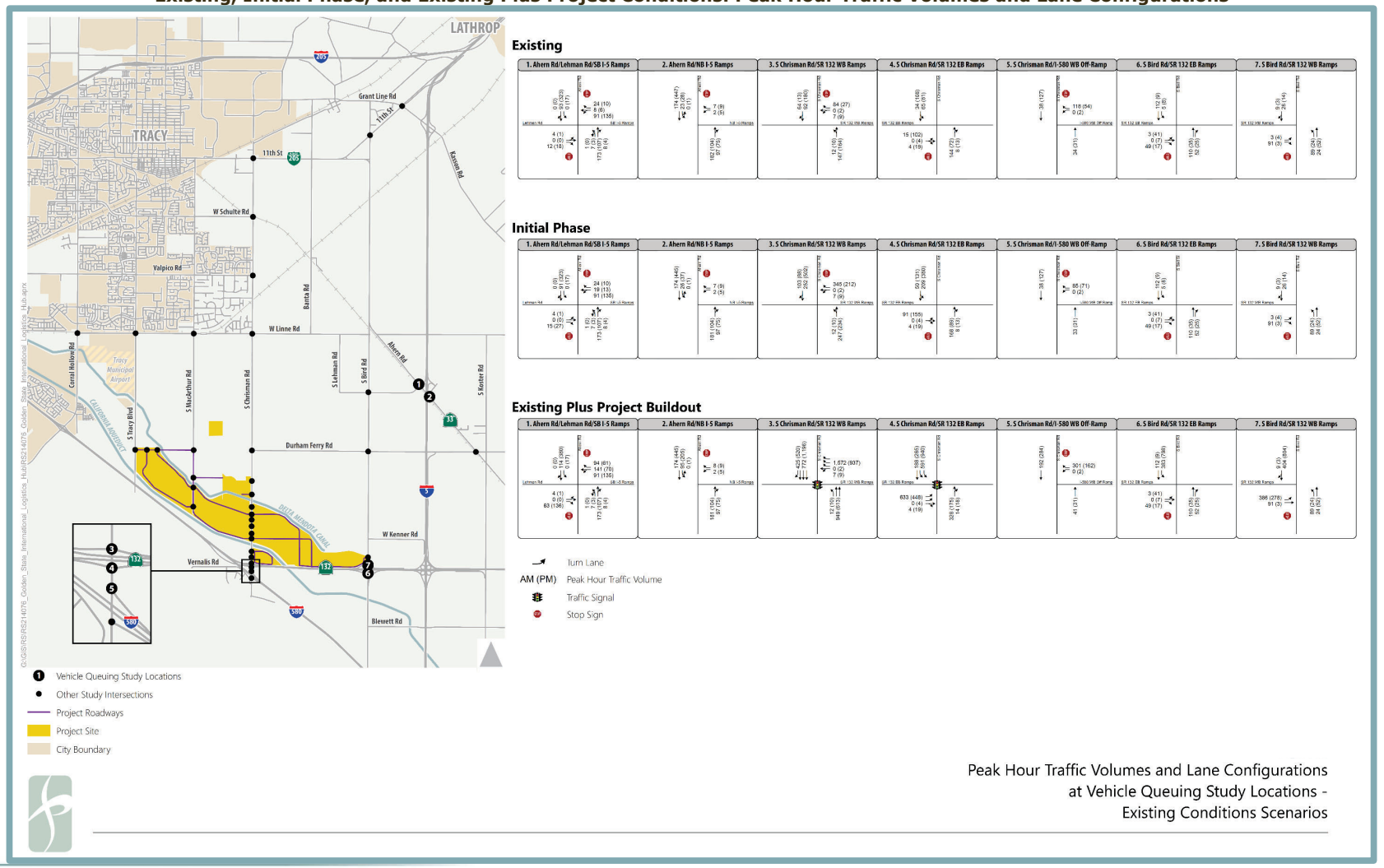
Cumulative Traffic Forecasts

The City of Tracy Refined travel demand model was used to develop estimates of cumulative background traffic forecasts on roadways in the project vicinity. According to the TIA, the model has more granularity than the more regional SJCOG model and is therefore better capable of developing forecasts at a neighborhood/community level. The City of Tracy Refined travel demand model projects a 33 percent increase in single-family residential units and 51 percent increase in multi-family residential units in the project vicinity between the base year (2019) and 2042 models. Non-residential growth is even greater at a 201 percent increase for retail employees, 48 percent increase for service employees, and 126 percent increase in other employees.

Most land use growth is expected to occur in the north and west parts of the City of Tracy. Minimal growth is forecast for the area east of South Chrisman Road between SR 132 and Eleventh Street. The aforementioned growth assumptions only represent the growth within the defined boundary. Additional development is also expected elsewhere in the City of Tracy and within its Sphere of Influence (SOI). The City's model extends westerly into Alameda County and easterly covering the cities of Stockton, Lathrop, and Manteca within San Joaquin County as well as various cities in Stanislaus County such as Modesto.

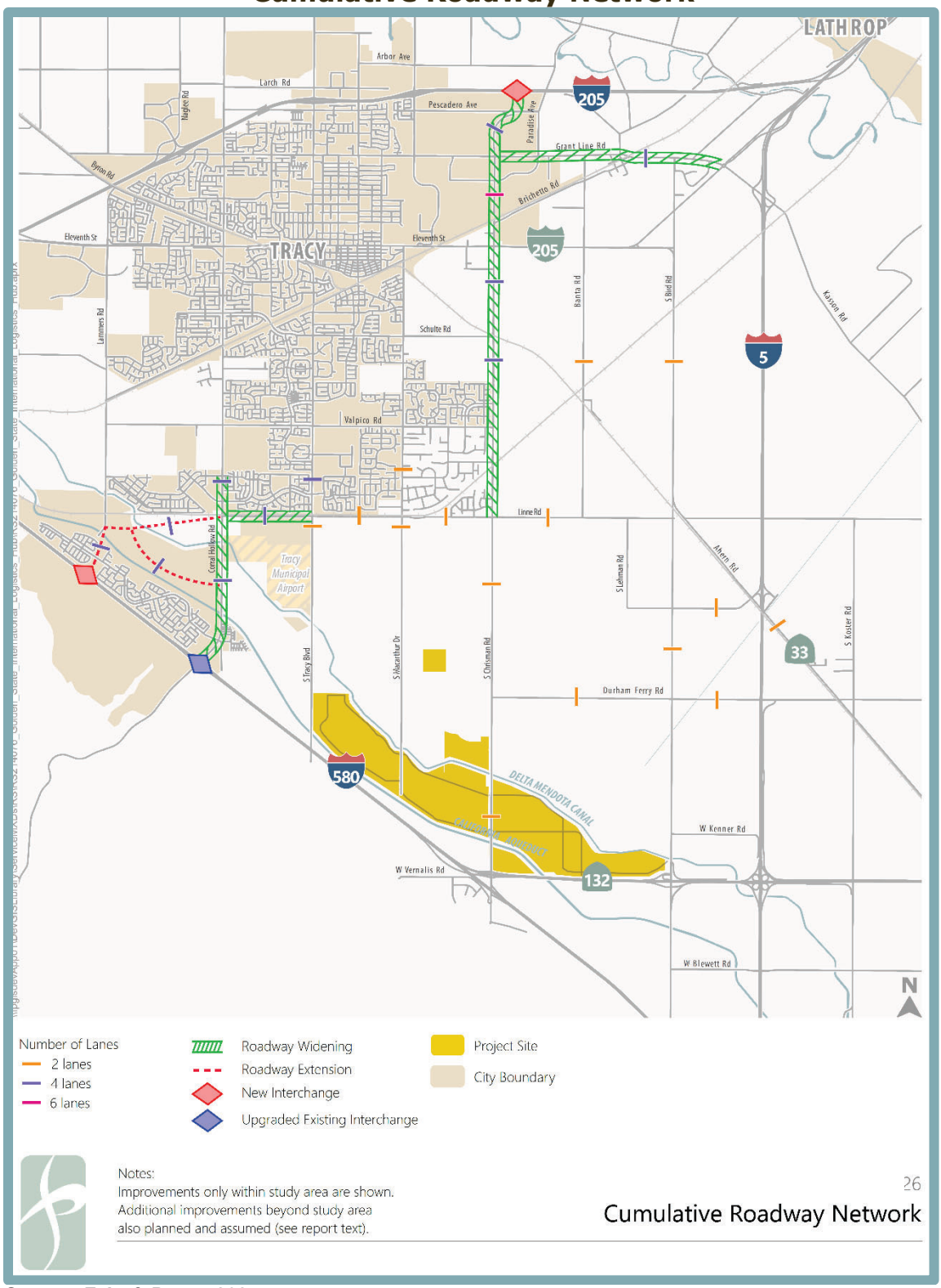
Figure 4.12-10 presents the planned cumulative roadway network improvements within the project vicinity, including several extended existing roadways, widened existing roadways, and new roadways that are planned for construction by 2042.

Figure 4.12-9
Existing, Initial Phase, and Existing Plus Project Conditions: Peak Hour Traffic Volumes and Lane Configurations



Peak Hour Traffic Volumes and Lane Configurations
at Vehicle Queuing Study Locations -
Existing Conditions Scenarios

Figure 4.12-10
Cumulative Roadway Network



Source: Fehr & Peers, 2025.

The following list of cumulative roadway improvements was derived from Appendix F (Project List) of the SJCOG Adopted 2022 RTP/SCS and the City of Tracy Citywide Roadway and Transportation Master Plan. The following cumulative roadway project list was reviewed and approved by San Joaquin County staff as part of preparation of the TIA:

- New I-205/ South Chrisman Road interchange;
- South Chrisman Road widening to four lanes between I-205 and Linne Road (with exception of segment between Eleventh Street and Grant Line Road, which would be six lanes);
- Grant Line Road widened to four lanes from South Chrisman Road to Eleventh Street;
- New I-580/Lammers Road interchange;
- Extension of Lammers Road southerly as four-lane road from current terminus to new interchange;
- Extension of Linne Road with four lanes from Corral Hollow Road to Lammers Road;
- Widening of Linne Road to four lanes from Corral Hollow Road to Tracy Boulevard;
- Upgrade of I-580/Corral Hollow Road interchange;
- Widening of Corral Hollow Road to four lanes from I-580 to north of Linne Road; and
- I-205 Managed Lanes project (one freeway lane added in each direction).

Cumulative Plus Project Average Daily Traffic

The project's travel characteristics under cumulative conditions are expected to be similar to the Existing Plus Specific Plan Buildout scenario. Figure 4.12-11 shows the ADT on the existing study roadways under Cumulative Plus Specific Plan Buildout conditions. Figure 4.12-12 shows the AM and PM peak hour traffic volumes, lane configurations, and traffic controls at the intersections on the State Highway System analyzed for vehicular queuing under Cumulative No Project and Cumulative Plus Project Buildout Conditions.

The following key findings are derived from Figure 4.12-11 and Figure 4.12-12:

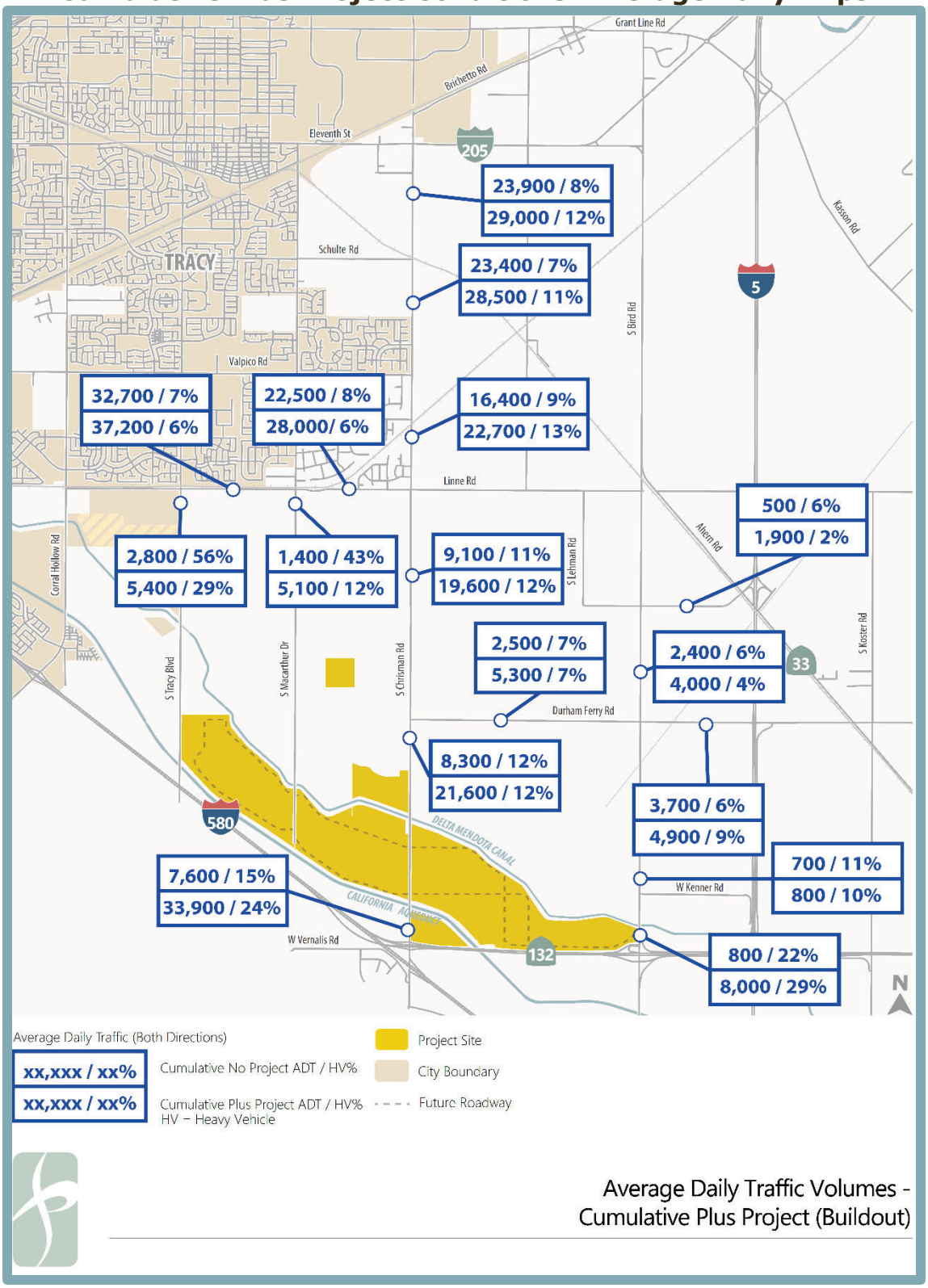
- Traffic volumes on South Chrisman Road between SR 132 and Eleventh Street would range from 20,000 to 34,000 ADT with higher volumes near the two end points, and lower volumes in the middle portion of the corridor.
- Durham Ferry Road east of South Chrisman Road would experience an increase in traffic from 2,500 (no project) to 5,300 (plus project) vehicles per day. Approximately 305 trucks per day (85 existing plus 220 project buildout trucks) are expected to use this segment.
- Traffic volumes on Bird Road north of SR 132 would carry 8,000 ADT with 29 percent of such trips being trucks.

Project-Specific Impacts and Mitigation Measures

The proposed project impacts on the transportation system are evaluated in this section based on the thresholds of significance and methodology described above. Each impact is followed by recommended mitigation to reduce the identified impacts, if needed.

In the case of traffic operations, specifically intersection and roadway LOS, such an analysis is not required pursuant to CEQA Guidelines Section 15064.3(a) because congestion and intersection operations no longer constitute a transportation impact under CEQA. San Joaquin County staff will separately review LOS for the project's consistency with General Plan policies.

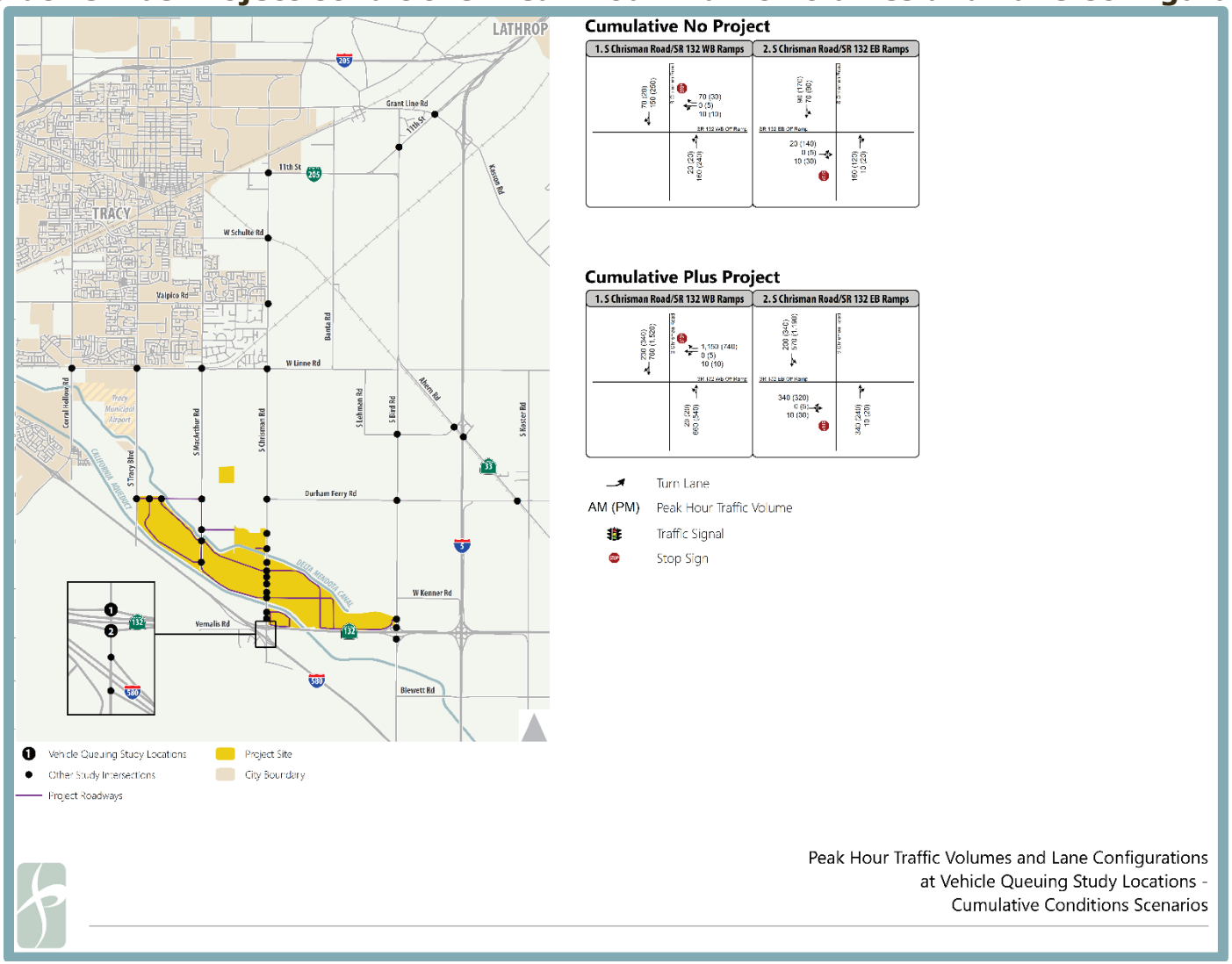
Figure 4.12-11
Cumulative Plus Project Conditions: Average Daily Trips



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

Figure 4.12-12
Cumulative Plus Project Conditions: Peak Hour Traffic Volumes and Lane Configurations



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

4.12-1 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase

Construction activities associated with the Initial Phase would include use of construction equipment, including vehicles delivering bulldozers and other heavy machinery, as well as building materials delivery, and construction worker commutes. The transport of heavy construction equipment to the site, haul truck trips, and construction worker commutes could affect the local roadway network.

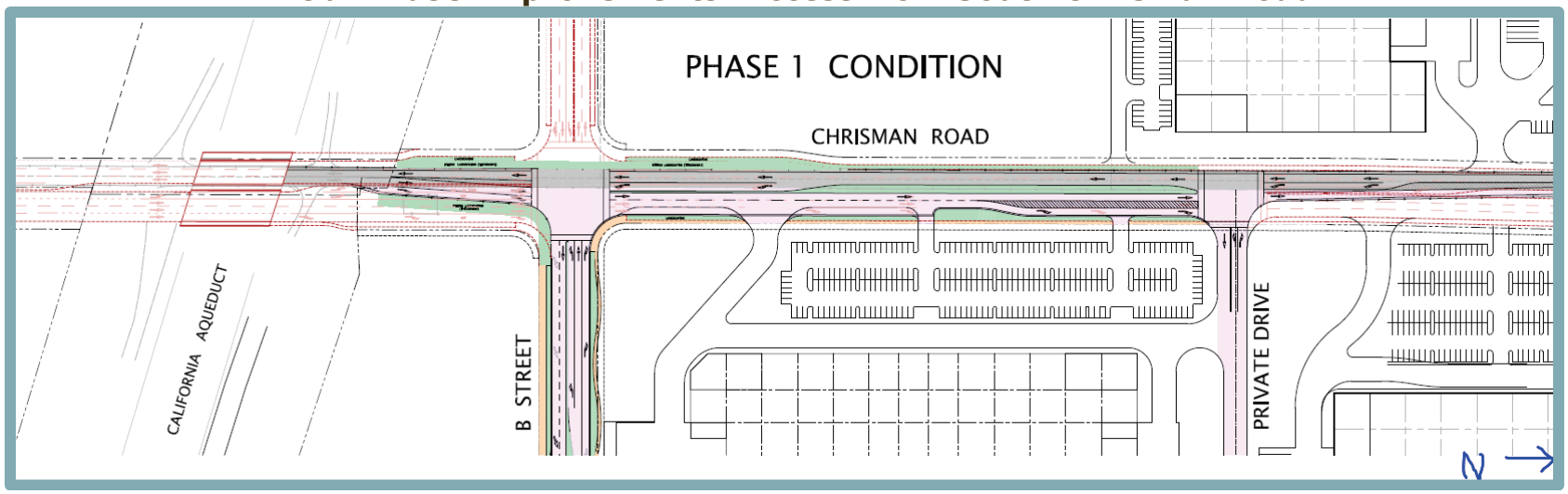
Construction workers typically arrive before the morning peak hour and leave before the evening peak hours of the traditional commute time periods. Deliveries of building material (lumber, concrete, asphalt, etc.) would also normally occur outside of the traditional commute time periods. In addition, any truck traffic to the site would follow designated truck routes, and project construction would likely stage any large vehicles (i.e., earth- moving equipment, cranes, etc.) on the site prior to beginning site work and remove such vehicles at project completion. However, detailed information related to the construction schedule during site development, or a construction management plan, is not available.

The Initial Phase of project development (i.e., partial buildout of Pacific Gateway East and University Center) would only require improvements at the six access points (two signalized accesses and four unsignalized accesses) along South Chrisman Road serving these uses. Figure 4.12-13 shows improvement drawings along South Chrisman Road at Pacific Gateway East. As shown therein, left- and right-turns lanes would be added to South Chrisman Road at the B Street and Private Industrial Driveway signalized intersections, requiring widening of South Chrisman Road. However, the widening would not require any modifications to the California Aqueduct bridge located just south of B Street. Additionally, construction of the access points would not likely require any sustained closures of South Chrisman Road. Temporary lane shifts, and manual traffic control during workdays, may be required.

Similar to the above-described situation for the California Aqueduct, development of the Initial Phase would not require the widening of South Chrisman Road nor bridge replacement over the Delta-Mendota Canal.

Based on the above, full road closures would not be required. However, construction activities could include minor disruptions to the transportation network near the project site.

Figure 4.12-13
Initial Phase Improvements: Access from South Chrisman Road



Source: Kier + Wright.

*Figure not OCR compatible.

Specific Plan Buildout

Similar to the Initial Phase, construction activities associated with Specific Plan Buildout would include use of construction equipment, including vehicles removing or delivering fill material, bulldozers, and other heavy machinery, as well as building materials delivery, and construction worker commutes. Detailed information related to the construction schedule during site development, or a construction management plan, is not available. Roadway improvements associated with Specific Plan Buildout would include bridge replacement on South Chrisman Road over the Delta-Mendota Canal and California Aqueduct, as well as the widening of a portion of MacArthur Drive to four lanes. Thus, Specific Plan Buildout could result in road closures that would require detours for all traffic.

Off-Site Improvements Study Area

While LOS is no longer a CEQA consideration, physical roadway improvements intended to address LOS conflicts caused by a project should be considered in an EIR. The LOS analysis conducted for the proposed project determined that the proposed project would result in LOS conflicts at several intersections within the region.

The physical improvements needed to resolve the LOS conflicts are evaluated in this EIR to provide environmental clearance should the improvements be implemented in the future. As some of the intersections and associated improvements are located within jurisdictions other than San Joaquin County, the ability to construct the improvements would require other agency approval (e.g., City of Tracy, Caltrans). In such instances of extraterritorial jurisdiction, the County cannot impose the improvements on the other jurisdictions, and as such, the list of off-site physical roadway improvements that would be constructed by the proposed project is not definitive at this time. Figures 3-14 and 3-15 in Chapter 3, Project Description, of this EIR illustrate the study areas associated with the intersection and roadway improvements and the specific study areas associated with South Chrisman Road.

The implementation of the foregoing improvements would directly influence the transportation network near the project site during construction, and could result in roadway or lane closures that adversely affect residents in the project area.

Conclusion

Without proper planning of construction activities, construction traffic could interfere with existing roadway operations during the construction phase, which could result in a risk to public safety. Therefore, project traffic related to construction activities could result in a ***significant*** impact.

Mitigation Measure(s)

Mitigation Measure 4.12-1 requires a construction specific traffic management and signage plan to be implemented to maintain access for all modes and users of the circulation system. By addressing and ameliorating potential project construction traffic interference, implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase, Specific Plan Buildout, Off-Site Improvements Study Area

4.12-1 *The Improvement Plans for each component of the proposed project shall include a striping and signing plan and shall include all on- and off-site traffic control devices. Prior to the commencement of construction within the County, a construction signing and traffic control plan shall be provided to the San Joaquin County Public Works Department for review and approval. For roadway improvement projects within the City of Tracy or Caltrans jurisdiction, the respective agency in whose jurisdiction the improvement project is located, shall have review and approval authority. The construction signing and traffic control plan shall include (but not be limited to) items such as:*

- *Guidance on the number and size of trucks per day entering and leaving the project site;*
- *Identification of arrival/departure times that would minimize traffic impacts;*
- *Approved truck circulation patterns only on designated truck routes (i.e., not on Durham Ferry Road);*
- *Locations of staging areas;*
- *Locations of employee parking and methods to encourage carpooling and use of alternative transportation;*
- *Methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);*
- *If feasible, stage the construction of bridge replacements over the California Aqueduct and Delta Mendota Canal such that a minimum of one travel lane remains open;*
- *Criteria for use of flaggers and other traffic controls;*
- *Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;*
- *Monitoring for roadbed damage and timing for completing repairs;*
- *Limitations on construction activity during peak/holiday weekends and special events;*
- *Preservation of emergency vehicle access;*
- *Removing traffic obstructions during emergency evacuation events; and*
- *Providing a point of contact for County residents and guests to obtain construction information, have questions answered, and convey complaints.*

4.12-2 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including roadway bicycle and pedestrian facilities, during operations. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the off-site improvements.

Initial Phase

Existing or planned bicycle and pedestrian facilities are not located in the immediate vicinity of the project site, and, therefore, the Initial Phase would not eliminate or adversely affect such facilities. The Initial Phase would include construction of frontage improvements along South Chrisman Road in the East Industrial Area and University Center to facilitate development. However, according to the TIA, dedicated bicycle facilities would not be provided to connect the site to the existing residential land uses north of Linne Road, which could serve potential residences for some Initial Phase employees, students, and staff. The Initial Phase industrial land uses would be located in the East District, east of South Chrisman Road, and further from the residential areas than anywhere else in the Specific Plan. As noted in the TIA, an employee residing in South Tracy would be required to ride at least four miles one-way on Linne Road and South Chrisman Road to reach the Initial Phase land uses, and, therefore, the majority of employees would not be anticipated to bike to work, even if a connection existed. Additionally, the Initial Phase would consist of approximately 14 percent of the project's total industrial employment and approximately eight percent of university students. In consideration of the above, the TIA concluded that the Initial Phase impacts related to conflicts with a program, plan, ordinance, or policy, addressing the circulation system, including roadway bicycle and pedestrian facilities, would be less than significant.

Specific Plan Buildout

As noted above, existing or planned bicycle and pedestrian facilities are not located in the immediate vicinity of the project site. Therefore, Specific Plan Buildout would not eliminate or adversely affect such facilities. At Specific Plan Buildout, approximately 1.33-mile of bicycle and pedestrian improvements would be constructed along one or both sides of the project frontage along South Chrisman Road (see Figure 4.12-14). However, dedicated bicycle facilities between the project site and residential areas to the north of Linne Road would not be included as part of the proposed project.

Given the number of employees and students that would be generated as part of the proposed project, and the lack of any planned bicycle facilities to connect the project site with residential areas to the north, as noted in the TIA, Specific Plan Buildout would potentially conflict with several San Joaquin County General Plan policies (TM-1.3, TM-1.6, TM-1.10, TM-2.5, and TM-2.7) pertaining to providing multimodal transportation options, reducing auto dependency, and eliminating gaps in the bikeway system. Thus, the TIA concluded that Specific Plan Buildout would result in a significant impact related to conflicting with a program, plan, ordinance, or policy, addressing the circulation system, including roadway bicycle and pedestrian facilities.

Figure 4.12-14
Proposed Bicycle and Pedestrian Facilities

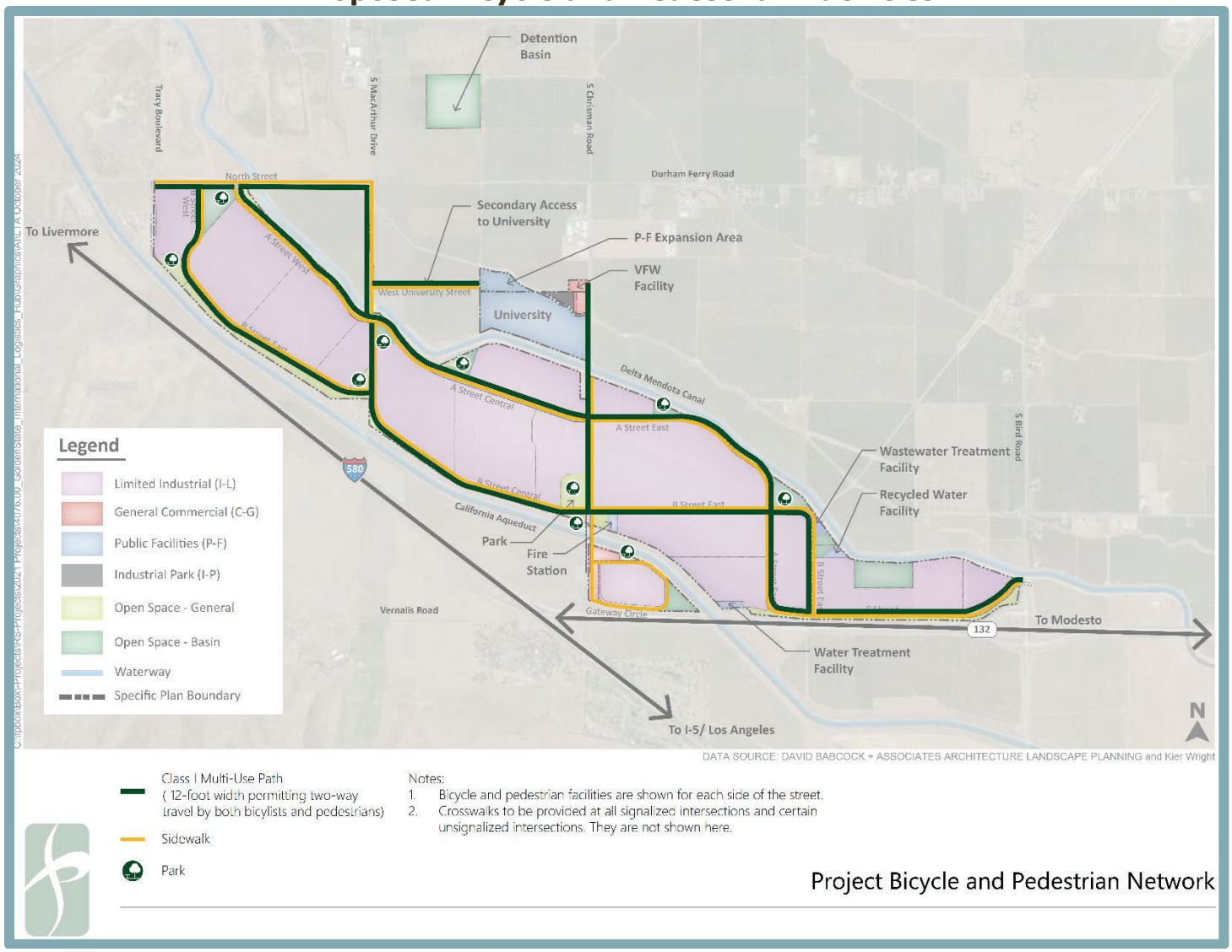


*Figure not OCR compatible.

Off-Site Improvements Study Area

As discussed above, Appendix A of the 2022 San Joaquin County Bicycle Master Plan Update includes a list of proposed bikeways, including the following in the vicinity of the project site:[10]

- Class II bicycle lane on South Chrisman Road from Eleventh Street to Linne Road.
- Class II bicycle lane on Linne Road from MacArthur Drive to South Chrisman Road.
- Class III bicycle route on South Chrisman Road from Linne Road to Durham Ferry Road.
- Class III bicycle route on Durham Ferry Road from South Chrisman Road to SR 33.
- Class IV separated bikeway on Linne Road from Corral Hollow Road to MacArthur Drive.

In addition, the 2020 RTP/SCS includes a planned Class III bike route on South Chrisman Road from Eleventh Street to the California Aqueduct, and a Class III bike route on Durham Ferry Road from South Chrisman Road to Kasson Road.

To the extent that the planned bicycle facilities overlap with off-site intersections and roadways that may be improved by the proposed project (e.g., Class III bicycle lane on South Chrisman Road from Linne Road to Durham Ferry Road), subject to obtaining other agency approval in some cases, the improvements would be designed to include the planned bicycle facilities. Thus, impacts related to conflicts with a program, plan, ordinance, or policy, addressing the circulation system, including roadway bicycle and pedestrian facilities, associated with the off-site improvements would be less than significant.

Conclusion

The proposed project would not eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage the use of such facilities. Additionally, the proposed project would not interfere with the implementation of any planned bikeways in the project vicinity. However, absent mitigation, full Specific Plan Buildout would cause an inconsistency with several San Joaquin County General Plan policies (TM-1.3, TM-1.6, TM-1.10, TM-2.5, and TM-2.7) pertaining to providing multimodal transportation options, reducing auto dependency, and eliminating gaps in the bikeway system.

Therefore, the proposed project could conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including roadway bicycle and pedestrian facilities, during operations, and a ***significant*** impact could occur.

Mitigation Measure(s)

The following mitigation measure would require the project applicant to construct a Class I off-street multi-use path or Class II on-street bike lane in each direction on MacArthur Drive for the two-mile distance between the project site and Linne

[10] San Joaquin County. *San Joaquin County Bicycle Master Plan Update*. November 2020.

Road, which would provide improved bicycle connectivity between the project site and existing uses to the north. The path or bike lane would also provide alternatives to driving for Tracy residents who work at the project site, consistent with General Plan policies TM-1.3 and TM-1.6. The following mitigation measure would be required subsequent to the Initial Phase. According to San Joaquin County Assessor Maps, the segment of MacArthur Drive to be improved has a minimum right-of-way (ROW) of 40 feet, which would be sufficient to provide a 12-foot travel lane and 6-foot bike lane in each direction, or to provide two 12-foot travel lanes and a 12-foot multi-use Class I path. The 12-foot multi-use Class I path, should it be the selected option, may be preferable on the west side of MacArthur Drive due to potential habitat disturbance that could occur on the east side.

Figure 4.12-15 below shows the location of the recommended bicycle lane improvement, as well as additional recommended project-specific physical off-site mitigation measures to address other project-related impacts discussed later in this chapter.

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

Initial Phase

None required.

Specific Plan Buildout

4.12-2 *Prior to the issuance of a building permit for the first building whose vehicle trips would use MacArthur Drive north of the Specific Plan area, the project applicant shall implement the following Transportation Demand Management (TDM) Strategy:*

- *Expand Bikeway Network – construct a Class I off-street multi-use path on the west side of MacArthur Drive or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance from the north edge of the project site to Linne Road.*

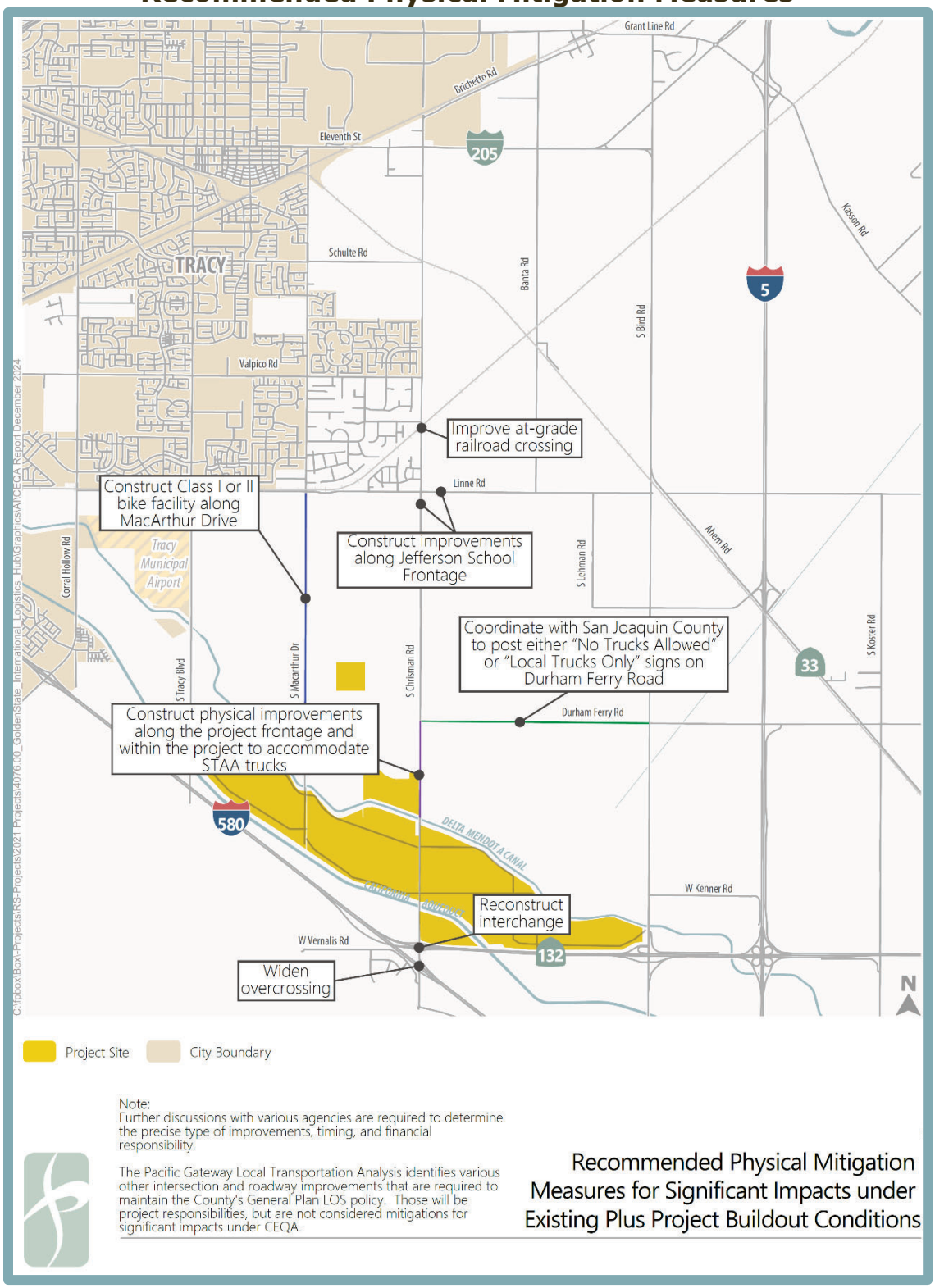
Off-Site Improvement Study Areas

None required.

4.12-3 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, during operations. Based on the analysis below and even with implementation of mitigation, the impact would remain *significant and unavoidable*.

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the Off-Site Improvements Study Area.

Figure 4.12-15
Recommended Physical Mitigation Measures



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

Initial Phase, Specific Plan Buildout

The proposed project would not eliminate or adversely affect existing transit access, as service is not currently provided in the immediate project vicinity. Additionally, the proposed project would not interfere with the implementation of any planned transit facilities in the project vicinity. However, the lack of any existing or planned fixed-route bus service to the area would lead to an unmet demand for transit service. According to the TIA prepared for the proposed project, approximately 170 warehouse employees are estimated to use the ACE train to travel between the site, Lathrop/Manteca, and Stockton. Usage of the RTD fixed-route bus is unknown as usage depends on routing, frequency, etc. Because the proposed project would not include the provision of any new transit facilities, which would lead to an unmet demand for transit service from future employees, the proposed project, without mitigation, would cause an inconsistency with several San Joaquin County General Plan policies (TM-1.3, TM-1.6, TM-1.11, TM-1.12, TM-2.3) pertaining to promoting the use of public transit, encouraging multi-modal transportation, providing alternative choices to single occupant driving, and supporting existing and future sustainable land use patterns.

Off-Site Improvements Study Area

The off-site roadway improvements would not include features that would cause additional demand for transit facilities. The proposed off-site roadway improvements would be constructed in accordance with the San Joaquin County Roadway Design Standards, or if located in another jurisdiction, the applicable standards would govern. Agency review and approval of each off-site roadway project would ensure such improvements would not interfere with the implementation of any existing or planned transit facilities in the project vicinity. Therefore, operations of the roadway improvements would not conflict with a program, plan, ordinance, or policy addressing transit facilities, and a less-than-significant impact would occur.

Conclusion

Based on the above, the proposed project could conflict with adopted policies, plans, or programs supporting transit facilities. Thus, the project could result in a ***significant*** impact to transit facilities.

Mitigation Measure(s)

Implementation of Mitigation Measure 4.12-3 would reduce significant impacts associated with transit facilities by extending the San Joaquin RTD fixed-route bus service to the project site and operating a private shuttle that circulates within the project site and off-site to the ACE Station in the City of Tracy. However, elements of Mitigation Measure 4.12-3 would be subject to final approval and action by San Joaquin RTD. Given that the required measures are not guaranteed to be approved by San Joaquin RTD and are outside of the County's jurisdiction, the County, as lead agency, cannot legally impose the mitigation measures. Therefore, implementation of Mitigation Measure 4.12-3 cannot be guaranteed.

Due to uncertainties regarding the ability for the aforementioned mitigation measure to reduce impacts to transit facilities, the project's transit facility and service impact is conservatively considered to remain *significant and unavoidable*.

Initial Phase, Specific Plan Buildout

4.12-3 Prior to the occupancy of the first building within the first phase of development, the project applicant shall implement Transportation Demand Management (TDM) Strategies 3 and 4 from Mitigation Measure 4.12-4(b), as follows:

- *Strategy 3: Extend Public Transit Service to Project Site – expand San Joaquin RTD fixed-route bus service to the project site.*
- *Strategy 4: Operate a private employee shuttle system during peak periods that circulates within the site and off-site to the Altamont Commuter Express (ACE) Station located on Tracy Boulevard at Linne Road.*

Off-Site Improvement Study Area

None required.

4.12-4 Result in VMT which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3, subdivision (b). Based on the analysis below, even with implementation of mitigation, the impact is ***significant and unavoidable*.**

The following discussions include an analysis of potential impacts associated with development of the Initial Phase and Specific Plan Buildout, as well as an analysis of potential impacts associated with the Off-Site Improvement Study Area.

Initial Phase

The Initial Phase of the proposed project would generally include development of approximately four million sf of industrial uses, a portion of the University Campus, and the VFW Facility. VMT associated with each of those uses was analyzed as part of the TIA and is discussed below.

Industrial Uses

With regard to the significance criterion related to VMT per employee for industrial land uses, it is noted that the methodology treats all employees the same. But in reality, different outcomes should be expected when considering VMT per office versus warehouse employee. Placing office space near residential or other sensitive receptors (e.g., schools, parks, etc.) does not cause the same type of nuisance or potential environmental harm as placing warehouse/industrial uses in the same location. To avoid such adverse effects, responsible planning dictates that the warehouse space be situated a sufficient distance away from those uses to avoid or minimize the effects. The SJVAPCD NOP comment letter reiterates this. However, this has the effect of increasing the distance between the warehouse location and most employee residences. Unless a robust multi-modal transportation system is available to provide alternatives to driving, average VMT per warehouse employee will normally be greater than average VMT per office employee.

The above concept is described in the 2022 California Department of Justice Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act Report, albeit in a slightly different form by stating, "Proactive planning can take many forms. Land use designation and zoning decisions should channel development into appropriate areas. For example, establishing industrial districts near major highway and rail corridors but away from sensitive receptors can help attract investment while avoiding conflicts between warehouse facilities and residential communities."

Notwithstanding the above, the unincorporated countywide average VMT per employee is 38.6 under baseline conditions. The significance threshold is 85 percent of that value, or 32.8 VMT per employee. As shown in Table 4.12-12, the warehouse uses constructed as part of the Initial Development Phase would have a VMT per employee that is 80 percent above the significance threshold. Accordingly, the warehouse component of the Initial Development Phase could result in a significant impact related to employee VMT.

University Campus

According to the TIA, a table similar to Table 4.12-12 cannot be prepared for the University uses because a quantitative VMT threshold for universities has not been established by San Joaquin County. In the Initial Phase, the university would not include student housing; therefore, the considerable travel distance between the university and likely off-site student and staff residence locations suggests that the university would not be considered a "VMT efficient" land use. By comparison, University of Pacific, a private, four-year university located in the central part of the City of Stockton, has student dormitories, and is well-served by transit.

Table 4.12-12
Comparison of Warehouse and Office Baseline Auto VMT per Employee Against Significance Threshold: Initial Phase

Scenario	Measure	Home-based Work Auto VMT per Employee[1]
		Warehouse Uses
Unincorporated County Average - Baseline	VMT Generated by Autos	38.6
85 percent of Countywide Average - Baseline		32.8
Initial Development Phase		59.1

[1] Calculated using the 2016 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and residence.

Source: Fehr & Peers, 2025.

Part of the intent of SB 743 relates to the placement of land uses in VMT-efficient areas, accomplished by comparing proposed projects against similar land uses to determine whether the project would be located in more or less VMT-efficient locations. The proposed University would be much less transportation efficient than the University of Pacific in San Joaquin County. Thus, the TIA concluded that

the VMT impact associated with the Initial Phase development of the University Campus could be significant.

Veterans of Foreign Wars Facility

With respect to VMT associated with the proposed VFW Facility, according to the TIA, the land use is considered a local-serving use because the facility would be a resource to the surrounding community. Thus, the TIA concluded that further VMT analysis of the VFW Facility is not required, as the VMT impact would be less than significant.

Specific Plan Buildout

Specific Plan Buildout would include development of industrial and office uses, full construction of the University Center, and retail uses. VMT associated with each of those uses was analyzed as part of the TIA and is discussed below.

Warehouse and Office Uses

As shown in Table 4.12-13, the warehouse and office uses constructed as part of full Specific Plan Buildout would result in VMT per employee averages of 42 percent and 104 percent, respectively, above the significance threshold. Accordingly, the TIA concluded that the warehouse and office components of Specific Plan Buildout could result in a significant impact related to employee VMT.

Table 4.12-13
Comparison of Warehouse and Office Baseline Auto VMT per Employee Against Significance Threshold

Scenario	Measure	Home-based Work Auto VMT per Employee[1]	
		Warehouse Uses	Office Uses
Unincorporated County Average - Baseline	VMT Generated by Autos	38.6	
85 percent of Countywide Average - Baseline		32.8	
Specific Plan Buildout		46.5	66.8

[1] Calculated using the 2016 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and residence.

Source: Fehr & Peers, 2025.

University Center

Specific Plan Buildout would include full construction of the University Center, which, as discussed above, would not be VMT-efficient land use. Therefore, the TIA concluded that full buildout of the University Center would result in a significant impact related to VMT.

Retail Uses

The County of San Joaquin VMT Thresholds Study recommends the following with respect to retail uses: “Retail projects less than 50,000 square feet shall be presumed to have less than significant VMT effects if they are deemed locally

serving. If the County determines the market geography of a retail project is in question an analysis should be conducted to verify the project does not generate regional trips." According to the TIA, the following land use components are considered local-serving for the following reasons:

- University Center (39,000 square foot shopping plaza): The shopping plaza is considered local-serving given its small size and immediate proximity to the university.
- Gateway Center (20,000 square feet of convenience store and restaurants associated with vehicle fueling, 20,000 square feet of restaurant, bank, and retail service, 10,000 square feet of fast-food restaurants, 60,000-square foot hotel, and Electrified Truck and Auto Charging Lots): The aforementioned uses would be located immediately adjacent to or along the main commute route to the proposed project's job center (i.e., West, Central, and East Industrial Areas). In total, the proposed project is anticipated to include 14,953 warehouse employees, 372 office employees, and 5,000 university students (plus staff). Such ancillary uses are intended to support the project's job and student population and would help reduce VMT by shortening trips for essential goods and services. The proposed gas station and electrified truck and auto charging lots would serve a similar purpose given the amount of auto and truck traffic expected on the adjacent segment of South Chrisman Road under full Specific Plan Buildout. In addition, the Gateway Center uses would be located in close proximity to SR 132 and I-580, thereby allowing short detours off each freeway for refueling/recharging. Therefore, the gas station and charging uses are 'local-serving' to the freeways.

In summary, the retail, restaurant, gas station, hotel, and electrified truck and auto charging lots associated with full Specific Plan Buildout are considered local-serving. Thus, the TIA concluded that further VMT analysis of such uses is not required, as VMT impacts would be less than significant.

Off-Site Improvements Study Area

The proposed project would construct new roadways and widen existing roadways. These capacity expansions could induce more VMT due to changes in background travel demand, route choice, and other factors.

The new roadways constructed by the project would accommodate primarily project trips only. The 1.3-mile widening of South Chrisman Road from two to four lanes from SR 132 to the north project boundary and the widening of a portion of MacArthur Drive within and proximate to the project site to four lanes were added to the base year City of Tracy Refined travel demand model. The model was then run and the total VMT within the model area was compared without and with the improvements. The base year model has network-wide (i.e., all travel on all streets/highways/freeways in the model extents on a daily basis) approximately 79 million VMT. The model was not sensitive to the change in capacity along the aforementioned roadways, and VMT did not change under the base year model. Therefore, the TIA concluded that the roadway improvements would not result in

VMT which exceeds an applicable threshold of significance, and a less-than-significant impact would occur.

Conclusion

Based on the above, the warehouse and office components of the proposed project would generate home-based work VMT per employee above the unincorporated County baseline average. Therefore, the proposed project could result in impacts regarding VMT associated with work-related land uses. In addition, the university component of the proposed project would not be considered a VMT-efficient land use. As such, a ***significant*** impact related to VMT could occur during both the Initial Development Phase and full Specific Plan Buildout.

Mitigation Measure(s)

Compliance with Mitigation Measure 4.12-4(a) would reduce project-generated VMT per employee by requiring the project applicant to comply with SJVAPCD Rule 9410, which requires major employers in the region to implement an eTRIP. Two types of worksites are identified: Tier 1 worksites consist of 100 to 249 eligible employees, while Tier 2 worksites have at least 250 eligible employees (who worked at least 16 consecutive weeks during the previous fiscal year). Eligible employees are any employees excluding the following: emergency health and safety employees, employment agency personnel, farm workers; field personnel, field construction workers, home garage employees, on-call employees, part-time employees, seasonal employees, volunteers, and employees who do not report to work during the peak period, which is defined as 6:00 AM to 10:00 AM. The number of eligible employees that work for a major employer would determine whether that employer falls into a Tier 1 or 2 worksite.

Table 1 of Rule 9410 indicates that Tier 1 and 2 worksites shall implement an eTRIP that achieves at least 44 and 66 points, respectively, based on selecting various TDM strategies, which fall into the following four groups: Marketing Strategies; Program Support Strategies; Service and Facilities Strategies; and Transportation, Alternative Schedule, and Incentives Strategies. Table 2 of Rule 9410 contains 59 different strategies that could be considered to reduce vehicle trips. Strategies are applicable only to eligible employees. The total number of individual warehouse tenants for the proposed project that would qualify as a Tier 1 or 2 worksite is currently unknown due to uncertainties around start time, shift hours, and the amount of square feet per employee. Currently, identifying which specific strategies that future tenants of individual buildings would select is not possible, and, therefore, quantifying the VMT savings achieved by the strategies that would be selected is not possible.

Compliance with Mitigation Measure 4.12-4(b) would reduce project-generated VMT per employee by requiring the applicant to institute a TDM program to reduce external vehicle trips generated by the proposed project. Most of the above strategies are ongoing measures that would begin in Initial Phase and continue through project Buildout. The exception is Strategy #2 (Expand Bikeway Network), which would be a one-time physical improvement triggered by the first subsequent development phase beyond the Initial Phase. Most of the TDM strategies included

in Mitigation Measure 4.12-4(b) are included in the California Air Pollution Control Officer's Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (GHG Reduction Handbook). In addition to listing a variety of TDM strategies, the CAPCOA GHG Reduction Handbook presents the maximum effectiveness that a given strategy or set of strategies can have. However, that effectiveness can vary considerably depending on geographic context (urban, suburban, versus rural), tenant type, and availability of non-auto modes). The following discussion summarizes each of the five TDM strategies required by Mitigation Measure 4.12-4(b).

Voluntary Commute Trip Reduction (CTR) Program

The CAPCOA GHG Reduction Handbook suggests that the voluntary Commute Trip Reduction (CTR) program could achieve up to a four percent reduction in employee-generated VMT. However, given the project's location and type of employment uses, less than a four percent reduction is to be expected. For analysis purposes, a two percent reduction was assumed in the TIA based primarily on the program achieving an increase in carpooling and usage of the vanpool program.

Employee Parking Cash-Out Program

The CAPCOA GHG Reduction Handbook suggests that an employee parking cash-out program could achieve up to a 12 percent reduction in VMT. The program would only be effective if combined with the other strategies that improve project access by biking and transit. Furthermore, a clear overlap occurs when considering how this program would overlap with transit. For analysis purposes, a three percent reduction was assumed in the TIA based on the premise that other modes of travel are also upgraded to become viable.

Expand Bikeway Network

The CAPCOA GHG Reduction Handbook suggests that expanding the bike network could achieve up to a modest 0.5 percent reduction in VMT. The generic VMT reduction value does not consider any of the project-specific conditions, such as a large workforce a relatively short distance from the project and typical warehouse worker wages, which may encourage greater usage of active transportation modes. According to the TIA prepared for the proposed project, approximately 26 percent of warehouse employees are estimated to reside in the City of Tracy. About 2.5 percent of Tracy residents commute to work by walking or bicycle. For analysis purposes, two percent of City of Tracy residents who work at the project site are assumed to commute to the project site by bicycling as a result of this dedicated bicycle facility. Each one-way bicycle commute was assumed to be five miles in length for analysis purposes within the TIA. Assuming each bicycle commute trip averages five miles, the VMT reduction was determined to be 778 for Specific Plan Buildout. When reported as an overall decrease in VMT per employee, such VMT reduction totals represent approximately a 0.01 percent decrease. The small decrease is due to the measure not applying to three-quarters of employees and only saving 10 VMT for a small subset of employees to which the measure would apply.

Extend Public Transit Service to Project Site

The CAPCOA GHG Reduction Handbook suggests that providing transit service to the project site could achieve up to a 4.6 percent reduction in VMT. However, what routes would be operated, service duration, headways, etc. are unknown. For a conservative analysis, a two percent bus public mode split was assumed within the TIA based on at least 30-minute headways during peak commute periods.

Private Employee Shuttle System

If operated in combination with discounted transit passes to financially incentivize its use, a private employee shuttle system offers considerable VMT savings opportunities. According to the TIA prepared for the proposed project, 38 percent of project employees would reside in Stockton, Lathrop, and Manteca. However, given ACE train schedules, only a small subset of employees residing in the three cities that work at the project site would be able to take advantage of the subsidized ACE train ride and private shuttle service package. Based on automobile-only (i.e., employee travel) traffic data collected at various warehouses, 15 percent of all auto trips entered the selected warehouse driveways during a time period where a substitute westbound ACE train ride (followed by a short shuttle ride to the warehouse) would allow for on-time arrival for their shift. Furthermore, not all employees whose shift times align with train schedules would choose to take advantage of the service. For analysis purposes, the TIA assumed that one in five (20 percent) of employees eligible to use the service would choose to do so. Such rate of employees using the service would translate into a VMT reduction of 972 for the Initial Phase and 6,056 for Specific Plan Buildout. Although the program appears to be an effective means to transport employees to/from work without relying on auto VMT for the majority of the trip, the program would only apply to an estimated six percent of all employees (given residence location and work start/end scheduling). Assuming 20 percent of the eligible employees choose to use the program, about 190 of the 16,792 warehouse employees would use the program. When reported as an overall decrease in VMT per employee, the program achieves a 0.7 percent reduction for the Initial Phase and a 0.9 percent reduction for Specific Plan Buildout.

Table 4.12-14 displays the expected effectiveness of the TDM strategies included in Mitigation Measure 4.12-4(b) at reducing the VMT per employee of warehouse employees. While the net effect of the measures would be an eight percent reduction in VMT, the resulting VMT per employee estimates would remain well above the significance threshold for determination of a VMT impact.

While the TDM strategies included as part of compliance with SJVAPCD Rule 9410 (Mitigation Measure 4.12-4[a]) would also provide some VMT savings, the savings that would be achieved are unknown given the uncertainty of what strategies would be selected and to how many employers that program would apply.

According to the TIA, a similar table could not be prepared for the office employees because details of their likely residence locations, work shifts, etc. are currently unknown. However, the same general conclusion is drawn for office employee VMT as warehouse employee VMT, which is that the identified mitigation measures would not reduce VMT to below the identified threshold.

With respect to the VMT reduction measures associated with the University component of the proposed project, compliance with SJVAPCD Rule 9410 would also be applicable to the University. In addition, TDM Strategies 1, 4, and 5 consist of a voluntary CTR program, extending public transit service to the project, and providing a private employee shuttle system. Such strategies are also applicable to university students and staff. Consistent with guidance from the CAPCOA GHG Reduction Handbook, Mitigation Measure 4.12-4(e) has a choice of two options (i.e., employee parking cash-out or paid parking). Both options should not be pursued simultaneously as it would represent application of the same concept twice. To estimate the VMT savings associated with the above measures would be speculative, as where university students and staff would likely live and how they would react to parking pricing is unknown. Additionally, the proportion of the University's VMT that is attributable to students versus staff is currently unknown.

Table 4.12-14
Mitigation Measure Effectiveness at Reducing Warehouse Auto VMT Generated for Existing Conditions

TDM Strategies	Percent Auto VMT Reduced per Employee[1]	
	Initial Phase[2]	Specific Plan Buildout
Voluntary Commute Trip Reduction (CTR) Program	2 percent	2 percent
Employee Parking Cash-Out Program	3 percent	3 percent
Expand Bikeway Network	N/A	0.01 percent
Extend Public Transit Service to Project Site	2 percent	2 percent
Private Employee Shuttle System	0.7 percent	0.9 percent
Total	**7.7 percent**	**7.9 percent**
Mitigation Measures (TDM Strategies) Overall Effectiveness	**Home-Based Work Auto VMT per Employee**	
	Initial Phase	**Specific Plan Buildout**
Without Mitigation Measures	59.1	46.5
With Mitigation Measures	54.5	42.8
Significance Threshold	32.8	32.8
VMT Reduced to Threshold?	No	No

1 See above discussion and calculations of TDM strategy effectiveness.
2 The Initial Phase would have identical TDM strategies as Project Buildout with the exception of excluding the expanded bike network.

Source: Fehr & Peers, 2025.

Based on the above, due to uncertainties regarding the ability for mitigation to reduce VMT to a less-than-significant level, VMT impacts would be considered *significant and unavoidable.*

Warehouse and Office Uses (Initial Phase, Specific Plan Buildout)

4.12-4(a) Prior to issuance of first certificate of occupancy for each phase of development, the project applicant shall comply with San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 9410 (Employer Based Trip Reduction), which requires major employers to implement an Employee Trip Reduction Plan (eTRIP). Employers must complete and submit an Employer Registration form to the Air Pollution Control Officer (APCO) of the SJVAPCD within 180 days of becoming subject to the trip reduction requirements of Rule 9410. According to Rule 9410, eTRIP strategies are phased in over a period of three years. An employer may submit a single eTRIP that covers multiple worksites when those worksites are using the same eTRIP measures. If worksites are using differing eTRIP measures, then each worksite shall have its own eTRIP.

In compliance with Rule 9410 requirements, employers shall collect information on the modes of transportation used for each employee's commute each day of the Commute Verification Period, which is a period of at least one week (selected by the employer) that is representative of typical work week conditions. The employer shall submit its sampling methodology to the District 120 days prior to the start of the calendar year in which the employer intends to use the method. The APCO shall notify employers of its approval or disapproval of this method within 60 days of receipt.

By March 31st of each year, the employer shall submit a report to the APCO containing the results of the Commute Verification for the previous calendar year (including number of forms distributed, the number completed and returned, total number of trips to and from work, and the total number of each commute mode for the employees during the Commute Verification period).

4.12-4(b) Prior to occupancy of the first building of each development phase, the project applicant shall implement the following transportation demand management (TDM) strategies, some of which may overlap with strategies selected under Rule 9410, in accordance with Mitigation Measure 4.12-4(a).

1. *Implement a Voluntary Commute Trip Reduction (CTR) program. Required elements of the program include:*
    - *Commute Trip Reduction Marketing – implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program).*
    - *Ridesharing Program – implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers.*

- *Subsidized or Discounted Transit Program - provides subsidized or discounted, or free transit passes for employees.*
- *End-of-Trip Bicycle Facilities – installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use.*
- *Employer-Sponsored Vanpool – implements an employer-sponsored vanpool service for employee groups of five to 15 people.*

2. *Implement Employee Parking Cash-Out program – requires project employers to offer employees the choice of foregoing their current subsidized/free parking for a cash payment (in exchange for not driving).*
3. *Extend Public Transit Service to Project Site – expand San Joaquin RTD fixed-route bus service to the project site.*
4. *Operate a private employee shuttle system during peak periods that circulates within the site and off-site to the Altamont Commuter Express (ACE) Station located on Tracy Boulevard at Linne Road.*

Proof of compliance shall be submitted to the County Community Development Department and Public Works Department for review and approval.

4.12-4(c) Implement Mitigation Measure 4.12-2.

<u>University Component (Initial Phase, Specific Plan Buildout)</u>

4.12-4(d) Implement Mitigation Measure 4.12-4(a).

4.12-4(e) Implement TDM Strategies 1, 3, and 4 from Mitigation Measure 4.12-4(b).

4.12-4(f) Prior to occupancy of the first University building, the project applicant shall either implement TDM Strategy 2 from Mitigation Measure 4.12-4(b), or charge staff and students a fee to park.

4.12-5 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Based on the analysis below and even with implementation of mitigation, the impact would remain *significant and unavoidable*.

The following discussion addresses potential hazards associated with the proposed project related to freeway off-ramp and highway intersection vehicle queues, geometric design features, an incompatible fleet mix, incompatible land uses, and vehicle conflicts with trains. Because the prospective off-site roadway improvements would be constructed in accordance with the San Joaquin County

Roadway Design Standards, or if located in another jurisdiction, the applicable standards of the appropriate agency, and would not result in additional traffic in the project area, such roadway improvements would not increase hazards to vehicle safety, and, therefore, are not discussed below.

Freeway Off-Ramp and State Highway Intersection Vehicle Queues

The following discussions include separate analyses of potential impacts related to vehicle queues associated with development of the Initial Phase and Specific Plan Buildout.

Initial Phase

Table 4.12-15 below displays the AM and PM peak hour 95th percentile queues at queuing study locations on the State Highway System under Existing Plus Initial Phase conditions.

As shown in Table 4.12-15, Initial Phase trips would not cause any vehicle queues to spill back onto the freeway mainline at a study highway intersection. The Initial Phase of the proposed project would not cause the 95th percentile queue for such movement to increase. Therefore, the Initial Phase would not cause adverse queuing conditions, and increased hazards due to increased vehicle queues would not occur.

Specific Plan Buildout

Table 4.12-16 below shows the AM and PM peak hour 95th percentile queues at queuing study locations located on the State Highway System under Existing Plus Specific Plan Buildout conditions. As shown in Table 4.12-16, five of the seven locations would experience queuing that exceeds the available storage. The 95th percentile queues would spill back onto the freeway mainline at both off-ramps at the SR 132/ South Chrisman Road interchange. The queues would cause queuing on South Chrisman Road, which would cause the queue on the I-580 westbound off-ramp left-turn/through lane to also spill back to the mainline.

Figure 4.12-16 presents the Simtraffic microsimulation modeling results that illustrate how traffic operations would be impacted at the SR 132/South Chrisman Road interchange under Specific Plan Buildout conditions if improvements were not made. As shown therein, extensive queuing would occur on the eastbound off-ramp, westbound off-ramp, and southbound approaches. Therefore, Specific Plan Buildout would cause adverse queuing conditions, and the TIA concluded that impacts related to increased hazards due to increased vehicle queues would be significant.

Geometric Design Features

The following discussion includes an analysis of potential impacts related to geometric design features associated with development of the Initial Phase and Specific Plan Buildout.

Table 4.12-15
95th Percentile Vehicle Queues – Existing Plus Initial Phase Conditions

Intersection	Movement	Available Storage[1]	Existing Conditions		Existing Plus Initial Phase Conditions		95th Percentile Queue Requirement Met?
			95th Percentile Queue (ft)[2]				
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
Ahern Road/SR 33/I-5 Southbound Ramps/Lehman Road	Westbound Off-Ramp Left Turn/Through/Right Turn	1,250 ft	114	158	90	118	Yes
	Southbound Left Turn	175 ft	0	21	0	18	Yes
Ahern Road/SR 33/I-5 Northbound Ramps	Southbound Left Turn	185	49	32	36	29	Yes
South Chrisman Road/SR 132 Westbound Ramps	Westbound Off-Ramp Left Turn/Through	850 ft	74	25	835	91	Yes
	Westbound Off-Ramp Right Turn	850 ft	114	75	113	102	Yes
South Chrisman Road/SR 132 Eastbound Ramps	Eastbound Off-Ramp Left Turn/Through/Right Turn	825 ft	59	89	90	153	Yes
South Chrisman Road/I-580 Westbound Ramps[3]	Westbound Off-Ramp Left Turn/Through	1,160 ft	0	0	6	3	Yes
	Westbound Off-Ramp Right Turn	1,160 ft	0	0	0	0	Yes

Notes:
1 Defined as distance to the freeway off-ramp gore point.
2 95th percentile queue based on output from SimTraffic model.
3 Off-ramp consists of a stop-controlled left-turn lane and an uncontrolled right-turn lane that merges onto South Chrisman Road. In addition to this storage, an additional 950 feet of off-ramp queuing space is provided downstream of the gore point.
4 Bolded values represent a 95th percentile queue length that exceeds the available storage.

Source: Fehr & Peers, 2025.

Table 4.12-16
95th Percentile Vehicle Queues – Existing Plus Specific Plan Buildout Conditions

Intersection	Movement	Available Storage[1]	Existing Conditions		Existing Plus Specific Plan Buildout Conditions		95th Percentile Queue Requirement Met?
			95th Percentile Queue (ft)[2]				
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
Ahern Road/SR 33/I-5 Southbound Ramps/Lehman Road	Westbound Off-Ramp Left Turn/Through/Right Turn	1,250 ft	114	158	161	239	Yes
	Southbound Left Turn	175 ft	0	21	0	25	Yes
Ahern Road/SR 33/I-5 Northbound Ramps	Southbound Left Turn	185 ft	49	32	65	69	Yes
South Chrisman Road/SR 132 Westbound Ramps	Westbound Off-Ramp Left Turn/Through	850 ft	74	25	**> 1,500**	**> 1,500**	No
	Westbound Off-Ramp Right Turn	850 ft	114	75	**> 1,500**	**> 1,500**	No
South Chrisman Road/SR 132 Eastbound Ramps	Eastbound Off-Ramp Left Turn/Through/Right Turn	825 ft	59	89	**925**	**914**	No
South Chrisman Road/I-580 Westbound Ramps[3]	Westbound Off-Ramp Left Turn/Through	1,160 ft	0	0	224	**1,231**	No
	Westbound Off-Ramp Right Turn	1,160 ft	0	0	49	192	Yes
Bird Road/SR 132 Eastbound Ramps	Eastbound Off-Ramp Left Turn	1,535 ft	16	73	19	111	Yes
Bird Road/SR 132 Westbound Ramps	Westbound Off-Ramp Left Turn	1,485 ft	17	27	409	430	Yes
	Westbound Off-Ramp Right Turn	260 ft	158	19	245	19	Yes

Notes:
1 Defined distance to the freeway off-ramp gore point.
2 95th percentile queue based on output from SimTraffic model.
3 Off-ramp consists of a stop-controlled left-turn lane and an uncontrolled right-turn lane that merges onto South Chrisman Road. In addition to this storage, an additional 950 feet of off-ramp queuing space is provided downstream of the gore point.
Bolded values represent a 95th percentile queue length that exceeds the available storage.
">1,500" is shown to represent queuing that spills onto freeway mainline a considerable distance.

Source: Fehr & Peers, 2025.

Figure 4.12-16
Existing Plus Project Buildout:
PM Peak Hour Queuing at the SR 132/South Chrisman Road Interchange

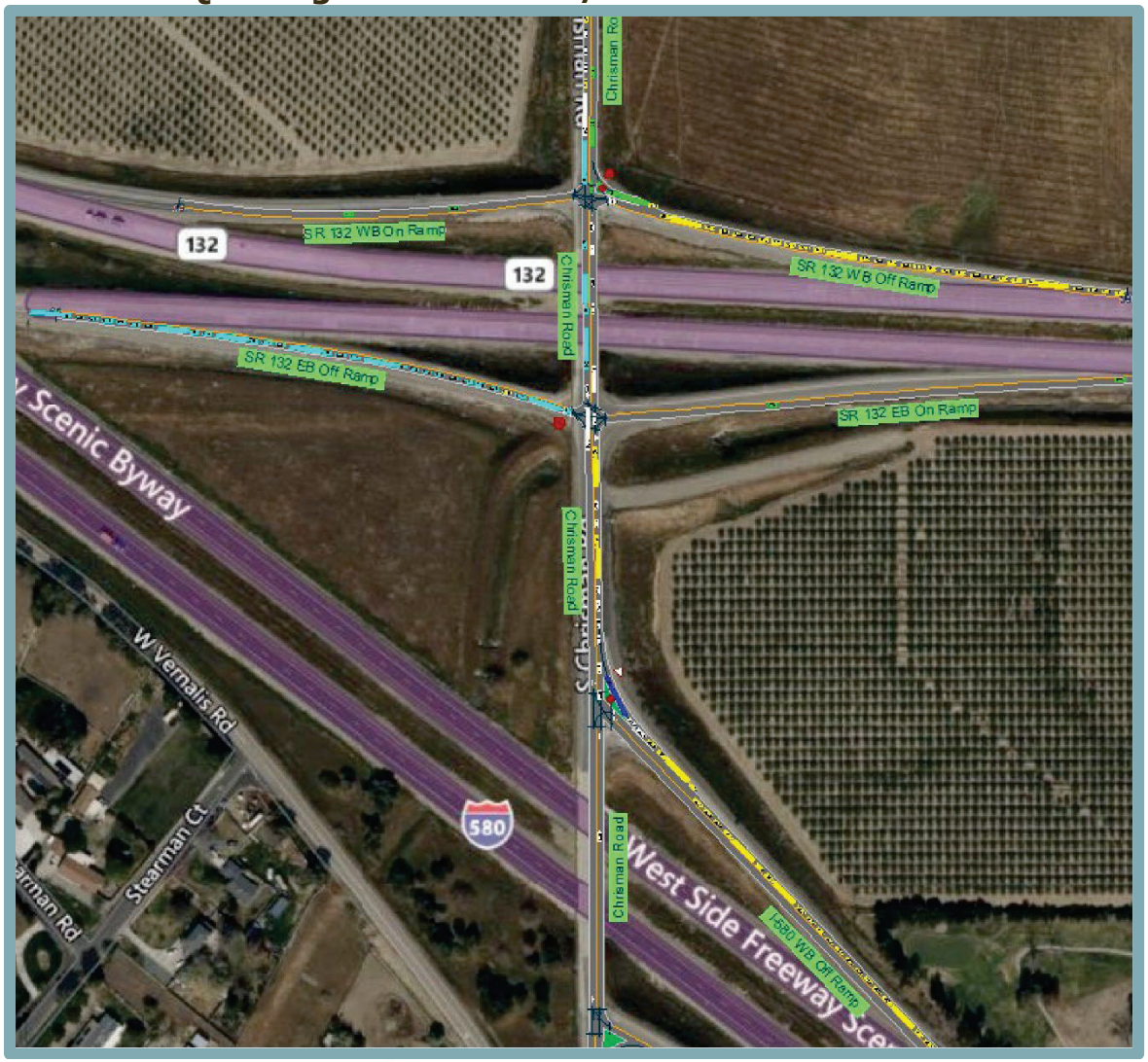


*Figure not OCR compatible.

Initial Phase, Specific Plan Buildout

The proposed project would generate a substantial amount of new truck trips as part of both the Initial Phase and Specific Plan Buildout, which have greater turning radius requirements and vehicle storage requirements than passenger vehicles. Therefore, the TIA concluded that impacts related to increased hazards due to geometric design features could be significant.

Incompatible Land Uses on Durham Ferry Road

The following discussion includes an analysis of potential impacts related to incompatible land uses on Durham Ferry Road associated with development of the Initial Phase and Specific Plan Buildout.

Initial Phase, Specific Plan Buildout

Durham Ferry Road features rural residential dwellings east of South Chrisman Road. Truck weight restriction signs are not currently posted on Durham Ferry Road. In addition, "Commercial Vehicles Over 7 Tons Prohibited" signs are posted in each direction of Bird Road between Durham Ferry Road and Lehman Road.

Thus, trucks of any weight traveling to/from the project site and I-5 to the north could use the I-5/SR 33 interchange by way of Durham Ferry Road. Trucks weighing less than seven tons could use Lehman Road to Bird Road.

The Initial Phase of the project could add an estimated 25 trucks per day to the segment of Durham Ferry Road between South Chrisman Road and SR 33, while full Specific Plan Buildout could add an estimated 220 trucks per day. The added trucks would represent 30 percent and 260 percent increases, during the Initial Phase and Specific Plan Buildout, respectively, over the existing level of truck traffic (85 trucks per day). The increase in project truck trips to Durham Ferry Road east of South Chrisman Road would create an incompatibility with the adjacent rural residences, and therefore, according to the TIA, the impact could be significant.

Incompatible Land Uses at South Chrisman Road and Linne Road Intersection (Jefferson School)

Jefferson School is located in the southeast quadrant of the South Chrisman Road and Linne Road intersection. The school is provided vehicle access from both streets and experiences surges in traffic during morning student drop-off and afternoon student pick-up. Excluding minimum days, school starts at 8:15 AM and ends at 3:00 PM. South Chrisman Road north of Linne Road carries a bi-directional volume of 569 vehicles from 8:00 AM to 9:00 AM, 609 vehicles from 3:00 PM to 4:00 PM, and 428 vehicles from 4:00 PM to 5:00 PM. Similarly, Linne Road west of South Chrisman Road carries a bi-directional volume of 564 vehicles from 8:00 AM to 9:00 AM, 686 vehicles from 3:00 PM to 4:00 PM, and 520 vehicles from 4:00 PM to 5:00 PM. Therefore, trips associated with Jefferson School influence traffic levels on the roadways.

The following discussions include an analysis of potential impacts related to incompatible land uses at the South Chrisman Road and Linne Road intersection associated with development of the Initial Phase and Specific Plan Buildout.

Initial Phase

During the AM peak hour, the Initial Phase would add approximately 180 vehicles to South Chrisman Road south of Linne Road. In addition, the total trips generated under the Initial Phase would be modest compared to Specific Plan Buildout, and diversion of trips away from South Chrisman Road south of Eleventh Street is not anticipated. As such, the TIA concluded that impacts related to potential hazards due to incompatible land uses at South Chrisman Road and Linne Road associated with the Initial Phase would be less than significant.

Specific Plan Buildout

During the AM peak hour, Specific Plan Buildout would increase the volume of traffic on South Chrisman Road, south of Linne Road, from 580 to 1,330 vehicles (both directions combined). During the same hour, Specific Plan Buildout would increase the volume of traffic on Linne Road, east of South Chrisman Road, from 750 to 1,030 vehicles. The increases that would occur along Linne Road east of South Chrisman Road are a result of project trips (both autos and trucks) diverting from South Chrisman Road to Bird Road (to access Eleventh Street), which carries less traffic. The increases in volume are anticipated to cause conflicts with motorists entering/exiting Jefferson School from both public streets to drop-off or pick-up students. In addition, the widening of South Chrisman Road, south of Linne Road, from two to four lanes would eventually be necessary to meet San Joaquin County standards. Some of the widening could require roadway encroachment into the school property, resulting in the roadway travel lanes being closer to school buildings than today. As such, the TIA concluded that impacts related to potential hazards due to incompatible land uses at South Chrisman Road and Linne Road associated with Specific Plan Buildout could be significant.

Train Conflicts

The proposed project would add passenger vehicle and truck trips to various at-grade railroad crossings situated throughout the project area. Table 4.12-17 shows the seven crossings that would experience the largest traffic increases. The table describes the crossing location, number of trains, collision history, crossing equipment present, and roadway traffic volumes.

The following discussions include an analysis of potential impacts related to potential train conflicts associated with development of the Initial Phase and Specific Plan Buildout.

Initial Phase

As shown in Table 4.12-17, the Initial Phase would add 700 vehicles per day or less to the four crossings for which traffic forecasts were developed. Although forecasts were not developed for the other three locations, the locations would generally be used to a lesser degree by project trips. Because the level of traffic added by Initial Phase trips would be modest (relative to the existing volume) and/or would not cause the crossing to carry substantial levels of traffic overall, the TIA determined that increased hazards at the railroad crossings would be less than significant.

Table 4.12-17
Project-Added Traffic to At-Grade Railroad Crossings

Crossing Location[1]	Trains per Day[2]	Number of Collisions (Year)[2]	Equipment Present[2]			Average Daily Traffic (HV%)		
			Gate Arms?	Warning Lights and Bells?	Advanced Warning	Existing	Existing Plus Initial Phase	Existing Plus Specific Plan Buildout
South Chrisman Road north of Schulte Road	4	0	Yes	Yes (including Overhead Light Assembly)	Warning Signs, Pavement Markings	13,200 (8%)	13,700 (10%)	18,300 (14%)
South Chrisman Road north of Linne Road	12	3 (1980, 1985, 1987)	Yes	Yes	Warning Signs, Pavement Markings	5,400 (15%)	6,100 (18%)	11,700 (19%)
Lehman Road west of SR 33	4	0	Yes	Yes	Warning Signs, Pavement Markings[3]	400 (7%)	500 (6%)	1,800 (2%)
Durham Ferry Road west of SR 33	4	0	Yes	Yes	Warning Signs, Pavement Markings[3]	1,400 (8%)	1,600 (9%)	2,600 (13%)
Corral Hollow Road north of Linne Road	12	4 (1978, 1986, 2008, 2015)	Yes	Yes	Warning Signs, Pavement Markings	N/A	N/A	N/A
Tracy Boulevard north of Linne Road	12	1 (2011)	Yes	Yes	Warning Signs, Pavement Markings[4]	N/A	N/A	N/A
MacArthur Drive north of Linne Road	12	1 (1977)	Yes	Yes	Warning Signs, Pavement Markings[4]	N/A	N/A	N/A

Notes:
1 Crossings shown here would experience the largest increase in traffic as a result of the project among 11 crossings in the vicinity of the project site.
2 Source: Federal Railroad Administration Railroad Crossing inventory
3 Crossings are situated less than 75 feet west of the edge of the SR 33 intersection. Warning signs and pavement markings clearly visible on eastbound approach to crossings. Warning signs (for westbound traffic) are present immediately east of each crossing, but not readily visible to northbound left-turn and southbound right-turning traffic.
4 Crossings are situated 50 feet north of Linne Road intersection. Warning signs and pavement markings clearly visible on southbound approach to crossings. Warning signs (for northbound traffic) are present immediately east of each crossing, but not readily visible to eastbound left-turn and westbound right-turning traffic.
HV% = Percent of ADT consisting Heavy Duty trucks
N/A=Traffic volume information is not available.

Source: Fehr & Peers, 2025.

Specific Plan Buildout

As shown in Table 4.12-17, Specific Plan Buildout would add between 4,000 and 5,000 trips per day at two at-grade crossings on South Chrisman Road between Linne Road and Eleventh Street. Project-added traffic would be modest at the other crossings. However, because Specific Plan Buildout would add substantial levels of traffic to the two South Chrisman Road at-grade railroad crossings shown in Table 4.12-17, the potential exists for increased conflicts between vehicles and trains. Thus, the TIA concluded that impacts could be significant.

It should be noted that the City of Tracy Draft Infrastructure Master Plan Impact Fee Nexus Study identifies the widening of South Chrisman Road to four lanes (across the railroad tracks) at Schulte Road. However, the widening of South Chrisman Road north of Linne Road is not included.

Conclusion

Based on the above, the proposed project could substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and a ***significant*** impact could occur.

Mitigation Measure(s)

The following sections include a description of the requirements and effectiveness of Mitigation Measures 4.12-5(a) through 4.12-5(f).

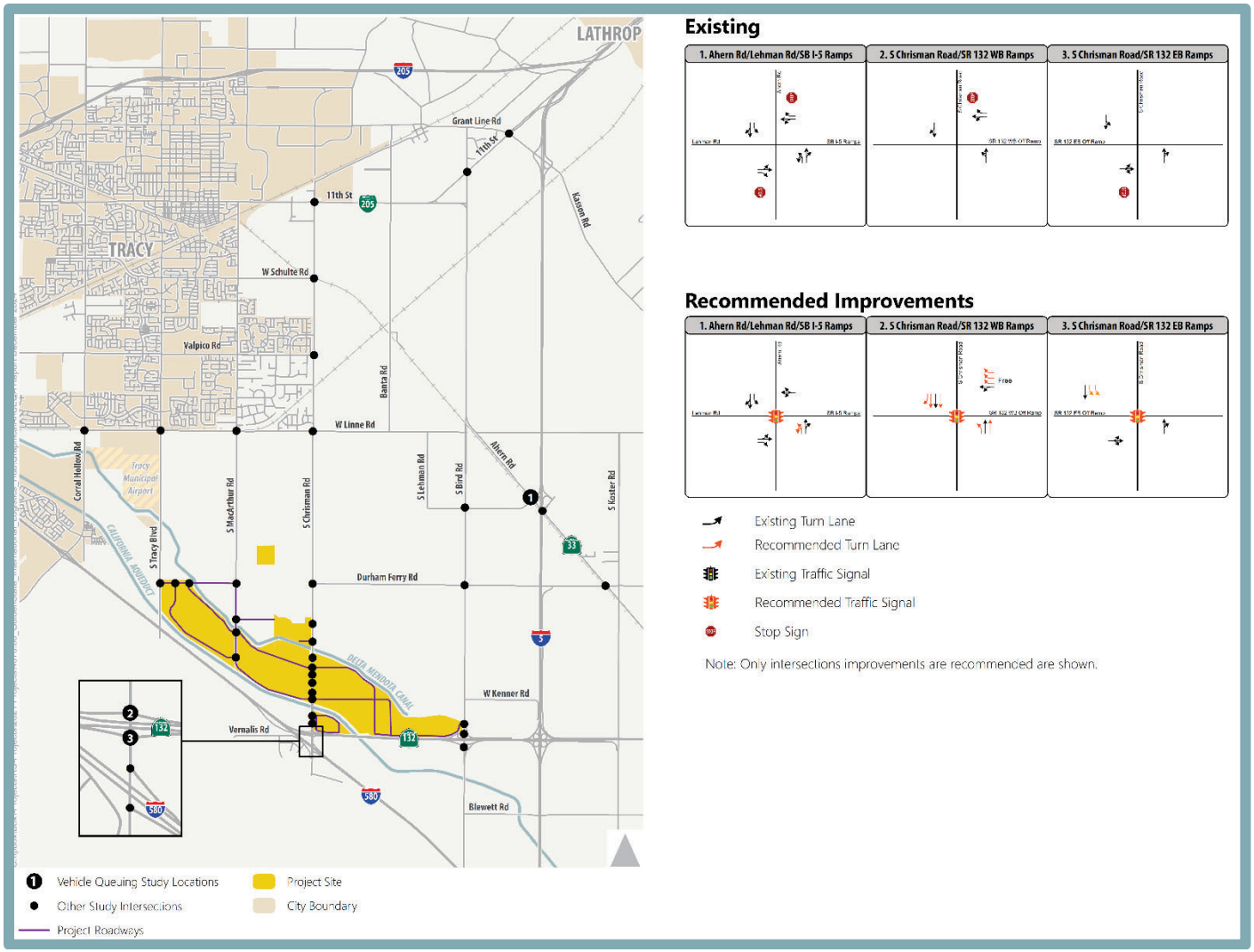
Freeway Off-Ramp and State Highway Intersection Vehicle Queues

The effectiveness of the improvements required under Mitigation Measure 4.12-5(a) for the ramp queues, as shown in Figure 4.12-17, were analyzed under Existing Plus Specific Plan Buildout conditions using the SimTraffic microsimulation model. The results are shown below in Table 4.12-18 and indicate that the proposed improvements would reduce the extent of queuing such that all 95th percentile queues would be less than the available storage. Once development continues beyond the Initial Phase, an interim set of improvements at the SR 132/South Chrisman Road interchange (i.e., less than what is described in Mitigation Measure 4.12-5[a], likely maintaining overcrossing structures and signalizing both ramp intersections) would be needed. The interim improvement would eventually be replaced with the ultimate improvements.

The project will prepare Stage 1 and/or Stage 2 ISOAP analyses at state highway intersections that may need to be upgraded as a result of project-added traffic. Such analyses would be initiated either prior to or during the Project Initiation Document (PID) phase for those improvements.

The improvements described in Mitigation Measure 4.12-5(a) would reduce the project's significant impact to a less-than-significant level. However, these improvements are on the State Highway System, which is owned and operated by Caltrans. As such, successful implementation of these improvements cannot be guaranteed.

Figure 4.12-17
Existing Plus Specific Plan Buildout Recommended Off-Site Improvements to Address Queuing Deficiencies



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

Table 4.12-18
95th Percentile Vehicle Queues With Improvements

Intersection	Movement	Available Storage[1]	95th Percentile Queue (ft.)[2]						
			Existing Conditions		Existing Plus Specific Plan Buildout Conditions				
					Without Improvements		With Improvements[3]		
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	95th Percentile Queue Requirement Met?
South Chrisman Road/SR 132 Westbound Ramps	Westbound Off-Ramp Left Turn/Through	850 ft[5]	74	25	**> 1,500**	**> 1,500**	30	36	Yes
	Westbound Off-Ramp Right Turn	850 ft[5]	114	75	**> 1,500**	**> 1,500**	360	230	Yes
South Chrisman Road/SR 132 Eastbound Ramps	Eastbound Off-Ramp Left Turn/Through/Right Turn	825 ft	59	89	**925**	**914**	518	334	Yes
South Chrisman Road/I-580 Westbound Off-Ramp	Westbound Off-Ramp Left Turn/Through	1,160 ft	0	0	224	**1,231**	52	24	Yes

Notes:
1 Defined as distance to the freeway off-ramp gore point. Represented on a per lane basis.
2 95th percentile queue based on output from SimTraffic model.
3 See Mitigation Measure 4.12-5(a) for description of improvements.
4 Left-turn lane would be widened to 1,000 ft with proposed improvements.
5 Amount of storage to be provided is unknown. For analysis purposes, storage is assumed to be identical to existing conditions.
Bolded values represent a 95th percentile queue length that exceeds the available storage.
">1,500" is shown to represent queuing that spills onto freeway mainline a considerable distance.

Source: Fehr & Peers, 2025.

Geometric Design Features

Mitigation Measure 4.12-5(b) would require project access intersections along South Chrisman Road to be designed in accordance with San Joaquin County standards to ensure the special geometric design needs of trucks are met. With implementation of Mitigation Measure 4.12-5(b), impacts related to hazards associated with geometric design features would be less than significant.

Incompatible Land Uses on Durham Ferry Road

With respect to Mitigation Measure 4.12-5(c), the addition of signs prohibiting trucks on Durham Ferry Road between Chrisman Road and SR 33 would discourage trucks from using the segment of Durham Ferry Road east of Chrisman Road. Depending on the degree that truck drivers comply with the signs, supplemental enforcement activities could also be necessary, and thus, Mitigation Measure 4.12-5(c) requires biennial monitoring to determine effectiveness of signage. Truck travel characteristics from concrete plants located south of the SR 132/Bird Road interchange are helpful in understanding compliance in the geographic area.

During AM peak hour, 306 trucks use Bird Road south of the SR 132 interchange. Only six trucks were observed traveling to/from the north of the interchange beyond Kenner Road where trucks over seven tons are prohibited, which indicates very strong compliance, though this is not the case everywhere in San Joaquin County. With implementation of Mitigation Measure 4.12-5(c), impacts related to incompatible land uses on Durham Ferry Road would be less than significant.

Incompatible Land Uses at South Chrisman Road and Linne Road Intersection (Jefferson School)

With respect to Mitigation Measure 4.12-5(d) the new signal on Linne Road would be 750 feet from the South Chrisman Road/Linne Road signalized intersection, which is considered adequate signal spacing. If a traffic signal were to be installed on South Chrisman Road to serve the south parking lot, the northerly driveway would be the logical choice, as the northerly driveway is the primary exit. However, the driveway is located only 410 feet south of the South Chrisman Road/Linne Road signalized intersection, which is considered too close to install a new traffic signal based on standard engineering practices for suburban signal spacing.

Bullet 3 included in Mitigation Measure 4.12-5(d) includes installation of a standard guard rail, such as found on highway/roadway curves or a cable barrier system, which are now commonly being installed in highway medians to prevent run-off-road collisions involving the opposite direction of travel. The recommendation is intended to address potential concerns over the widening of South Chrisman Road adjacent to Jefferson School. The recommended improvements are considered physically feasible as right-of-way is available for their construction.

Coordination with the Jefferson School District would be required to construct some of the improvements, as the improvements would involve modifications (i.e., addition of signal equipment, such as vehicle loop detection) within the school district property. As noted in the final bullet of the mitigation measure, the project applicant would be responsible for adding turn lanes, modifying signal phasing,

and adding upgraded pedestrian facilities at the South Chrisman Road/Linne Road intersection. The recommended improvements would improve the pedestrian environment at the intersection.

Implementation of these improvements would reduce the project's significant impact to a less-than-significant level. The applicant is conducting ongoing coordination with the Jefferson School District regarding these recommended safety improvements. In the event that the Jefferson School District elects not to implement these improvements, or an equally effective set of improvements, this EIR conservatively concludes that this impact could remain significant and unavoidable.

Train Conflicts

With respect to mitigation measures related to vehicle/train conflicts, improvements are not warranted at the at-grade crossing on Durham Ferry Road west of SR 33 or Lehman Road west of SR 33 because there have not been any reported collisions involving trains at the crossings and project-added traffic would be modest. Improvements are not warranted at the at-grade crossing on MacArthur Drive north of Linne Road as there has been just one reported collision in the past 48 years. Mitigation Measure 4.12-5(e) would require payment of a fair share contribution to the City of Tracy to cover the project's proportionate cost to upgrade the South Chrisman Road at Schulte Road at-grade railroad crossing. The improvements described below in Mitigation Measure 4.12-5(f) would require approvals from multiple agencies and public utilities.

Conclusion

While the roadway improvements required under Mitigation Measures 4.12-5(a), 4.12-5(d), 4.12-5(e), and 4.12-5(f) would help to reduce roadway hazards, the measures would require approvals from multiple agencies and public utilities. Given that the required measures are not guaranteed to be approved by Caltrans, the City of Tracy, or other outside agencies, and are outside of the County's jurisdiction, the County, as lead agency, cannot legally impose the mitigation measures. Therefore, implementation of Mitigation Measures 4.12-5(a), 4.12-5(d), 4.12-5(e), and 4.12-5(f) cannot be guaranteed. Implementation of the following mitigation measures would reduce the above potential impacts related to hazards to vehicle safety. However, due to uncertainties regarding the ability for the aforementioned mitigation measures to be implemented, impacts would be considered to remain *significant and unavoidable*.

Vehicle Queuing: Specific Plan Buildout Only

4.12-5(a) *In conjunction with submittal of each future subdivision application, the project applicant shall submit a transportation phasing analysis that determines which geometric improvement(s) in the below table and Figure 4.12-17 of the EIR is triggered by the phase. The transportation phasing analysis shall be submitted for review to the appropriate agency within whose jurisdiction the improvements are located.*

The project applicant shall collaborate with that agency to implement the identified improvement (or alternative improvements that are equally effective). Collaborative efforts, which are subject to County review and acceptance, could include (but are not limited to): establishing a multi-agency fee program to fund identified improvements, contributing a fair share payment to the jurisdiction serving as the lead agency pursuing construction of said improvements, or paying the applicable San Joaquin County TIMF fee provided that said improvements are fully funded through that fee program. The following performance standards are to be made part of the project's Mitigation Monitoring Report requirements:

- *Traffic does not queue back from the SR 132/South Chrisman Road interchange onto the SR 132 mainline.*
- *Traffic does not queue back from the I-580/South Chrisman Road westbound off-ramp onto the I-580 mainline.*

Recommended Improvements to Address Queuing Deficiencies – Existing Plus Specific Plan Buildout Conditions		
Facility	***Lead Agency***	***Description of Improvements***
Interchange Improvements		
SR 132/ South Chrisman Road Interchange	*California Department of Transportation*	*Reconstruct with wider (six-lane) overcrossing and ramp widening and signals at both ramp intersections. Secondary improvements will likely include a deceleration lane on westbound SR 132 at the interchange, on-ramp ramp metering, and widening of the adjacent South Chrisman Road overcrossing at I-580 (for lane alignment purposes).*
Intersection Improvements		
South Chrisman Road/SR 132 Westbound Ramps	*California Department of Transportation*	*Signalize with lanes shown on Figure 21 of Transportation Impact Analysis Report, operate with protected left-turn phasing, and provide a deceleration lane and a two-lane off-ramp approaching the interchange on westbound SR 132.*
South Chrisman Road/SR 132 Eastbound Ramps	*California Department of Transportation*	*Signalize with lanes shown in Figure 21 of Transportation Impact Analysis Report, widen eastbound SR 132 on-ramp to accommodate two receiving lanes, and operate with protected left-turn phasing.*

South Chrisman Road/I-580 Westbound Off-Ramp	California Department of Transportation	Widening of existing overcrossing or construction of second parallel overcrossing likely needed for lane alignment with widened SR 132/ South Chrisman Road interchange.
South Chrisman Road/I-580 Eastbound On-Ramp	California Department of Transportation	
Notes: The improvements described above are on the State Highway System, which is owned and operated by Caltrans. However, to complete those improvements, certain County-owned roadway segments adjacent to those facilities may also need to be improved. Additional improvements may be required on County-maintained roadways to maintain consistency with General Plan LOS policy goals. Source: Fehr & Peers, 2025.		

Geometric Design Features: Initial Phase, Specific Plan Buildout

4.12-5(b) *Prior to approval of Improvements Plans for each phase, the Improvement Plans shall show that project access intersections along South Chrisman Road are designed in accordance with San Joaquin County standards. Additional considerations should be made for the need to accommodate STAA trucks, enhanced pavement structural sections, and increased truck turn lane storage. To ensure that the project roadway designs provide the necessary infrastructure improvements to accommodate the special needs of trucks, the following performance standards are established:*

- *All street sections that would be constructed, replaced, or widened by the project shall be designed with the appropriate Traffic Index (TI) to ensure that the structural section is capable of accommodating the added weight of trucks for the street section.*
- *All left and right turn lanes constructed at intersections along South Chrisman Road and within the various project development areas shall provide adequate vehicle storage to accommodate the 95th percentile vehicle queues (considering cumulative travel demands and the effects of trucks on storage requirements).*
- *Intersection designs shall consider curb return radii requirements, width of receiving travel lanes, placement of traffic control equipment, and other design parameters to ensure that trucks can perform left and right-turns without encroaching onto oncoming travel lanes, running over curbs, or colliding with signal equipment or signs.*

The roadway design review process, overseen by the San Joaquin County Public Works Department, shall ensure that the aforementioned performance standards are met.

Incompatible Land Uses on Durham Ferry Road: Initial Phase

4.12-5(c) *Prior to occupancy of the first industrial building, the project applicant shall coordinate with San Joaquin County to post a combination of either "No Trucks Allowed" or "Local Trucks only" signs on Durham Ferry Road between South Chrisman Road and SR 33. The project applicant shall conduct biennial monitoring of project-related truck traffic on Durham Ferry Road, and within one month of monitoring, a memo summarizing the results shall be submitted to San Joaquin County Public Works Department. Should the volume of trucks exceed the totals shown in the EIR and it is demonstrated that the added trucks are either directly (i.e., have origins or destinations at project site) or indirectly (i.e., rerouted due to project activities) associated with the proposed project, enhanced measures shall be instituted, such as additional or modified signage, increased enforcement, levying penalties on trucking companies for observed violations, etc, with subsequent monitoring to confirm required reductions.*

Incompatible Land Uses at South Chrisman Road and Linne Road Intersection: Specific Plan Buildout Only

4.12-5(d) *The project applicant shall coordinate with the San Joaquin County Public Works Department and administrators at Jefferson School and Jefferson School District to identify and construct a set of improvements that minimize conflicts between project trips and motorists entering/exiting Jefferson School. Potential improvements to be considered include (but are not limited to):*

- *Installation of traffic signal at Linne Road/Jefferson School Easterly Driveway;*
- *Construction of westbound left-turn lanes on Linne Road at both Jefferson School Driveways;*
- *Construction of southbound left-turn lane on South Chrisman Road at Jefferson School Southerly Driveway (including a guard rail or cable barrier system along the South Chrisman Road school frontage); and*
- *Speed feedback signs in each direction of Linne Road approaching Jefferson School and on northbound South Chrisman Road approaching Jefferson School.*

The following performance standards have been established for this mitigation measure (presuming the above or other equally effective physical improvements are chosen for construction):

- *School-related trips do not queue beyond the storage provided in the left-turn lanes on westbound Linne Road constructed as part of this mitigation measure;*
- *School-related trips do not queue beyond the storage provided in the southbound left-turn lane at the Jefferson School southerly driveway constructed as part of this mitigation measure;*
- *The traffic signal at the Jefferson School Easterly Driveway/Linne Road does not cause undue delays (i.e., as measured by more lengthy queues forming at the north parking lot entrance) to school-related trips exiting this driveway during peak school hours; and*
- *The northbound South Chrisman Road approach to Linne Road is redesigned (as part of separate applicant required widening to meet San Joaquin County General Plan LOS policies) to accommodate U-turn movements made by buses.*

The improvements that are determined acceptable by the Jefferson School District shall be completed prior to occupancy of the first industrial building for the second phase to the satisfaction of the San Joaquin County Public Works Department.

Vehicle/Train Conflicts: Specific Plan Buildout Only

4.12-5(e) *Prior to occupancy of the first industrial building of the second phase, the project applicant shall make a fair share contribution to the City of Tracy to cover the project's proportionate cost to upgrade the South Chrisman Road at Schulte Road at-grade railroad crossing.*

4.12-5(f) *Prior to occupancy of the first industrial building of the second phase, the project applicant shall work with Union Pacific Railroad and California Public Utilities Commission (CPUC) to determine the need for appropriate upgrades to the South Chrisman Road at-grade crossing north of Linne Road and to implement such improvements during subsequent phases beyond the Initial Phase.*

4.12-6 Result in inadequate emergency access. Based on the analysis below, the impact is *less than significant*.

Several factors determine whether a project has sufficient access for emergency vehicles, including the following:

1. Number of access points (both public and emergency access only);
2. Width of access points; and
3. Width of internal roadways.

The following discussions include an analysis of potential impacts related to emergency access associated with development of the Initial Phase and Specific Plan Buildout.

Initial Phase

The Initial Phase would consist of partial buildout of the Pacific Gateway East area, University Center, and the VFW Facility. The following accesses were assumed for each Initial Phase component:

- Pacific Gateway East: Construction of B Street east of South Chrisman Road. The intersection would be signalized and include dedicated northbound right-turn and southbound left-turn lanes on South Chrisman Road and westbound left- and right-turn lanes.
- University Center: Construction of Main University driveway as an unsignalized intersection. The intersection would include a dedicated northbound left-turn lane on South Chrisman Road, southbound right-turn lane, and a stop-controlled eastbound left/right lane exiting the university.
- VFW Facility: The VFW Facility would have a dedicated driveway access north of the university. Under Initial Phase conditions, the driveway would permit all movements. The VFW driveway would be stop-controlled and not require any widening along South Chrisman Road.

Given compliance with the San Joaquin County Roadway Design Standards, on-site travel lanes would be adequately sized to allow two-way circulation and truck circulation, as well as emergency vehicle access and circulation. All industrial streets would be designed to STAA standards to allow for truck traffic. Overall, by providing multiple access and egress points, the Initial Phase would meet County standards for providing emergency vehicle access to the site.

The proposed project is located within the jurisdiction of the South San Joaquin County Fire Authority (SSJCFA), with fire and non-transport emergency medical services (EMS) provided by the Tracy Rural Fire District (TRFD) and ambulance service provided by American Medical Response. The project site is currently served by TRFD Station 93 and 95, both of which are located within five miles of the project site. The TRFD operates under a joint power agreement with the City of Tracy Fire department, forming the SSJCFA. The proposed project would be located within the San Joaquin County Sheriff's District. Sutter Tracy Community Hospital is located in downtown Tracy, approximately seven miles to the north of the project site.

Based on the above, the Initial Phase would provide adequate emergency access and a less-than-significant impact would occur.

Specific Plan Buildout

At full buildout, the following new roadways would be constructed to provide access to individual areas of the plan (see Figure 4.12-18):

Figure 4.12-18
Roadway Improvement Plan

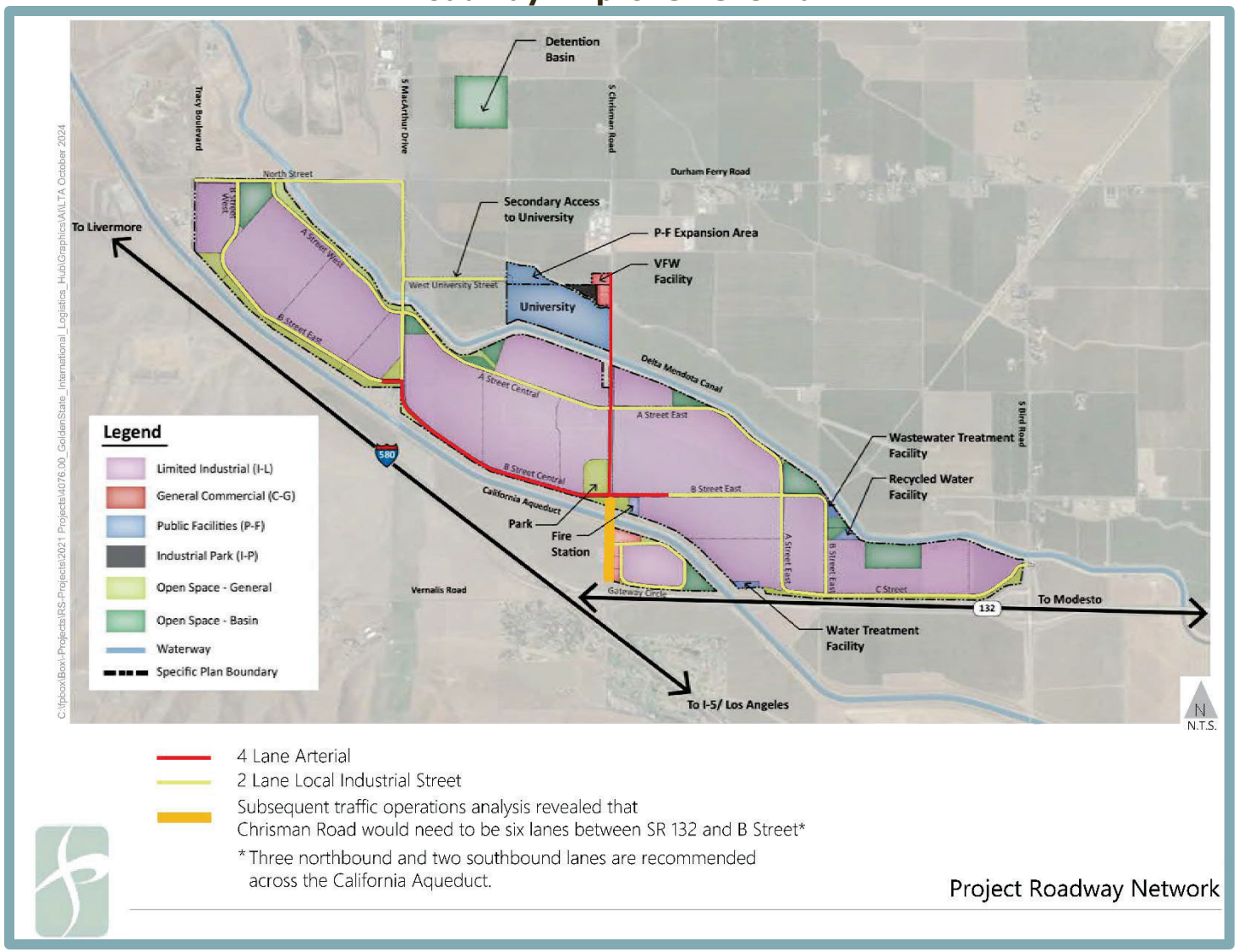


*Figure not OCR compatible.

- South Chrisman Road: Widened to a four-lane major arterial along the project frontage. To accommodate project buildout, South Chrisman Road would be widened to consist of three travel lanes in each direction from SR 132 north for a distance of approximately 2,230 feet to B Street.
- North of B Street, two lanes would be provided in each direction along the entire project frontage, which extends for slightly greater than one mile north of B Street. In addition, left- and right-turn lanes would be required at both signalized and unsignalized project access intersections along South Chrisman Road.
- North Street: This new two-lane local industrial street with free turning median lane would extend east of Tracy Boulevard and terminate at MacArthur Drive, just north of the Pacific Gateway West development area. The street would include a 12-foot Class I bicycle and pedestrian path on its south side.
- MacArthur Drive: This segment of MacArthur Drive, from North Street to the Specific Plan Boundary, would be improved with two lanes and a 14-foot landscaped median lane.
- West University Street: This new two-lane local industrial street would extend from MacArthur Drive and provide secondary access to the University Campus. The street would include a 12-foot Class I bicycle and pedestrian path on one side.
- Three new, two-lane local industrial streets, labeled alphabetically from A Street to C Street, would be constructed within the Specific Plan area.

The internal two-lane local industrial streets would include two lanes with a 14-foot free turning median lane. The proposed internal circulation network would provide for multi-modal uses and accommodate vehicles and trucks, as well as pedestrians, bicycles, and public transportation. Given compliance with the San Joaquin County Roadway Design Standards, on-site travel lanes would be adequately sized to allow two-way circulation and truck circulation, as well as emergency vehicle access and circulation. All industrial streets would be designed to STAA standards to allow for truck traffic.

The SSJCFA, on behalf of the TRFD, has determined that due to the remote location and significant size of the proposed project, existing fire protection and emergency response facilities are not sufficient to serve the proposed project at full buildout.[11] The project applicant entered into an agreement with the TRFD and SSJCFA to include the development of a new fire station within the project site. As a condition of approval, the proposed project would be required to fund and construct the fire station located on a 2.59-acre parcel east of Chrisman Road and north of the California Aqueduct, within the Pacific Gateway East development area once the project exceeds 6,000,000 sf, which would be after the Initial Phase development. The fire station would be centrally located to provide adequate emergency service coverage to the project. On-site fire water distribution system and design elements intended to prevent fires would also be included. Thus, adequate emergency access and provision of fire protection facilities would be provided, and impacts would be less than significant.

[11] Bradley, Randall, Fire Chief, South San Joaquin County Fire Authority. Personal Communication [letter] with Jennifer Jolley, Director, San Joaquin County Community Development Department. December 23, 2024.

Off-Site Improvements Study Area

The proposed off-site roadway improvements would be constructed in accordance with the San Joaquin County Roadway Design Standards, or other applicable standards, depending on whose jurisdiction the improvements are located in, which would ensure off-site travel lanes are adequately sized to allow two-way circulation and project-related truck circulation, as well as emergency vehicle access and circulation. Therefore, the off-site improvements would not result in inadequate emergency access or access to nearby uses.

Conclusion

Based on the above, the proposed project would not result in inadequate emergency access or access to nearby uses, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As discussed above, for the cumulative traffic setting, the City of Tracy Refined travel demand model projects a 33 percent increase in single-family residential units and 51 percent increase in multi-family residential units in the project vicinity between the base year (2019) and 2042 models. Non-residential growth is even greater at a 201 percent increase for retail employees, 48 percent increase for service employees, and 126 percent increase in other employees. For further detail related to the cumulative setting of the proposed project, refer to Chapter 6, Statutorily Required Sections, of this EIR.

It should be noted that increased traffic volumes on local roadway facilities under cumulative conditions would not substantially alter performance related to emergency vehicle access. Rather, impacts under Cumulative Plus Project conditions would be similar to those discussed above under Impact 4.12-5. In addition, construction activities associated with the proposed project would be complete prior to the cumulative analysis year. Therefore, such topics are not discussed further in the cumulative analysis presented herein.

Impacts are identified only for the Specific Plan Buildout, and not for the Initial Phase, given the cumulative nature of the analysis.

4.12-7 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, roadway bicycle, and pedestrian facilities, during operations under cumulative conditions. Based on the analysis below, and with the implementation of mitigation, the project's incremental contribution to this significant cumulative impact would be *cumulatively considerable* and *significant and unavoidable*.

The following discussion provides a separate analysis of impacts related to conflicts with bicycle and pedestrian facilities and transit services under cumulative conditions.

Bicycle and Pedestrian Facilities

As discussed above, the proposed project would not eliminate or adversely affect a planned bikeway or pedestrian facility in a way that would preclude construction of such improvements. However, absent mitigation, the proposed project would cause an inconsistency with several San Joaquin County General Plan policies pertaining to providing multimodal transportation options, reducing auto dependency, and eliminating gaps in the bikeway system. Under cumulative conditions, dedicated bicycle facilities would still not be between the project site and residential areas to the north (i.e., north of Linne Road). However, additional development is expected to occur, which would further increase the need for bicycle and pedestrian facilities. Project employees are unlikely to choose to walk from the nearest residential areas in South Tracy. Thus, the need for connecting pedestrian facilities is much less than the need for bicycle facility connectivity. Nonetheless, given the proposed project's large number of employees and students and the lack of any planned bicycle facilities to connect the project site with residential areas to the north, the impact could be cumulatively considerable and significant.

Transit Services

The proposed project would not eliminate or adversely affect planned transit access as service is not currently provided or planned in the immediate project vicinity. However, development in the region under cumulative conditions would increase the demand for fixed-route bus service, and the proposed project would further contribute to the increased demand. The lack of any existing or planned fixed-route bus service to the area would lead to an unmet demand for transit service. Thus, the impact could be cumulatively considerable and significant.

Conclusion

Based on the above, cumulative impacts related to conflicting program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, roadway bicycle, and pedestrian facilities could be ***cumulatively considerable*** and ***significant***.

Mitigation Measure(s)

Compliance with Mitigation Measure 4.12-7 would reduce significant impacts associated with program, plan, ordinance, or policy, except LOS, addressing bicycle and pedestrian facilities. However, transit-related elements of Mitigation Measure 4.12-7 would be subject to final approval and action by San Joaquin RTD. Given that the required measures are not guaranteed to be approved by San Joaquin RTD and are outside of the County's jurisdiction, the County, as lead agency, cannot legally impose the mitigation measures. In addition, further discussions with various agencies would be required to determine the precise type of improvements, timing, and financial responsibility for the recommended roadway improvements. Therefore, implementation of Mitigation Measure 4.12-7 cannot be guaranteed.

The effectiveness of the below measures would be similar under both baseline and cumulative conditions, with the main difference being transit service in the region would likely be more robust under cumulative conditions, which would enable the

private shuttle TDM strategy to become more effective. Nonetheless, due to uncertainties regarding the ability for the aforementioned mitigation measure to reduce impacts to transit facilities, transit facility and service impacts would be considered to remain *cumulatively considerable* and *significant and unavoidable*.

4.12-7 Implement Mitigation Measure 4.12-2 and TDM Strategies 3 and 4 from Mitigation Measure 4.12-4(b).

4.12-8 Result in cumulative conflicts or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b). Based on the analysis below, and with implementation of mitigation, the project's incremental contribution to this significant cumulative impact would be *cumulatively considerable* and *significant and unavoidable*.

The following discussion provides a separate analysis of VMT impacts associated with each component of the proposed project under cumulative conditions.

Warehouse and Office Uses

Table 4.12-19 indicates that both the warehouse and office uses developed under project buildout conditions would have VMT per employee averages that exceed the cumulative unincorporated Countywide average VMT of 29.5 and the significance threshold of 25.1 VMT per employee. Thus, VMT associated with the warehouse and office uses developed under project buildout conditions under cumulative conditions is considered to be significant.

Table 4.12-19
Comparison of Warehouse and Office Cumulative Auto VMT per Employee Against Significance Threshold

Scenario	Measure	Home-based Work Auto VMT per Employee[1]	
		Warehouse Uses	Office Uses
Unincorporated County Average - Cumulative	VMT Generated by Autos	29.5	
85 percent of Unincorporated Countywide Average - Cumulative		25.1	
Cumulative Project Buildout		43.3	62.1

[1] Calculated using the 2046 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and residence.

Source: Fehr & Peers, 2025.

University Campus

With respect to VMT impacts associated with the university component under cumulative conditions, despite additional housing planned in the southeastern

portion of Tracy near the project site, the lack of any on-site student housing and the considerable travel distance between the university and likely off-site student and staff residence locations suggests that the university would not be considered a "VMT efficient" land use. The proposed university would be much less transportation efficient than University of Pacific in San Joaquin County. Thus, VMT associated with the proposed university developed under project buildout conditions under cumulative conditions could be significant.

University Center Shopping Plaza, Gateway Center Commercial Uses, and VFW Facility

Similar to the finding under Existing Plus Project Buildout conditions, the proposed project's potential retail, restaurant, gas station, hotel, VFW Facility, and EV truck and auto charging lots are considered local-serving uses given that the uses would support the project's combined 14,953 warehouse employees, 372 office employees, and 5,000 university students (plus staff). Additionally, the uses are located in close proximity to SR 132 and I-580, thereby allowing short detours off each freeway for refueling/recharging. In this sense, the uses are considered "local-serving" to the aforementioned freeways. Thus, VMT associated with the project's retail, restaurant, gas station, hotel, VFW Facility, and EV truck and auto charging lots would not contribute to a cumulative impact.

On- and Off-Site Roadway Improvements

According to the TIA, under cumulative conditions, the widening of Chrisman Road along the project frontage and the widening of MacArthur Drive within the project site would not cause a net increase in travel and VMT. Such improvements were added to the cumulative year version of the City of Tracy Refined travel demand model. The model was run and the total VMT within the model area was compared without and with the improvements. The cumulative year model has network-wide approximately 128 million VMT. The model was not sensitive to the change in capacity along the aforementioned roadways, and VMT decreased by five VMT under the cumulative model. Therefore, the off-site roadways improvements associated with project buildout under cumulative conditions would not result in VMT which exceeds an applicable threshold of significance.

Conclusion

Based on the above, cumulative impacts related to VMT associated with the proposed project's office and warehouses uses and University Campus could be ***cumulatively considerable*** and ***significant***.

Mitigation Measure(s)

Compliance with Mitigation Measures 4.12-8(a) and 4.12-8(b) would reduce project-generated VMT by requiring the project applicant to implement various TDM strategies. The effectiveness of the below measures would be similar under both baseline and cumulative conditions, with the difference being that transit service in the region would likely be more robust under cumulative conditions, which would enable the private shuttle TDM strategy to become more effective. Nonetheless, with implementation of the following mitigation measures, the project's incremental contribution to the significant cumulative impact would remain *cumulatively considerable* and *significant and unavoidable* due to

uncertainties regarding the ability for mitigation to reduce VMT to a less-than-significant level.

Warehouse and Office Uses
4.12-8(a) Implement Mitigation Measures 4.12-4(a) and 4.12-4(b).

University Component
4.12-8(b) Implement Mitigation Measure 4.12-4(a) and 4.12-4(b).

4.12-9 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) under cumulative conditions. Based on the analysis below and with implementation of mitigation, the project's incremental contribution to this significant cumulative impact is *cumulatively considerable* and *significant and unavoidable*.

The following discussion addresses potential hazards associated with Specific Plan Buildout related to freeway off-ramp and highway intersection vehicle queues, geometric design features, incompatible land uses, and vehicle conflicts with trains under cumulative conditions.

Freeway Off-Ramp and State Highway Intersection Vehicle Queues

Table 4.12-20 displays the AM and PM peak hour 95th percentile queues at queuing study locations on the State Highway System under Cumulative Plus Specific Plan Buildout conditions. As shown therein, trips under cumulative conditions would cause vehicle queues to spill back onto the freeway mainline at five of the seven study highway intersections. Therefore, Cumulative Plus Specific Plan Buildout Conditions would cause adverse queuing conditions, and would increase hazards due to increased vehicle queues.

Incompatible Land Uses on Durham Ferry Road

Additional development is expected to occur in the vicinity of the project site under cumulative conditions. Such development is expected to add approximately 100 trucks per day to Durham Ferry Road east of South Chrisman Road. Buildout of the Specific Plan (assuming restrictions in truck travel are not posted and enforced) would add an additional 220 trucks per day along the roadway.

Given that the proposed project would contribute approximately 69 percent of the growth in truck traffic under cumulative conditions to Durham Ferry Road east of South Chrisman Road, the proposed project's contribution could be cumulatively considerable. The increase in project truck trips to Durham Ferry Road east of South Chrisman Road could create an incompatibility with the adjacent rural residences.

Table 4.12-20
95th Percentile Vehicle Queues – Cumulative Plus Specific Plan Buildout Conditions

Intersection	Movement	Available Storage[1]	Cumulative No Project Conditions		Cumulative Plus Project Condition		95th Percentile Queue Requirement Met?
			95th Percentile Queue (ft)[1]				
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
Ahern Road/SR 33/I-5 Southbound Ramps/Lehman Road	Westbound Off-Ramp Left Turn/Through/Right Turn	1,250.	153	**1,602**	240	**1,623**	No
	Southbound Left Turn	175	8	43	9	37	Yes
Ahern Road/SR 33/I-5 Northbound Ramps	Southbound Left Turn	185	93	25	102	79	Yes
South Chrisman Road/SR 132 Westbound Ramps	Westbound Off-Ramp Left Turn/Through	850	96	40	**>1,500**	**>1,500**	No
	Westbound Off-Ramp Right Turn	850	116	77	**>1,500**	**>1,500**	No
South Chrisman Road/SR 132 Eastbound Ramps	Eastbound Off-Ramp Left Turn/Through/Right Turn	825	66	132	**>1,500**	**>1,500**	No
South Chrisman Road/I-580 Westbound Ramps[2]	Westbound Off-Ramp Left Turn/Through	1,160	13	13	332	**1,406**	No
	Westbound Off-Ramp Right Turn	1,160	13	10	65	165	Yes
Bird Road/SR-132 Eastbound Ramps	Eastbound Off-Ramp Left Turn	1,535	16	73	19	111	Yes
Bird Road/SR 132 Westbound Ramps	Westbound Off-Ramp Left Turn	1,485	17	27	409	430	Yes
	Westbound Off-Ramp Right Turn	260	158	19	245	19	Yes

Notes:
[1] 94th percentile queue based on output from SimTraffic model.
[2] Off-ramp consists of a stop-controlled left-turn lane and an uncontrolled right-turn lane that merges onto Chrisman Road. In addition to this storage, an additional 950 feet of off-ramp queuing space is provided downstream of the gore point.
"1,500" is shown to represent queuing that spills onto freeway mainline a considerable distance. Specific values are shown for Ahern Road/SR 33/I-5 Southbound Ramps/Lehman Road intersection due to subsequent significance determination.
Bolded values represent a 95th percentile queue length that exceeds the available storage.

Source: Fehr & Peers, 2025.

Incompatible Land Uses at South Chrisman Road and Linne Road Intersection

Project related increases in traffic along the frontages of Jefferson School are considerable when compared to overall traffic growth on the roadway segment under cumulative conditions. Trips generated by the proposed project could cause conflicts with motorists entering/exiting Jefferson School to drop-off or pick-up students.

Vehicle/Train Conflicts

Additional development is expected to occur in the vicinity of the project site under cumulative conditions. Such development is expected to add vehicle trips to the various at-grade railroad crossings in the vicinity of the project site. However, the project's contribution of passenger vehicle and truck trips to the at-grade railroad crossings could be considerable based on the overall level of expected background growth and amount of traffic generated by the proposed project. Because the proposed project would add cumulatively considerable levels of traffic to the two South Chrisman Road crossings shown above in Table 4.12-17, the proposed project could result in increased conflicts between vehicles and trains under cumulative conditions.

Conclusion

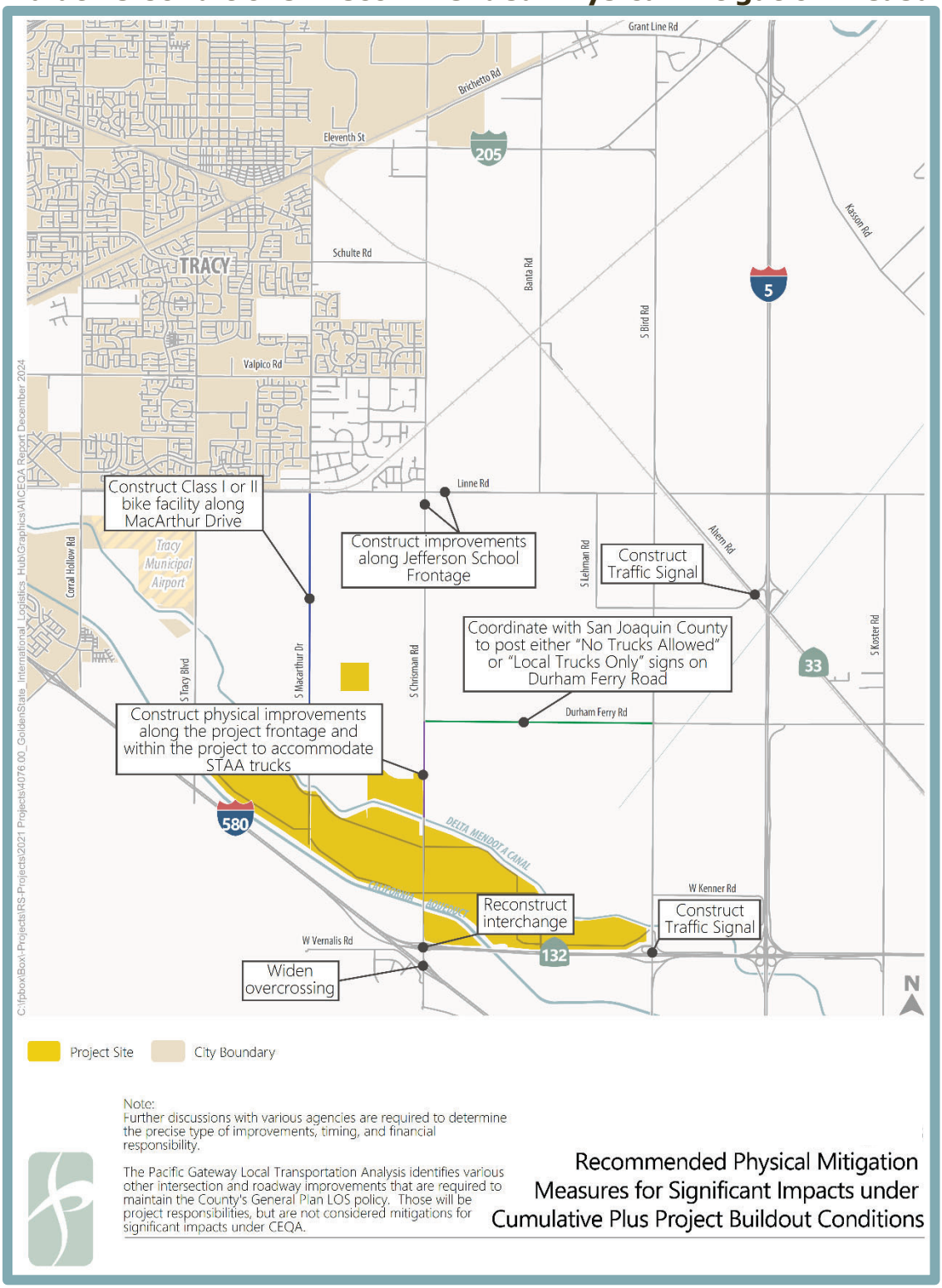
Based on the above, under cumulative conditions, Specific Plan Buildout could substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), and a ***cumulatively considerable*** and ***significant*** impact could occur.

Mitigation Measure(s)

Figure 4.12-19 below shows the location of the recommended project-specific physical off-site mitigation measures to reduce increased hazards to freeway ramp queueing under cumulative conditions, as required by Mitigation Measure 4.12-9(a). The effectiveness of the improvements required under Mitigation Measure 4.12-9(a) were analyzed under Cumulative Plus Specific Plan Buildout conditions using the SimTraffic microsimulation model.

The results are shown below in Table 4.12-21 and indicate the proposed improvements would reduce the extent of queuing such that all 95th percentile queues would be less than the available storage. The improvements described in Mitigation Measure 4.12-9(a) would reduce the project's significant incremental contribution to a less-than-cumulatively considerable level. However, these improvements are on the State Highway System, which is owned and operated by Caltrans. As such, successful implementation of these improvements cannot be guaranteed.

Figure 4.12-19
Cumulative Conditions: Recommended Physical Mitigation Measures



Source: Fehr & Peers, 2025.

*Figure not OCR compatible.

Table 4.12-21
95th Percentile Vehicle Queues – Cumulative Plus Specific Plan Buildout Conditions with Improvements

Intersection	Movement	Available Storage[1]	95th Percentile Queue (ft.)[2]						
			Cumulative No Project Conditions		Cumulative Plus Specific Plan Buildout Conditions				
					Without Improvements		With Improvements[3]		
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	95th Percentile Queue Requirement Met?
Ahern Road/SR 33/I-5 Southbound Ramps/Lehman Road	Westbound Off-Ramp Left Turn/Through/Right Turn	1,250	153	**1,602**	240	**1,623**	147	281	Yes
	Southbound Left Turn	175	8	43	9	37	20	32	Yes
South Chrisman Road/SR 132 Westbound Ramps	Westbound Off-Ramp Left Turn/Through	850[4]	96	40	**>1,500**	**>1,500**	38	40	Yes
	Westbound Off-Ramp Right Turn	850[4]	116	77	**>1,500**	**>1,500**	339	242	Yes
South Chrisman Road/SR 132 Eastbound Ramps	Eastbound Off-Ramp Left Turn/Through/Right Turn	825[4]	66	132	**>1,500**	**>1,500**	608	511	Yes
South Chrisman Road/I-580 Westbound Ramps	Westbound Off-Ramp Left Turn/Through	1,160	13	13	332	**1,406**	116	7	Yes
	Westbound Off-Ramp Right Turn	1,160	-	-	65	165	79	7	Yes
Bird Road/SR 132 Westbound Ramps	Westbound Off-Ramp Left Turn	1,485	17	17	**>1,500**	**>1,500**	416	373	Yes

Notes:
[1] Defined as length of turn pocket distance to the freeway off-ramp gore point.
[2] 95th percentile queue based on output from SimTraffic model.
[3] Refer to Mitigation Measure 4.12-9(a) for geometric modifications.
[4] Amount of storage to be provided is unknown. For analysis purposes, storage is assumed to be identical to existing conditions.
"1,500" is shown to represent queuing that spills onto freeway mainline a considerable distance.
Bolded values represent a 95th percentile queue length that exceeds the available storage.

Source: Fehr & Peers, 2025

Mitigation Measure 4.12-9(b) would require the addition of signs prohibiting trucks on Durham Ferry Road between South Chrisman Road and SR 33, which would discourage trucks from using the segment of Durham Ferry Road east of South Chrisman Road. With implementation of Mitigation Measure 4.12-9(c), the cumulative impact related to incompatible land uses on Durham Ferry Road would be less than cumulatively considerable.

With respect to Mitigation Measure 4.12-9(c), the recommended improvements are considered physically feasible as right-of-way is available for their construction. However, coordination with the Jefferson School District would be required to construct some of these improvements, as the improvements would involve minor modifications (i.e., addition of signal equipment, such as vehicle loop detection) within the school district property.

As noted in the final bullet of the mitigation measure, the project applicant would be responsible for adding turn lanes, modifying signal phasing, and adding upgraded pedestrian facilities at the South Chrisman Road/Linne Road intersection. The recommended improvements would improve the pedestrian environment at the intersection. Implementation of these improvements would reduce the project's cumulatively significant impact to a less-than-significant level. The applicant is conducting ongoing coordination with the Jefferson School District regarding these recommended safety improvements. In the event that the Jefferson School District elects not to implement these improvements, or an equally effective set of improvements, this EIR conservatively concludes that this impact would remain cumulatively considerable and significant and unavoidable.

With respect to mitigation measures related to vehicle/train conflicts, the improvements described below in Mitigation Measure 4.12-9(e) would require approvals from multiple agencies and public utilities.

The roadway improvements required under Mitigation Measures 4.12-9(a) and 4.12-9(e) would require approvals from multiple agencies and public utilities. Given that the required measures are not guaranteed to be approved by Caltrans, the City of Tracy, or other outside agencies, and are outside of the County's jurisdiction, the County, as lead agency, cannot legally impose the mitigation measures. Therefore, implementation of Mitigation Measure 4.12-9(a) and 4.12-9(d) cannot be guaranteed.

Implementation of the following mitigation measures would help to reduce the above potential impacts related to hazards to vehicle safety. Due to uncertainties regarding the ability for the aforementioned mitigation measures to be implemented, impacts would be considered to remain *cumulatively considerable* and *significant and unavoidable*.

Cumulative Conditions: Vehicle Queuing

4.12-9(a) *In conjunction with submittal of each future subdivision application, the project applicant shall submit a transportation phasing analysis that determines which geometric improvements in the below table and Figure 4.12-19 of the EIR is triggered by the phase. For those*

recommended improvements that are only triggered by the project's incremental traffic in the cumulative condition (i.e., compare with Mitigation Measure 4.12-5(a)), the applicant's responsibility shall be limited to a fair share payment. The transportation phasing analysis shall be submitted for review to the appropriate agency within whose jurisdiction the improvements are located. This agency may identify other measures of equal or greater effectiveness.

Recommended Improvements to Address Queuing Deficiencies – Existing Plus Specific Plan Buildout Conditions		
Facility	**Lead Agency**	**Description of Improvements**
Interchange Improvements		
SR 132/ South Chrisman Road Interchange	*California Department of Transportation* *(Continued on next page)*	*Reconstruct with wider overcrossing and ramp widening at each ramp terminal intersection (see below for specific improvements at each ramp intersection).*
Intersection Improvements		
Ahern Road/SR 33/I-5 Southbound Ramps/Lehman Road	*California Department of Transportation*	*Install traffic signal and widen westbound and eastbound approaches to consist of a left-turn lane and a shared through/right lane.*[1]
South Chrisman Road/SR 132 Westbound Ramps	*California Department of Transportation*	*Same as Existing Plus Specific Plan Buildout improvement.*
South Chrisman Road/ SR 132 Eastbound Ramps	*California Department of Transportation*	*Same as Existing Plus Specific plan Buildout improvement.*
South Chrisman Road/I-580 Westbound Off-Ramp	*California Department of Transportation*	*Widening of existing overcrossing or construction of second parallel overcrossing likely needed for lane alignment with widened SR 132/South Chrisman Road interchange.*
South Chrisman Road/I-580 Eastbound On-Ramp	*California Department of Transportation*	
Bird Road/SR 132 Westbound Ramps	*California Department of Transportation*	*Signalize intersection with existing lane configurations.*
Notes: *[1] May require widening of at-grade railroad crossing situated on Lehman Road west of SR 33.*		

Additional improvements may be required on County-maintained roadways to maintain consistency with General Plan LOS policy goals *Source: Fehr & Peers, 2025.*

Cumulative Conditions: Incompatible Land Uses on Durham Ferry Road

4.12-9(b) Implement Mitigation Measure 4.12-5(c).

Cumulative Conditions: Incompatible Land Uses at South Chrisman Road and Linne Road Intersection

4.12-9(c) Implement Mitigation Measure 4.12-5(d).

Cumulative Conditions: Vehicle/Train Conflicts

4.12-9(d) Implement Mitigation Measures 4.12-5(e) and 4.12-5(f).

4.13 Urban Decay

4.13 URBAN DECAY

4.13.1 INTRODUCTION

The Urban Decay chapter of the EIR evaluates the potential for the proposed project to result in urban decay or deterioration leading to physical impacts to properties that affect the quality of the surrounding community.

Typically, social and economic effects caused by a project are not subject to review under CEQA because CEQA applies only to a project's physical environmental effects. Pursuant to the Fifth District Court of Appeal decision in *Bakersfield Citizens for Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184, 1204*, urban decay analyses are primarily prepared for retail development, or the retail components of large-scale mixed use projects. Over time, some environmental impact reports also conservatively extend the urban decay analysis to other land uses, including hotel, office, and industrial land uses. Such is the case for this current analysis of the proposed project, which primarily consists of industrial development. Although the project includes business park, hotel, and general commercial space uses, such uses are relatively small and are intended to be supportive of the proposed industrial space, relying on internally generated demand.

For the purposes of this analysis, and to support CEQA's impact threshold requirements,[1] urban decay is defined as extended long-term business vacancies, directly or indirectly resulting in physical deterioration to properties or structures that is so prevalent, substantial, and long lasting that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community. Physical deterioration includes abandoned buildings, boarded doors and windows, parked trucks and long-term unauthorized use of the properties and parking lots, extensive or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees and shrubbery, and uncontrolled weed growth.

This chapter analyzes the potential impact of the proposed project's planned industrial and commercial components on the physical environment as represented by the respective real estate bases. The key indicator from a CEQA perspective is impacts on the existing physical environment, which in the context of an urban decay analysis includes existing industrial buildings and other germane real estate conditions, as measured against the current baseline.

The following analysis is based on information drawn from the Urban Decay Study (UDS) prepared for the proposed project by ALH Urban & Regional Economics (ALH) (see Appendix P),[2] as well as the San Joaquin County General Plan[3] and the associated General Plan EIR.[4]

1 CEQA Guidelines Section 15064(e), 15064(f)(6), 15131, and 15182.
2 ALH Urban & Regional Economics. *Pacific Gateway Urban Decay Study*. December 2024.
3 San Joaquin County. *San Joaquin County General Plan.* Adopted December 2016.
4 San Joaquin County. *San Joaquin County 2035 General Plan Environmental Impact Report*. Certified October 2014.

4.13.2 EXISTING ENVIRONMENTAL SETTING

When considering urban decay, it is important to first understand the inventory of uses within San Joaquin County that are similar to the types of uses proposed as part of the project. A brief summary of the proposed development is included below.

The proposed project includes implementation of a Specific Plan that would result in up to 24,675,000 square feet (sf) of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.5-acre University campus plus 9.8 acres for future expansion, a Veterans of Foreign Wars (VFW) post, and various open space, parks, a new fire station, stormwater management basins, and pedestrian and bicycle facilities within the 1,576.7-acre project site.

Industrial Market Characteristics

County Overview

Information related to the locational context and economic base of San Joaquin County is provided below.

Locational Context

San Joaquin County is located east of the Bay Area's Alameda County in California's Central Valley. The County encompasses almost 920,000 acres, extending from the Delta and the Diablo Range (with its Altamont Pass) to the west and to the start of the foothills of the Sierra Nevada in the east. Much of the County is relatively level with rich agricultural lands. Stockton is the County seat and is the largest city. Other major cities are Tracy, Manteca, and Lodi, with smaller incorporated areas including Mountain House, Lathrop, Ripon, and Escalon. Tracy is the westernmost city in San Joaquin County.

San Joaquin County has an extensive transportation network that includes four major freeways: Interstate 5 (I-5), California's primary north-south freeway; I-580, which connects to the Bay Area; I-205, which connects I-5 and I-580; and State Route (SR) 99, a secondary north-south freeway connecting to Fresno and Bakersfield. Smaller highways include SR 4, SR 12, SR 26, SR 120, and SR 132. The Port of Stockton is a major inland deep-water port that connects to the Pacific Ocean. The County also has two national rail lines, both of which have intermodal facilities, and a regional airport.

Due to the County's proximity to the Bay Area, San Joaquin County has experienced tremendous residential growth, with residents attracted by its relatively affordable housing stock. The advantage of lower land and building prices has also promoted industrial development throughout the County, expanding upon its historic agricultural-related industrial base.

Economic Base

The economic base of San Joaquin County, as well as a comparison to the State of California, is presented below.

San Joaquin County

San Joaquin County is a heavily agricultural county, with prime agricultural land historically and currently supporting agriculture and related businesses. Historic information about San Joaquin County's employment base from 1990 through 2023 is summarized in Table 4.13-1.

Table 4.13-1
San Joaquin County Employment Trends, 1990 – 2023

Industry Sector[1]	Employment			Percent of All Employment			CAGR[3] (percent)		
	1990	2020	2023	1990	2020	2023	'90-'20	'20-'23	'90-'23
Total Farm	37,800	14,600	14,100	22.3	5.7	4.9	-3.1	-1.2	-0.3
Goods Producing	34,200	33,300	37,400	20.2	12.9	12.9	-0.1	4.1	0.3
Foods Manufacturing[2]	*8,000*	*5,600*	*6,000*	*4.7*	*2.2*	*2.1*	*-1.2*	*2.3*	*-0.9*
Wholesale Trade	6,700	10,600	12,300	4.0	4.1	4.3	1.5	5.1	1.9
Retail Trade	18,000	24,600	27,200	10.6	9.5	9.4	1.0	3.4	1.3
Transportation, Warehousing, & Utilities	6,100	38,800	46,800	3.6	15.1	16.2	6.4	6.4	6.4
Information	2,700	1,200	1,100	1.6	0.5	0.4	-2.7	-2.9	-2.7
Financial Activities	9,400	7,800	8,000	5.5	3.0	2.8	-0.6	0.8	-0.5
Professional & Business Services	9,300	21,300	23,700	5.5	8.3	8.2	2.8	3.6	2.9
Educational & Health Services	16,900	37,300	42,200	10.0	14.5	14.6	2.7	4.2	2.8
Leisure & Hospitality	11,700	18,500	24,600	6.9	7.2	8.5	1.5	10.0	2.3
Other Services	4,800	6,800	8,200	2.8	2.6	2.8	1.2	6.4	1.6
Government	34,000	43,000	43,000	20.1	16.7	15.0	0.8	0.3	0.7
All Industry Employment	**169,400**	**257,800**	**288,900**	**--**	**--**	**--**	**1.4**	**3.9**	**1.6**

Notes:
1 Comprises major industry sectors, each of which has numerous sub-sectors. The sub-sectors are not included herein.
2 This sub-sector is included because it is relevant to the historic agricultural orientation of San Joaquin County.
3 Compound annual average growth rate (CAGR).

Source: ALH Urban & Regional Economics, 2024.

Table 4.13-1 indicates that County employment totaled 169,400 in 1990, increasing to 288,900 in 2023. This growth reflects a 1.6 percent compound annual average growth rate (CAGR), meaning year over year the County experienced average growth of 1.6 percent. Over this 33-year time frame, most of the major industry sectors experienced growth, but three did not: Total Farm, Information, and Financial Activities. The Farm sector shrunk by a 0.3 percent CAGR, while the Information sector experienced a loss of 1,600 jobs, comprising a decline of 2.7 percent CAGR between 1990 and 2023. The Financial Activities sector remained relatively flat with a nominal 0.5 percent decline in CAGR, with employment dropping from 9,400 in 1990 to 8,000 in 2023.

Despite San Joaquin County's historic stronghold in the agricultural sector, Total Farm employment declined by 1,500 jobs from 1990 to 2023, while Food Manufacturing lost 2,000 jobs. By 2023, given the rise of employment in other sectors and the drop in Total Farm and Food Manufacturing employment, combined Total Farm and Food Manufacturing employment comprised seven percent of the County's employment, down from 14 percent in 1990. However, even with this relative decline in importance to San Joaquin County's employment base, these agriculture-oriented sectors continue to comprise a significant share of the economy relative to other areas of California.

As shown in Table 4.13-1, the Transportation, Warehousing, & Utilities sector experienced substantial growth, with jobs increasing eightfold from 6,100 in 1990 to 48,800 in 2022, representing a 6.4 percent CAGR. The Transportation, Warehousing, & Utilities sector drives demand for industrial space, and in 2023 comprised the County's largest industry sector. As a consequence of the sector's strong growth, employment in the Transportation, Warehousing, & Utilities sector increased significantly from 3.6 percent of all County employment in 1990 to 16.2 percent of all County employment in 2023. Other sectors increased their share of total County employment over this time, but to a lesser extent. Notable examples include Educational & Health Services increasing from 10.0 percent to 14.6 percent, Professional & Business Services increasing from 5.5 percent to 8.2 percent, and Leisure & Hospitality increasing from 6.9 percent to 8.5 percent.

State of California Comparison

Table 4.13-2 presents employment trends for all of California, paralleling the information presented for San Joaquin County in Table 4.13-1. As shown in Table 4.13-2, Total Farm employment throughout California comprised 2.8 percent of all statewide employment in 1990, dropping to 2.2 percent in 2023. Similar to San Joaquin County, Food Manufacturing declined, comprising 1.4 percent of State employment in 1990 and only 0.9 percent in 2023. Thus, the combined food-related sectors in San Joaquin County continue to be comparatively stronger sectors, with seven percent of all employment in 2023, when compared to the statewide combined share of 3.2 percent.

Other significant sectoral differences between San Joaquin County and the State of California include the State's much lower share of total employment in the Transportation, Warehousing, & Utilities sector (4.6 percent) and its much higher shares of employment in the Professional & Business Services (15.2 percent), Educational & Health Services (17 percent), and Leisure & Hospitality (11 percent) sectors.

Overall, employment grew 1.1 percent on an annual average basis throughout California from 1990-2023. The State's annual average employment growth rate is below San Joaquin County's 1.6 percent annual average growth rate.

Table 4.13-2
State of California Employment Trends, 1990 – 2023

Industry Sector[1]	Employment			Percent of All Employment			CAGR (percent)		
	1990	2020	2023	1990	2020	2023	'90-'20	'20-'23	'90-'23
Total Farm	363,700	406,800	406,700	2.8	2.5	2.2	0.4	0.0	0.3
Goods Producing	2,650,100	2,144,800	2,267,200	20.5	12.9	12.4	-0.7	1.9	-0.5
Foods Manufacturing[2]	*174,500*	*155,200*	*169,300*	*1.4*	*0.9*	*0.9*	*-0.4*	*2.9*	*-0.1*
Wholesale Trade	533,500	646,900	667,300	4.1	3.9	3.7	0.6	1.1	0.7
Retail Trade	1,436,400	1,510,700	1,609,500	11.1	9.1	8.8	0.2	2.1	0.3
Transportation, Warehousing, & Utilities	429,100	735,100	830,200	3.3	4.4	4.6	1.8	4.1	2.0
Information	393,200	535,700	559,000	3.0	3.2	3.1	1.0	1.1	1.1
Financial Activities	822,000	818,400	814,300	6.4	4.9	4.5	0.0	-0.1	0.0
Professional & Business Services	1,515,700	2,605,100	2,775,400	11.7	15.7	15.2	1.8	2.2	1.8
Educational & Health Services	1,163,000	2,738,300	3,100,000	9.0	16.5	17.0	2.9	4.2	3.0
Leisure & Hospitality	1,106,800	1,481,800	2,010,600	8.6	8.9	11.0	1.0	10.7	1.8
Other Services	415,600	477,700	587,900	3.2	2.9	3.2	0.5	7.2	1.1
Government	2,074,800	2,493,300	2,603,700	16.1	15.0	14.3	0.6	1.5	0.7
All Industry Employment	**12,904,200**	**16,593,800**	**18,231,700**	**--**	**--**	**--**	**0.8**	**3.2**	**1.1**

Notes:
1 Comprises major industry sectors, each of which has numerous sub-sectors. The sub-sectors are not included herein.
2 This sub-sector is included because it is relevant to the historic agricultural orientation of San Joaquin County.

Source: ALH Urban & Regional Economics, 2024.

Therefore, growth in San Joaquin County over the indicated period outpaced the California state average, demonstrating the comparative strength of San Joaquin County's overall economy.

Transportation and Warehousing Sector Strength

Information about the national and regional context related to the Transportation and Warehousing sector, as well as the County's growth in the Transportation and Warehousing sector, is provided below.

National and Regional Context

The relative strength of San Joaquin County's Transportation and Warehousing sector is well-researched and identified in an April 2019 paper prepared by The Center for Business and Policy Research, University of Pacific. The paper was prepared for the San Joaquin Council of Governments (SJCOG), and was titled "Warehousing, E-Commerce, and Evolving Trade Patterns in San Joaquin County" (SJCOG Study). The SJCOG Study analyzes and identifies many aspects of the goods movement system in San Joaquin County, including the shares of total employment in the sector compared to the shares in other U.S. and Northern California locations.

The SJCOG Study's findings are based on data through 2017. The period used in the SJCOG Study is not as current as the data presented above, which reflect employment trends through 2023. Nonetheless, even with the SJCOG Study's data reflecting a nominally truncated period, the analysis demonstrates the importance of the Transportation and Warehousing sector to the County's economy. As demonstrated later in this analysis, because Utilities employment comprises a relatively small portion of the larger Transportation, Warehousing, & Utilities sector, the following discussion focuses on Transportation and Warehousing only.

A discussion of San Joaquin County's employment location quotient (LQ) in the Transportation and Warehousing sector is one of several important economic indicators presented in the SJCOG Study. The LQ is a standard economic indicator used in the study of regional economics to convey the relative strength of a sector, both to the local economy under study, as well as across geographic locations. As defined by the U.S. Bureau of Economic Analysis:

> "A location quotient (LQ) is an analytical statistic that measures a region's industrial specialization relative to a larger geographic unit (usually the nation). An LQ is computed as an industry's share of a regional total for some economic statistic (earnings, GDP by metropolitan area, employment, etc.) divided by the industry's share of the national total for the same statistic. For example, an LQ of 1.0 in mining means that the region and the nation are equally specialized in mining; while an LQ of 1.8 means that the region has a higher concentration in mining than the nation."

As cited in the SJCOG Study, San Joaquin County's LQ in the Transportation and Warehousing sector stayed stable at about 1.12 times the national share of employment prior to 1995. After 1995, the County's relative concentration in transportation and warehousing employment grew dramatically, "reaching 1.71 times the national concentration in 2005, 2.33 times in 2015, and 2.65 times in 2017," the last year reflected in the SJCOG Study. The SJCOG Study proceeds to indicate that the County's strong growth in the sector led to San Joaquin County having the nation's second highest concentration of transportation and warehousing jobs, second only to the logistics hub in Laredo, Texas, on the U.S.-Mexico border. Other metro areas in the top five logistics hubs included Memphis, Tennessee; Houma-Thibodaux, Louisiana; and Chambersburg-Waynesboro, Pennsylvania. It is important to note that these rankings are based on the share of

total employment in the transportation and warehousing sector, and not the absolute number of jobs in the sector.

Given that San Joaquin County's employment in the Transportation, Warehousing, & Utilities sector has grown since 2017, ALH anticipates that the County would continue to maintain its national status as a highly concentrated logistics hub. As a point of comparison, based upon the data presented in Table 4.13-1 and Table 4.13-2, and compared to the State of California, San Joaquin County had a LQ in the Transportation, Warehousing, & Utilities sector of 1.08 in 1990 and 3.56 in 2023.[5] For perspective, the County's LQ for Total Farm employment relative to the State was 7.92 in 1990, declining to 2.19 in 2023. The foregoing comparison further demonstrates the importance of the Farm sector to San Joaquin County, albeit to a lesser extent than the Transportation, Warehousing, & Utilities sector.

The SJCOG Study also presented data on the share of Transportation and Warehousing jobs in San Joaquin County in 2013 and 2017 compared to other Northern California locations. The findings presented therein indicated that the County had more than twice the share of jobs in the Transportation and Warehousing sector than the next highest locations, which were nearby Merced and Stanislaus counties. Other areas reflected in the analysis included Solano, Sacramento, Napa, Santa Clara, Sonoma, and Monterey counties, as well as the San Francisco-Oakland-Hayward Metropolitan Statistical Area. San Joaquin County also experienced the greatest percentage job growth over this period, measured at 53.2 percent, although the County's growth was nearly matched by the percentage growth that occurred in the much smaller hubs of Santa Clara County and Solano County. All other regional locations had less than 30 percent growth between 2013 and 2017, with many less than 20 percent.

County Rise in Prominence and Sectoral Composition

Table 4.13-3 demonstrates San Joaquin County's growth in just the Transportation and Warehousing sector. This compares to the earlier findings in Table 4.13-1 that also included Utilities employment in the sector, which some data sources bundle together with transportation and warehousing.

Table 4.13-3
San Joaquin County Transportation and Warehousing Employment Trend, 1990 – 2023

Employment Characteristic	1990	2000	2010	2020	2023	CAGR 1990-2023
Transportation and Warehousing Employment						
Amount	5,100	10,700	12,700	37,300	45,100	6.8
Share of All Industry Employment (percent)	3.0	5.2	6.1	14.5	15.6	--
All Industry Employment						
--	**169,400**	**203,900**	**208,300**	**257,700**	**288,900**	**1.6**

Source: ALH Urban & Regional Economics, 2024.

[5] The LQ is calculated by dividing the "Percent of All Employment" in the Transportation, Warehousing, & Utilities sector for San Joaquin County, as presented in Table 4.13-2, by the "Percent of All Employment" in the Transportation, Warehousing, & Utilities sector for the State, as presented in Table 4.13-3, for the cited time period.

The data presented in Table 4.13-3 shows the more incremental stages of sectoral growth by decade from 1990 to 2023. As shown therein, the biggest period of growth was between 2010 and 2020, when Transportation and Warehousing employment grew from 6.1 percent to 14.5 percent total County employment. However, nearly 8,000 jobs were added between 2020 and 2023, for a very strong period of growth.

The annual average growth rate in Transportation and Warehousing absent the influence of jobs in Utilities was 6.8 percent. The comparative figure with Utilities presented in Table 4.13-1 was 6.4 percent. The difference highlights the relative stagnancy in the Utility sub-sector, with the growth concentrated in Transportation and Warehousing employment.

Competitive Market Area

In the context of the existing market of the County, the City of Tracy, located approximately one mile northwest of the project site, is considered to be a competitive market. Tracy is the first city encountered by those travelling east over the Altamont Pass from the Bay Area, and is accessed via two freeways: I-580 and I-205. Thus, this City has a strong locational advantage in San Joaquin County's market. Lathrop, located northeast of Tracy at the intersection of I-5 and SR 120, is also considered a competitive market, primarily due to Lathrop's supply of newer, modern, warehouse buildings (some older product exists in Lathrop as well). Stockton, north of Lathrop with access to both I-5 and SR 99, is secondarily competitive mainly due to distance and its older industrial base. Finally, brokers interviewed by ALH indicate that Patterson, located in western Stanislaus County, about 18 miles southeast of the project site, should be considered a secondary competitive location at minimum. Patterson is a very small submarket that functions mainly as a release valve for the more established San Joaquin County market.

San Joaquin County Industrial Market Overview

The following presents an overview of the industrial market of San Joaquin County, including statistics from 2024, historic industrial market trends, and tenants in the market.

San Joaquin County Second Quarter 2024 Statistics

The San Joaquin County industrial market includes the cities of Tracy, Lathrop, and Stockton, as well as additional smaller cities of Manteca, Lodi, and Ripon, which are not considered competitive. According to the UDS, as of third quarter 2023, warehouse product dominates the market, with 77 percent of the inventory, or 106.4 million sf out of the total industrial inventory of 138.4 million sf. Stockton has the largest inventory of space, comprising 49.8 million sf of warehouse space and a total industrial inventory of 64.2 million sf, or about 46 percent of the County's market for both warehouse and industrial space. Tracy is the second largest market area, with 30.4 million sf of warehouse space (28.6 percent of the County's market) and 35.7 million sf of total industrial space. Lathrop is the smallest of the three with about 16.5 million sf of warehouse space and 19.2 million sf of overall industrial space.

Warehouse space is the dominant product type in Tracy and Lathrop, with over 85 percent of each city's inventory comprising warehouse space. Stockton, which is an older market area, has a slightly more diverse product base, with warehouse comprising 78 percent of the market. In terms of new construction, all the product under construction is in the warehouse market subset, totaling approximately 900,000 sf in Stockton. Warehouse space also dominates year-to-date net absorption (through third quarter 2024), which measures the net change in occupied square footage.

Historic Industrial Market Trends

The UDS used information provided by CoStar, one of the nation's largest commercial real estate information and analytics providers, to reflect industrial market trend data from 2007 to September 2024. The geographic area covered by CoStar includes both San Joaquin and Stanislaus counties. As brokerage data indicate that San Joaquin County comprises about 75 percent of the two-county building base, San Joaquin County drives much of the data presented. The space tracked includes all industrial building types, including warehouses.

During the 17.75-year period covered, the industrial inventory grew from 144 million sf to 211.5 million sf as of September 2024. The amount of vacant space has been as low as 4.7 million sf in 2016 and as high as 20 million sf in 2009, during the Great Recession. As of September 2024, approximately 13.6 million sf are vacant, as tracked by CoStar. Figure 4.13-1 presents period trends in vacant sf and vacancy rates, which are discussed in additional detail below.

Vacancy Trends

Figure 4.13-1 illustrates the market cycle from just before the Great Recession, the impact of the Great Recession in 2009 and 2010, followed by gradual recovery to a vacancy low in 2016. Since then, there has been strong construction activity that has increased the vacancy rate. The 2024 vacancy rate through September 2024, reported at 6.4 percent, is lower than the third quarter 2024 vacancy rate reported at 7.8 percent. While higher than the 2016 market low of 2.9 percent, the vacancy rates in the 5.0 percent to 6.5 percent range since 2021 are nonetheless considered healthy vacancy rates. Over the longer term, the two-county vacancy rate has averaged closer to 7.5 percent.

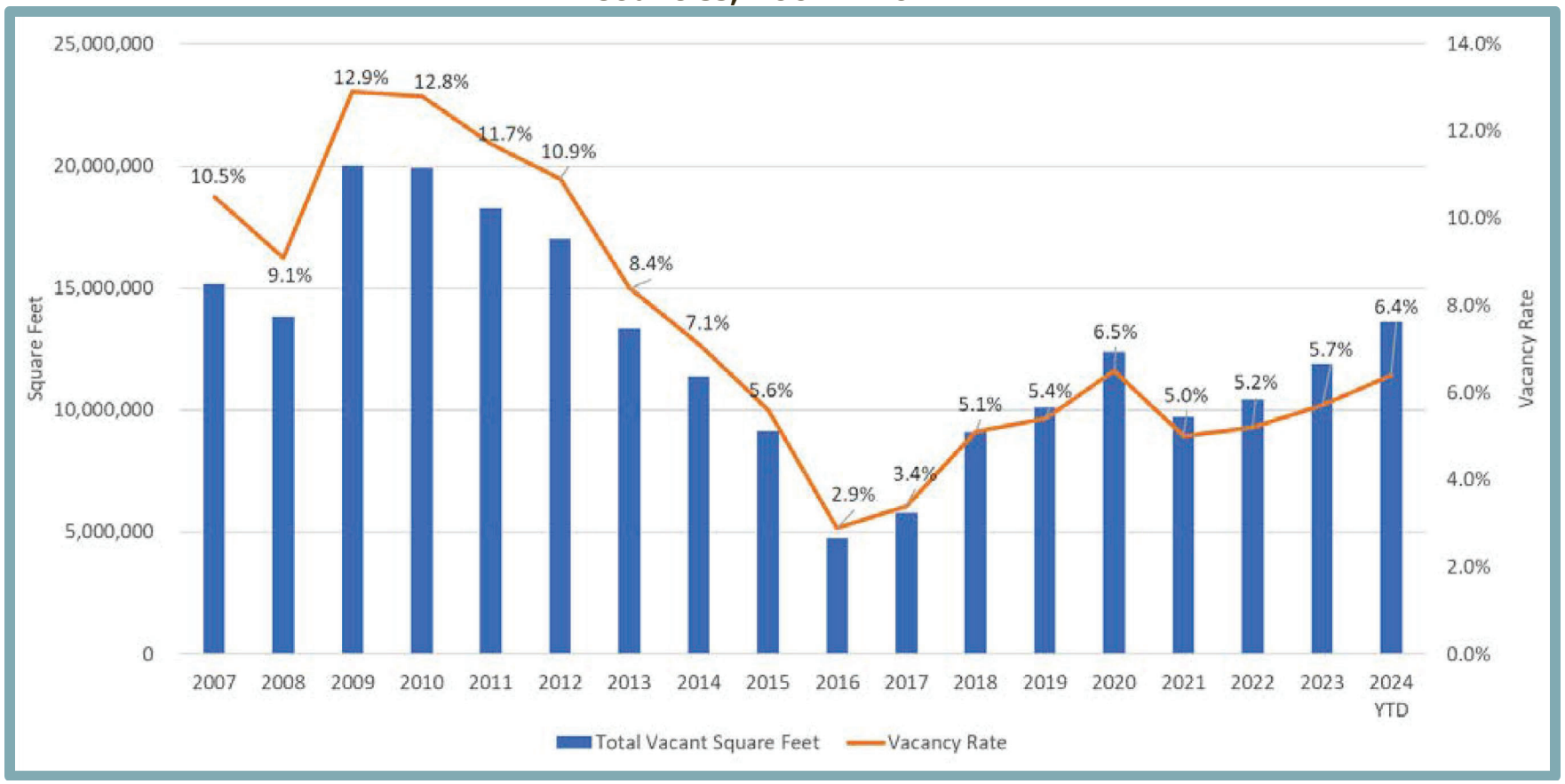
New Construction

Since 2007, 69.25 million sf of new industrial space has been completed in San Joaquin and Stanislaus counties, or about 3.9 million sf per year, which represents nearly one third of the market inventory. Measuring from Great Recession recovery (i.e., 2014 on), 52.2 million sf of new industrial space has been completed in the two-county area, for a higher average of 4.9 million sf per year. The pace of new construction accelerated over the past 5.75 years (2019 to third quarter 2024), with 34.2 million sf completed; nearly half of the new space since 2007. This averages 5.95 million sf added per year from 2019 to third quarter 2024. Figure 4.13-2 below illustrates annual new construction deliveries and net absorption for the period covered.

Net Space Absorption

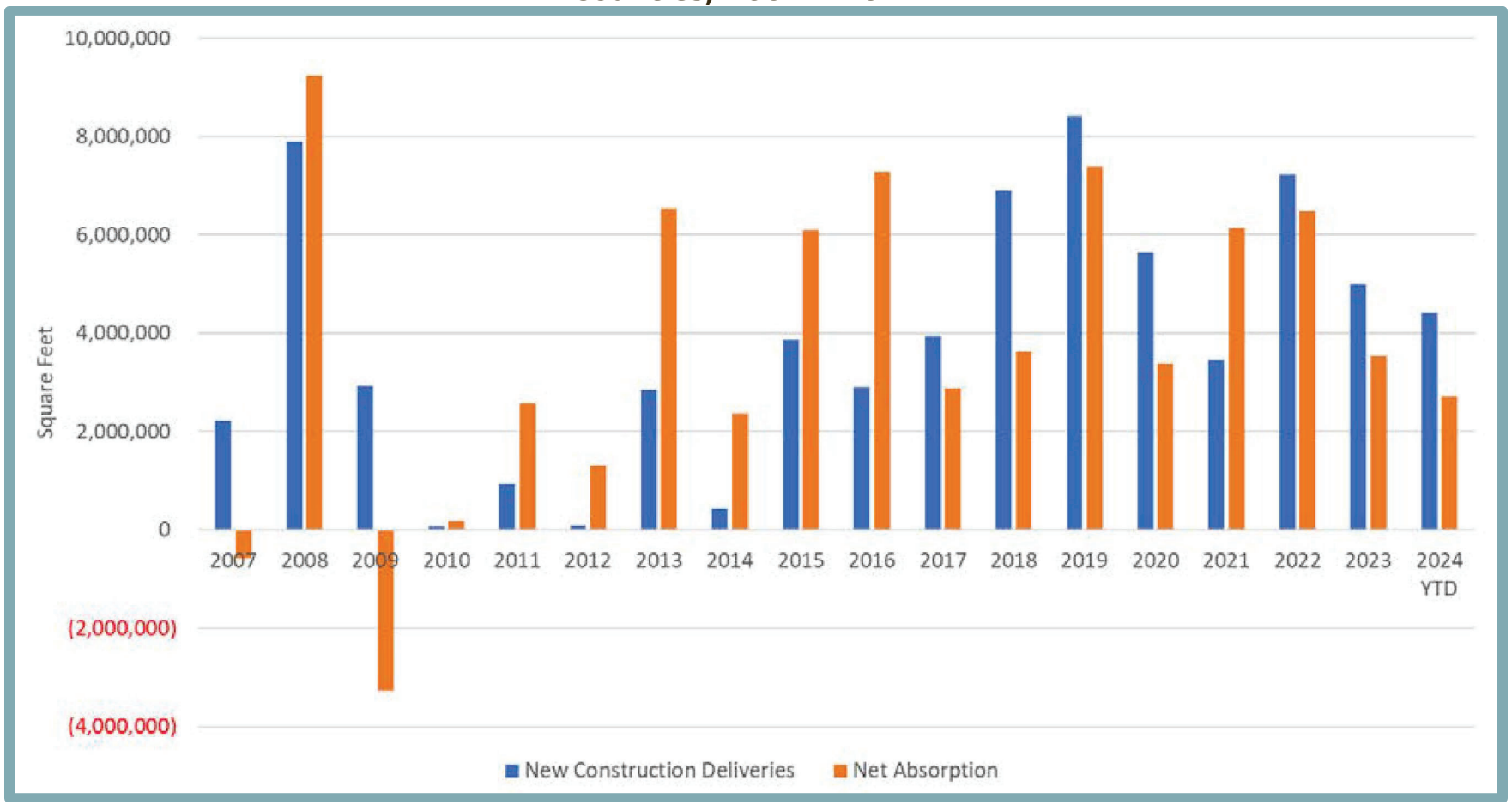
As shown in Figure 4.13-2, at the onset of the Great Recession in 2008, the market still absorbed a significant amount of space, i.e., 9.25 million sf, which was nearly matched by new construction of 7.9 million sf. However, net absorption was significantly negative in 2009, and just barely positive in 2010. From 2011 through 2014, new building deliveries were minimal, consistent with a recovering economy, so the market could stabilize. New construction deliveries started outpacing net absorption in 2017. In 2020, the COVID-19 pandemic resulted in slower market absorption, which was again dwarfed by new building completions. In 2021, the reopened and rebounding economy resulted in increased net absorption compared to construction completions, followed by another strong year of net absorption in 2022.

Figure 4.13-1
Industrial Market Vacant Square Feet and Vacancy Rate Trends in San Joaquin and Stanislaus Counties, 2007 – 2024



Source: ALH Urban & Regional Economics, 2024.

Figure 4.13-2
Industrial Market New Construction Deliveries and Net Absorption San Joaquin and Stanislaus Counties, 2007 – 2024



Source: ALH Urban & Regional Economics, 2024.

Over the 10.75 years from 2013 to September 2024, net absorption totaled 51.97 million sf, or 4.8 million sf per year. Looking at the 5.75 years between 2018 and 2024, net absorption totaled 29.7 million sf, or 5.16 million sf per year. Net absorption thus far for 2024 was off that pace at 2.7 million sf, reflecting uncertainty due to high interest rates and geopolitical concerns, as well as likely a pause in demand after two very strong years in 2021 and 2022. Typically, the market will respond to less favorable conditions by slowing down future construction activity to allow absorption to catch up with new completions.

Change in Average Building Size

CoStar data also illustrate the change in the industrial building inventory over the years. Table 4.13-4 below presents snapshots of the building inventory and new construction deliveries between 2007 and September 2024.

Table 4.13-4
Industrial Building Inventory Sizes in San Joaquin and Stanislaus Counties, 2007 – 2024

Year/Time Period	Number of Buildings	Total Building Size (sf)	Average Size (sf)
Total Inventory Snapshot			
2007	3,476	143,979,840	41,421
2024	3,786	211,503,178	55,865
New Construction Deliveries			
2007 to 2024	393	69,249,678	176,208
2013 to 2024	176	52,233,768	296,783
2019 to 2024	118	34,189,696	289,743

Source: ALH Urban & Regional Economics, 2024.

As shown in Table 4.13-4, the average building size in the inventory increased 35 percent from 41,421 sf in 2007 to 55,865 sf as of 2024. This is due to the comparatively larger buildings being constructed since 2007. The average size of new buildings constructed over the 17.75-year period is 176,208 sf, more than triple the current inventory average building size. However, in looking at construction over the 10.75 years since 2014, the average building size of new buildings increased to 296,783 sf. The increase reflects the completion of several buildings in the 1,000,000-sf range for tenants such as Amazon, Medline, Michaels, Wayfair, and others.

The increasing building size reflects the evolution of warehouses to include subsets such as logistics and fulfillment centers, driven by the growth in eCommerce. According to an October 2020 report published by the National Association of Industrial and Office Properties (NAIOP), "e-commerce supply chains require more than three times the distribution space required by traditional retail supply chains centered on brick-and-mortar distribution." Not only have warehouse buildings become larger (often exceeding 1,000,000 sf), ceiling heights (called "clear ceiling heights" or "clear heights") have become higher. Buildings also now have more power, more extensive heating/ventilation/air conditioning (HVAC) systems, more loading doors, and reinforced concrete floors able to withstand heavier loads. Additionally, occupants of these facilities often make extensive investments in interior improvements and equipment. Because of these changes, newer industrial buildings are vastly different from product built in the 20th Century, as well as those built in the early 2000s.

Business Park Use Considerations

In addition to the 24,675,000 sf of industrial space, the proposed project is also planned to include 93,000 sf of business park space (I-P Zoning). The purpose of the proposed business park space is to provide a business park environment consisting of smaller buildings to be used for combined office/warehouse uses including research and development, light impact manufacturing (such as assembly), HVAC contractors, electricians, plumbing contractors and window installation and other service-related businesses, such as janitorial service and supply vendors. User spaces typically include limited warehouse area mostly serviced by grade level doors for delivery.

The 93,000 sf of business park space is one of the smallest components of the proposed project. Given that this space will include smaller buildings intended for multiple tenants, each individual tenant space will be relatively small. According to the UDS, user demand for the small tenant spaces is likely to comprise start-up or established businesses with local area ownership or targeted to serve the project's 24,675,000 sf of industrial users. Such uses are unlikely to be competitive with the light industrial stock in Tracy or beyond, all of which are about seven or more miles distant from the project site. Furthermore, the existing light industrial stock in Tracy, the geographically closest established market, is well-occupied with a 4.9 percent occupancy rate and approximately 735,000 sf of inventory. Due to the lack of competitiveness, the proposed business park use is not evaluated in the context of potential urban decay, as vacancy impacts on existing stock are likely to be very limited.

Market Area Industrial Demand

The approach to projecting industrial demand in the project area, as well as the results of the analysis, are discussed below.

Approach to Projecting Demand

The degree to which absorption of the project's industrial buildings could impact the existing competitive market would be dependent upon growth in demand for industrial space in San Joaquin County as well as Patterson in Stanislaus County. The following information presents employment projections in relevant employment sectors and assumptions regarding per employee square footage requirements. The following estimates are compared with net absorption based on market trends for reasonableness and provide a context for absorption of the project as well as additional planned developments addressed later in the cumulative project analysis.

Forecasted Industrial Employment

The results of the forecasted industrial employment analysis is presented below.

Forecasted Employment

Employment forecasts for San Joaquin and Stanislaus counties are summarized in Table 4.13-5, below. The analysis presented therein was calculated based in part on estimates provided by the State of California Employment Development Department (EDD) using the methodology described in the Method of Analysis section of this Chapter. Table 4.13-5 includes the 2020 baseline employment estimate, the CAGR deduced by ALH, and projected employment for the year 2024 and each subsequent year up to 2060 in ten-year intervals, for each County. Total forecasted growth between 2023 and 2060 is also presented.

Table 4.13-5
Transportation and Warehousing Employment Projections in San Joaquin and Stanislaus Counties, 2024 – 2060

2020	CAGR (percent)	Projected Employment					Growth 2024-2026
		2024	2030	2040	2050	2060	
San Joaquin County							
37,300	3.04	42,039	50,300	67,831	91,472	123,352	81,313
Stanislaus County							
8,748	2.48	9,649	11,178	14,283	18,251	23,320	13,671

Source: ALH Urban & Regional Economics, 2024.

The results in Table 4.13-5 indicate that San Joaquin County's Transportation and Warehousing sector is projected to grow by 81,313 to 123,352 new jobs between 2024 and 2060, for an average increase of 293 percent over the existing 2024 sectoral employment base.

The projected average rate of growth in Stanislaus County is slightly lower than the average in San Joaquin County. Additionally, Stanislaus County has a much smaller sectoral employment base than San Joaquin County. Stanislaus County's projected 2024 to 2060 growth in Transportation and Warehousing employment is 13,671. While these figures comprise more than a doubling of the existing base, the 2024 employment base in Stanislaus County is 23 percent of that of San Joaquin County and is projected to decline slightly to 19 percent by 2060.

Given the long-term nature of the projections, the forecasts presented in Table 4.13-5 are somewhat speculative. However, there are many drivers of demand for jobs in warehousing and logistics, specifically impacting jobs in the transportation and warehousing sector. Such drivers include the continuing growth of ecommerce, which was expanding strongly before the COVID-19 pandemic and accelerated during the pandemic, further fueling demand. During the early months of the pandemic, when stay-at-home orders were in effect, many stores were closed and those that were open operated with strict occupancy restrictions. In addition, consumers were apprehensive about being near other people. Thus, on-line shopping boomed in the early part of the pandemic. Even after the economy re-opened, a portion of the increased shift to on-line shopping is considered permanent.

Another pandemic-driven demand driver for warehouse space is the realization of the fragile nature of "just-in-time delivery" systems. With disrupted supply chains, particularly those that rely on cargo ships, many companies realized they should plan for additional domestic storage of products, parts, and materials. Some people call this new inventory management strategy "just-in-case" inventory management. Finally, yet another pandemic-related demand driver for the overall industrial sector, not just warehousing, is the realization that more manufacturing should be domestic, again due to the aforementioned supply-chain issues. As a result, many companies are seeking to expand domestic manufacturing capacity.

Estimated Employment Density

To convert the forecasted employment growth to space demand, ALH used the employment density factor of 1,650 sf per employee. This density factor is based on analysis of data collected by Fehr & Peers for warehouse buildings located in San Joaquin County in 2021. The building warehouse survey was a component of other project-related analysis conducted by Fehr & Peers pertaining to traffic analysis assumptions and projections. Most of the buildings included in this

analysis are located in the project's market area spanning Stockton, Tracy, and Lathrop, with a few additional properties in other San Joaquin County locations (e.g., Manteca and Lodi). An additional factor included in the analysis is a stabilized building occupancy rate of 93 percent, based on historic CoStar occupancy rates and market data provided by Cushman & Wakefield.

Forecasted Industrial Demand

Pairing the Transportation and Warehousing sector projections for San Joaquin County and Stanislaus County with the sf per employee and occupancy rate assumptions results in estimated long-term demand for industrial space. The demand forecasts for San Joaquin County and Stanislaus County are presented below.

San Joaquin County

The industrial demand forecasts for San Joaquin County are summarized in Table 4.13-6 below.

Table 4.13-6
Transportation and Warehousing, Employment Projections and Net New Space Demand in San Joaquin County, 2024 – 2026

Demand Characteristic	2024-2040 (sf)	2040-2060 (sf)	Total (sf)
Employment Increase	25,792	55,521	81,313
Projected Demand	45,759,680	98,504,921	144,264,602
Annual Average Demand per Year	2,859,980	4,925,246	3,899,043

Source: ALH Urban & Regional Economics, 2024.

The findings shown in Table 4.13-6 indicate that San Joaquin County's net new space demand for the Transportation and Warehousing sector is projected to total 144.3 million sf through 2060. Based on the summary presentation depicting two interim time periods, from 2024-2040 and 2040-2060, the average projected net new absorption totals nearly 2.86 million sf per year from 2024-2040 and 4.9 million sf per year from 2040-2060.

San Joaquin County has an existing inventory of 138.4 million sf of industrial space in 2024. Thus, if realized and housed in industrial properties, the new demand equates to a 104 percent increase in San Joaquin County's existing inventory.

Stanislaus County

Patterson, one of the secondary competitive industrial market cities, is located in Stanislaus County. Patterson is the only area in Stanislaus County deemed competitive with the industrial market of the proposed project. However, according to ALH, Patterson's industrial real estate base totals only 6.3 million sf, or only 15 percent of the total County inventory. Thus, only a portion of the projected Stanislaus County demand for Transportation and Warehousing space, summarized in Table 4.13-7, may be relevant to Patterson.

Table 4.13-7
Transportation and Warehousing, Employment Projections and Net New Space Demand in Stanislaus County, 2024 – 2026

Demand Characteristic	2024-2040 (sf)	2040-2060 (sf)	Total (sf)
Employment Increase	4,634	9,037	13,671
Projected Demand	8,221,274	16,033,535	24,254,809
Annual Average Demand per Year	513,830	801,677	655,535

Source: ALH Urban & Regional Economics, 2024.

As shown in Table 4.13-7, Stanislaus County's net new space demand for the Transportation and Warehousing sector is projected to total 24.3 million sf. For the time period 2024-2040, demand is estimated to average 513,830 sf per year, increasing to an annual average of 801,677 sf from 2040-2060. Patterson has an existing inventory of 6.3 million sf of industrial space. If 15 percent of the County's industrial stock continues to be located in Patterson, this would suggest an average total demand in Patterson from 2024-2060 for 3.6 million sf (i.e., 24.3 million x 15 percent), or a 58 percent increase in the existing inventory. This would correspond to annual average demand of 77,074 sf from 2024-2040 and 120,252 sf from 2040-2060. ALH determined that the potential exists for Patterson to absorb more than its proportional share of current demand, as this node has the potential to rise in prominence relative to other, older industrial nodes in Stanislaus County, such as in Modesto.

The combined annual average demand for San Joaquin and Stanislaus counties is 4.0 million sf for the total period of 2024 to 2060. This annual average demand is within the range of historical net absorption per year in the two-county area as reported by CoStar, which has been 3.8 million sf annually, on average, for the 17.75 years from 2007 to September 2024. For just the 10.75 years from 2014 to mid-2024, annual average absorption was even higher at 4.8 million sf. Thus, comparison with historic net absorption indicates that the long-term projections are reasonable.

Hotel Component

The context for the proposed hotel component of the proposed project is discussed below.

Context for Pacific Gateway Planned Hotel

The proposed project includes a 60,000-sf, 100-room hotel in the Gateway Center development area. The project site is distant from most existing commercial development, with the closest hotel competition located about 10.5 miles away in Tracy. Therefore, ALH defined the competitive market for the proposed hotel as the City of Tracy. Eight hotels exist in Tracy, with a total of 608 rooms.

Existing Supply of Tracy Hotels

The Tracy hotel supply was identified through internet research and review of a list of hotels maintained by Smith Travel Research (STR), a company that tracks supply and demand data for the hotel industry and provides market share analysis. ALH reviewed a list of hotels in Tracy that participate in STR's trend analysis, which includes operating trends such as rooms, average daily room rate, demand, supply (measured by rooms available per period), and revenue, among other characteristics. ALH then researched room rates for the listed hotels.

The existing Tracy hotels represent three classes of hotel, including economy, midscale, and upper midscale. Upscale or upper upscale hotels are not present in the market. Overall, 608 rooms are distributed among the eight hotels. All of the hotels are located between 10.5 and 12.8 miles from the project site, which is a substantial distance, indicating that the proposed hotel would be uniquely situated without proximate competition. The hotels range in size from 57 rooms at the Best Western Luxury Inn (Midscale Class) to 102 rooms at the Holiday Inn Express & Suites Tracy (Upper Midscale Class). Over half of the inventory are properties constructed before 2000. Only one hotel is relatively new – the 94-room Home2 Suites by Hilton (Midscale Class), which was completed in 2021. This property has the highest room rate of the group.

ALH conducted field reconnaissance to examine the physical condition of the existing hotels. All of the existing hotels were found to be in good general repair, with attractive physical conditions and few signs of deterioration or urban decay, such as litter, graffiti, weeds, or rubbish.

Historic and Current Hotel Performance

STR provided a summary report of the performance of the eight Tracy hotels from 2016 through October 2024. The STR data include a supply estimate, which reflects the summation of the number of rooms available per month times the number of days in the period. This is effectively a measure of the number of room nights available among the competitive supply throughout the year. As of October 2024, a total of 18,848 room nights were available among the eight hotels. STR also measures demand, which is based on occupancy reported by the participating hotels. Annual demand has fluctuated over the period covered, with a low during the 2020 pandemic and a high in 2021 as the economy reopened. Demand has been decreasing since 2021. This is illustrated by the market-wide occupancy rate which peaked at 81.9 percent in 2021, but has since declined to 67 percent in 2023; the average occupancy rate through October 2024 is 69 percent. Over the 2016-2024 period, the average full-year occupancy rate is 75.4 percent.

Projected Hotel Demand and Occupancy

ALH developed a hotel demand projection using the existing supply and performance characteristics as a base, which is then grown out pursuant to projected population and employment growth. The County's population is anticipated to increase at an average annual growth rate of 0.7 percent between 2024 and 2030, and at an average annual growth rate of 1.1 percent between 2030 and 2035. The average annual growth rate for County employment is 1.5 percent over the entire period. The average of the population and employment growth rates is 1.1 percent between 2024 and 2030 and 1.3 percent between 2030 and 2035.

Based on the demand projection, and absent any new additions to supply in Tracy, hotel occupancy is projected to increase annually, resulting in high levels relative to industry standards. In general, a hotel occupancy rate of 70 percent is considered an optimal industry standard occupancy rate. Tracy hotel market occupancy levels are projected to rise to over 75 percent by 2026 (near the eight-year average), and reaching over 80 percent by 2032, the year the proposed hotel is assumed to be completed. These estimates are summarized in Table 4.13-8, which also includes the eight-year market occupancy history.

As shown in Table 4.13-8, without the addition of new supply, the occupancy rate is assumed to exceed the industry standard optimal occupancy rate. These high occupancy rates are a strong indicator that the market would benefit from the addition of new supply, to avoid periods of total booking for select hotels and thus potential hotel guests seeking lodging in other markets.

Table 4.13-8
Historic and Projected Tracy Area Hotel Occupancy

Year	Annual Occupancy (percent)
2016	79.6
2017	77.9
2018	79.6
2019	75.2
2020	68.0
2021	81.9
2022	74.4
2023	67.0
2024	73.8
2025	74.5
2026	75.3
2027	76.2
2028	77.0
2029	77.8
2030	78.6
2031	79.7
2032	80.7

Note: Values above the bolded lane are historic and values below the bolded line are projected.

Source: ALH Economics, 2024.

Retail Component Support

The proposed project includes retail space as a largely ancillary use. While the proposed project includes a total of 160,000 sf of commercial space, the project includes two areas with planned retail space, including 49,592 sf in the Gateway Center and 38,908 sf in the University Center, for a total of 88,500 sf of retail space. The amount of proposed retail space is not enough square footage to comprise a shopping center with a critical mass, especially because the retail will not be concentrated in one place, but rather distributed across the project site. Accordingly, the proposed retail square footage would have two primary purposes. The primary purpose of the University Center retail space would be to provide convenience shopping and dining opportunities for tenants and visitors of the project, as well as the University students living on campus. The primary purpose of the Gateway Center space would be to capture drive-by traffic to/from the Bay Area via I-580, I-5, SR 132, and SR 99.

University Center Retail Support

Given the primary purpose of the University Center's 38,908 sf of retail space, the most likely sources of demand include employee spending, hotel guest spending, and student spending. The following addresses each of these sources of demand.

Employee Retail Spending Potential

For employee daytime retail demand estimates, ALH drew upon findings from the International Council of Shopping Centers (ICSC) regarding office worker retail spending during the workday. The office worker spending patterns were adapted to the range of workers anticipated to work at the proposed project based on income proportionality between San Joaquin County's office-based workers and the relevant project-based employment sectors.

For the purpose of the underlying analysis, ICSC conducts its office worker retail spending survey on a recurring basis, with the most recent survey findings released in early 2012. The survey includes analysis of office worker spending near their work location, including analysis by type of retail good (e.g., restaurants and fast food, groceries, and all other goods and services), as well as spending patterns in urban and suburban areas, including areas with or without ample retail (e.g., major shopping centers or significant retail nodes near the office location). These spending estimates include retail sales made during the workday, including near the work location as well as some before and after work as well. Given the location of the project site, the figures are benchmarked to suburban locations without ample retail. The resulting estimate is approximately $11,076 per year in office worker daytime spending near the work location in 2024 dollars. This figure rounds up to $11,100 when the main constituent spending categories of restaurants/fast food, groceries, and all others are rounded to the nearest $100.

Because project employees would include workers that are not traditional office employees, ALH adjusted the office worker spending estimate on a pro rata basis in accordance with the differential in annual average wages for office workers in San Joaquin County and select other types of workers anticipated at the project. The relative wages for office workers and select other types of workers in San Joaquin County are derived from United States Bureau of Labor Statistics employment data and payroll for San Joaquin County for 2023 and inflated to 2024 dollars. Pursuant to the pro rata wage adjustments, the estimated daytime spending estimate is $10,200 per year for Pacific Gateway's industrial workers, $9,400 per year for University workers, $8,700 per year for retail workers, and $8,100 per year for hotel workers. ALH determined that some of these estimates are conservative, especially for the industrial workers, as average incomes for these workers may be higher than estimated using countywide economic data.

Total annual employee daytime retail spending is estimated based on the maximum anticipated number of on-site employees by land use. Employee counts include 14,955 industrial workers, 300 University workers, 94 retail workers, and 60 hotel workers. With the employee counts, and the estimated annual retail spending by type of employee, the annual retail spending generated by all employees totals approximately $157 million, including $31 million for Restaurants and Fast Food, $23 million for Groceries, and $103 million for All Other. Notably, these are maximum figures, reflecting purchases across several areas, including locations to and from the work location.

Employee Supportable Retail Space

ALH converted the project employee retail spending estimate to supportable square feet based upon generalized industry standard sales per square foot by type of space. With a vacancy adjustment, the supportable square feet findings across all employees total approximately 48,400 sf, of which 17,800 sf are for Restaurants and Fast Food, 3,500 sf are for Groceries, or convenience store shopping, and 27,100 sf are for All Other, which could include yet additional sundries along with other goods.

Pacific Gateway Hotel Guests

Additional retail and restaurant sales are anticipated to be generated by hotel guests of the project's planned 100-room hotel. Assuming an industry-standard 65 percent occupancy rate, and 1.5 average guests per room, the project hotel is estimated to generate 35,590 (rounded) annual average guests. Incorporating a governmental allowance assumption of $74 per guest on food and incidentals, the hotel guests are estimated to generate $2.6 million in food and traveler-related incidental sales. The amount of demand translates into a nominal 4,600 sf of supportable

space for restaurants as well as stores selling incidentals. While a small amount of space, it is nonetheless an additional increment of space supportable by the uses planned for the proposed project.

Student Retail Spending Potential

The University students would also generate demand for University Center retail. Currently the buildout student population is estimated to total 5,000, with 1,600 student beds available on the campus. Thus, 1,600 students are assumed to live on-campus and the balance of 3,400 students are assumed to live off-campus. Student budget spending patterns would vary somewhat depending upon student living status. ALH obtained student budget information for the University of the Pacific, a university in nearby Stockton, as an illustrative proxy for the annual spending of the project's University students. ALH then paired each budget category with an estimated University Center retail capture rate, as the students would be somewhat of a captive population for their non-educational spending needs. These assumed capture rates range from zero percent for several non-retail categories such as rent and transportation, to a range of 10 percent to 20 percent for off-campus students for personal items, books and supplies, and food, and five percent to 33 percent for on-campus students, for food, books and supplies, and personal items.

Based on the number of students, estimated annual retail spending per student captured at the University retail, and a weighted average retail sales per sf estimate and retail vacancy rate, ALH translated the estimated student spending into an estimate of supportable University Center retail space. The weighted average retail sales per sf figure was derived from the earlier employee spending estimates. The results of the analysis suggest the University's students may have the potential to support 18,320 sf of University Center retail space.

4.13.3 REGULATORY CONTEXT

Applicable federal and State laws or regulations pertaining to urban decay do not exist. The existing local regulations applicable to the proposed project are listed below.

Local Regulations

The following local regulations are applicable to the proposed project.

San Joaquin County Code of Ordinances

The San Joaquin County Code of Ordinances includes many regulations designed to maintain the physical condition of properties in the County unincorporated areas. Such regulations, therefore, further serve to keep urban decay conditions at bay. The sections of the Code most applicable to urban decay characteristics, including sections addressing graffiti, weeds and rubbish, illegal dumping, and nuisance abatement, are summarized below.

The portion of the Code that directly pertains to graffiti includes Title 6 – General Welfare, Division 3. – Public Order, Chapter 6. Graffiti Abatement. This section addresses graffiti vandalism on public and privately-owned structures and real property. The County's many findings about graffiti (see section 6-3600, Findings) include finding that graffiti degrades the community, causes an increase in crime, and is inconsistent with the County's property maintenance goals and aesthetic standards. Accordingly, graffiti is subject to abatement and punishment pursuant to the Code. Of most relevance to conditions of urban decay, the Code requires removal of graffiti no longer than 10 days after notification by the County (see section 6-3604, Removal of Graffiti). In section 6-3605, Right of County To Remove, the County Code has provisions for the use of public funds to abate the graffiti if it is viewable from a public or quasi-public place. Additional provisions exist for

the County to recover the funds spent on graffiti abatement if the graffiti was caused or committed by a minor (see section 6-3610, Recovery of County Funds), or from the property owner (see section 6-3616, Abatement Procedures).

Title 4 – Public Safety, Division 1 – Fire Prevention, Chapter 6 – Abatement of Hazardous Weeds and Rubbish, of the County Code addresses the abatement of hazardous weeds and rubbish that constitute a public nuisance and fire hazard, with rubbish including items such as printed material, cardboard boxes, and combustible refuse (among others). The Fire Warden has jurisdiction over these concerns, which includes directing County abatement of the conditions if not satisfied by the property owner (see section 4-1055, Abatement), among other provisions.

In Title 8 Building Regulations, Division 5 – Housing and Nuisance Abatement Code, Chapter 7 – Securement of Unsafe Condition, section 8-5600, Findings for Securing Unsafe Conditions, the County Code identifies that unsecured conditions that are unsafe are considered a public nuisance, and will require securement. Sample conditions cited in the Code include unsecured openings, including unboarded windows and doorways, and other conditions deemed hazardous by the County Health Officer or authorized representative. Section 8-5601, Unlawful Not To Secure After Notice, then identifies it is unlawful for the unsafe condition to not be secured, generally within a ten-day timeframe of notification (section 8-5605, Securing Unsafe Condition After Ten Day Notice). The Code further stipulates that the owner of record shall be responsible for all costs associated with securing the unsafe condition (see 8-5608, Liability For Cost Of Securement).

City of Stockton Municipal Code

The City of Stockton has many components of the City's Municipal Code that are designed to ward off the types of conditions that lead to urban deterioration or decay. For example, Title 8 Health and Safety, Chapter 8.24 Graffiti, section 8.24.040, Graffiti prohibited, states that it is unlawful for any person to apply graffiti on any public or privately owned property, structure, or surface within the City. Then, if such graffiti occurs and is reported to the City, Title 16 Development Code, Division 3. Site Planning and General Development Regulations, Chapter 16.32, General Performance Standards, includes section 16.32.060, Graffiti, which indicates that all graffiti should be removed within 48 hours after notification by the City of Stockton. Yet additional portions of the City's Municipal Code (section 8.24.060, Right of City to Remove) has provisions for the City to abate the graffiti if it is not attended to by a responsible person within 48 hours of City notification.

Additional provisions in the Health and Safety portion of the Stockton Municipal Code pertain to the destruction and removal of weeds, rubbish, refuse and dirt. Section 8.08.040, Notice to destroy weeds and rubbish, indicates that such items on private property comprise a public nuisance, which must be abated without delay or the City of Stockton will take charge with the associated cost of destruction or removal assessed upon the relevant lots and land as a lien until such time as it is paid.

In Stockton's Municipal Code, unsecured buildings are also deemed a public nuisance, and dangerous to the health and safety of the city's inhabitants. In Title 15 Buildings and Construction, Chapter 15.28, Abatement of Dangerous Buildings Code, section 15.28.060 Existence of unsecured buildings – a public nuisance, this includes unoccupied structures with free entry through unsecured openings, broken and unboarded windows and doorways. If notified of such a public nuisance by the City, section 15.28.070 Unlawful not to secure after notice, stipulates

that it must be secured within 10 days, after which time the City may do the work, paid for by the building owner, agent, lessee, or other person. (section 15.28.110, Securing by City after ten-day period).

Of greatest relevance to concerns about urban decay is the portion of Stockton's Municipal Code that addresses abandoned and vacant property. Specifically, Title 15 Buildings and Construction, Chapter 15.32, Maintenance, Security and Rehabilitation of Abandoned and Vacant Property, addresses neglected, vacant, and abandoned properties that can be a source of blight, especially when not maintained and managed in a manner that ensures they do not become a liability to the surrounding community. In section 15.32.020, Definitions, the City of Stockton defines evidence of vacancy as conditions such as overgrown and/or dead vegetation; accumulation of newspapers, circulars, flyers, etc.; accumulation of trash, junk and/or debris; and, for residential properties, the absence of window coverings and furnishings or personal items consistent with residential habitation, etc. The City further lays out maintenance requirements for properties in section 15.32.040, Maintenance requirements, including maintaining the property free of graffiti by removal or painting over with paint that matches the color of the structure exterior; keeping the property free of junk, debris, etc.; and rehabilitating a boarded up building for occupancy within 180 days of being boarded, among others. The City's Code further requires the property owner to inspect the abandoned or vacant property on a monthly basis to ensure the property is in compliance with the city's requirements (section 15.32.060, Inspection). The City of Stockton's concerns about abandoned and vacant buildings are emphasized per section 15.32.100, Violation – Penalty, which establishes that violations of this Chapter of the Municipal Code are subject to prosecution and administrative enforcement.

As the above review indicates, the City of Stockton, similar to San Joaquin County, has existing regulations designed to address numerous property conditions that could comprise precursors to urban decay. Thus, enforcement of these regulations could additionally shore up market-driven activities designed to maintain existing properties and ward off urban decay and deterioration if such conditions begin to be observed among Stockton's larger scale industrial properties.

City of Tracy Municipal Code

The City of Tracy also has many components of the City's Municipal Code that are designed to ward off the types of conditions that lead to urban deterioration or decay. One such component is the City's Chapter on Graffiti Control, i.e., Chapter 3.48 – Graffiti Control. As stated in the Code, "The purpose of this chapter is to provide a program and enforcement tools, in addition to those already provided by state law, for removal of graffiti from walls and structures on both public and private property and to prevent and control the further spread of graffiti in the City." The provisions of this Chapter include making it unlawful for property owners or others in control of any property to allow graffiti to be placed or remain on a permanent structure, for anyone to apply graffiti, or for anyone to aid, abet, or encourage another to produce graffiti. Such graffiti visible from public property, public right-of-way, or private property open to the public is to be declared a public nuisance, and may be abated through the authorization of City funds, whereas private property owners are required to remove graffiti at their own expense within 10 days of City removal notification. If this private property removal does not occur within the required timeframe the City has the authorization to arrange for the abatement and bill the property owner or place a special assessment against the parcel if not paid within 30 days of invoicing.

The City of Tracy Municipal Code also has numerous provisions prohibiting the accumulation of rubbish and refuse. These include section 4.12.265, Accumulation of rubbish and refuse

prohibited, section 5.04.010, Throwing rubbish on streets unlawful, and section 4.12.260, Weeds, Rubbish, refuse, and flammable materials public nuisances. In the case of accumulated rubbish and refuse, the Code requires that the accumulation should not remain on a lot for longer than seven days, with several City methods of enforcement, such as the issuance of infractions or administrative citations.

In Chapter 9.60 – Boarding of Buildings With Unsecured Openings, the City of Tracy's Municipal Code declares that vacant buildings with unsecured windows and doors or other openings (e.g., broken or missing) are a public nuisance and contribute to blight within the City, as they can be a nuisance to children, harbor rats, increase fire risk, and depress surrounding property values. The City actually requires such openings to be temporarily boarded up, after receipt of a boarding permit that specifies the number and location of the openings to be boarded. These permits are to be issued for no more than six months, unless renewed upon request and for good cause. The City sets standards for this temporary boarding, including specifying the type of plywood, and also requires that the plywood be painted a dark gray or similar earth color or a color compatible with the subject building's exterior. Thus, while evidence of boarded up doors and windows can be an indicator of urban decay, implementation of the City of Tracy's standards converts these signifiers instead to signs of compliance with City regulations, intended, however, to be temporary pending repair, rather than more long-term and thus more likely to be construed as indicators of urban decay.

City of Lathrop Municipal Code

The City of Lathrop's Municipal Code is less extensive than the Codes referenced for the other market area cities, with fewer sections or less well-developed sections addressing some of the topics most associated with concerns about urban decay. This is likely attributable to the Lathrop's incorporation as recently as 1989, compared to 1850 for Stockton and 1910 for Tracy. However, similar to the cities of Stockton and Tracy, the City of Lathrop also has graffiti controls addressed in the Municipal Code, including sections on the prohibition of graffiti (section 9.12.040, Graffiti prohibited) and the removal of graffiti within 48 hours of notice by the City (section 9.12.050, Removal of graffiti). These sections are included in Title 9 Public Peace and Welfare, Chapter 9.12, Graffiti. Similar to the other municipalities, the City also has the right to remove the graffiti if the responsible party does not comply with the removal requirements (section 9.12.060, Right of city to remove). In addition, penalties are in place for the act of graffiti vandalism (section 9.12.070, Penalty provisions – Administrative citations).

Further, the City of Lathrop Municipal Code has a section that addresses nuisances on nonresidential property (Title 8 Health and Safety, Chapter 8.24, Property Nuisances and Dust Control, section 8.24.050, Unlawful nonresidential property nuisances), making it unlawful to maintain a nonresidential property with certain conditions visible from the public street for an unreasonable period of time, including the following (among others): accumulation of dirt, litter, or debris; overgrown vegetation; graffiti; vehicle parts or other abandoned personal property; and broken or discarded furnishings. Violations of these provisions are subject to enforcement and penalty, pursuant to Title 1 General Provisions, Chapter 1.12, Administrative Enforcement Procedures.

In contrast to the other jurisdictions reviewed above, Lathrop does not appear to have controls in place associated with vacant or abandoned nonresidential property, other than vehicles or nonconforming structures or sites, although such controls do exist for residential property. Nor

are there provisions in the Lathrop Municipal Code regulating procedures for boarding up properties with unsecured openings.

City of Patterson Municipal Code

Similar to the cities discussed above, the City of Patterson Municipal Code includes components designed to address conditions that lead to urban deterioration or decay. Most notable for this purpose is Title 6 Health and Safety, Chapter 6.18, Neglected and Vacant Structures. The City lays out maintenance requirements for vacant properties in section 6.18.090, Appearance, including maintaining the property free of graffiti, ensuring that exterior surfaces are applied with the same color and/or style of finish as adjoining areas, and maintaining visible front and side yards with landscaping to the neighborhood standard. City standards regarding the prohibition and removal of graffiti are further codified in Chapter 6.50, Graffiti, of the City of Patterson Municipal Code, and Chapter 6.16, Property Maintenance, of the City's Municipal Code further establishes standards related to maintaining appearance standards of vacant properties.

4.13.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to urban decay. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

An impact related to urban decay is considered significant if the proposed project would:

- Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects (CEQA Guidelines Section 15064[e], 15064[f][6]; 15131, and 15182).

Method of Analysis

ALH engaged in numerous tasks to prepare the project-specific UDS (see Appendix P)[6] assessing the potential urban decay impact of the proposed project. The general tasks pursued include the following:

- Conduct site and field reconnaissance;
- Collaborate with local brokers, identify a competitive market area for the project's industrial component, and assess existing conditions;
- Estimate demand for industrial space in the market area;
- Assess project impacts;
- Identify and assess cumulative project impacts; and
- Identify urban decay implications of the proposed project's industrial and hotel components and cumulative projects.

In fulfilling the foregoing tasks, ALH relied upon a number of key resources. Such resources including governmental resources, including the California EDD, planning department websites for the cities of Tracy and Lathrop, planning department staff for the cities of Patterson and Stockton, and SJCOG. Additional third-party resources include Fehr & Peers; Page Architects; David Babcock + Associates; Ridgeline Property Group; Cushman & Wakefield; Colliers; CoStar;

[6] ALH Urban & Regional Economics. *Pacific Gateway Urban Decay Study*. December 2024.

brokerage firm, real estate investment trust, and developer websites; Loopnet; and Woods & Poole, a national resource for demographic estimates and projections.

The methodology for the forecasted industrial employment, as well as the limitations of the projected industrial demand, presented below.

Forecast Methodology

The earlier San Joaquin County overview and economic base analysis indicated that the Transportation and Warehousing industry sector is most associated with logistics employment and building occupation. Accordingly, ALH developed 2024 estimates of employment in this sector, and then forecasted employment out to the year 2060. The year 2060 is four years after the projected 2056 completion of the proposed project.

The foregoing estimates and forecasts were prepared for San Joaquin County and Stanislaus County. For both counties, the base year 2024 estimate was prepared by starting with the State of California EDD year 2020 estimate and then growing it out to 2024, which in turn were grown out to the year 2060. The future employment per County was estimated using 2020-2030 EDD projections, with the 10-year CAGR extended into the future up to the year 2060 to encompass full project buildout. This is a study assumption that the 10-year rate will apply equally to the subsequent decades, as EDD does not project beyond the 2030 timeframe.

The proposed Specific Plan indicates that the majority of the project site would be zoned Limited Industrial, which is intended to provide for warehouse, distribution, fulfillment center, ecommerce, advanced manufacturing, light manufacturing and assembly, and other such industrial uses. This description continues to be best exemplified by the Transportation and Warehousing industry sector, especially as the EDD employment projections provide only general estimates and projections for light manufacturing and industrial uses, and, thus, do not lend themselves to supporting the preparation of space demand projections. For these types of activities, the data source provides only general manufacturing employment projections (e.g., EDD's categories of Durable Goods Manufacturing, Nondurable Goods Manufacturing, and Food Manufacturing). Thus, the more conservative approach is to base the space projections methodology on a narrower sector with the greatest applicability to the project.

Limitations of Forecasted Demand

The preceding demand projections are intended to give a general sense of the projected industrial demand in San Joaquin and Stanislaus counties. The figures are not precise estimates, and actual results achieved during the projection period would likely vary from the demand projections. Changes would occur if employment growth varied from the levels deduced from currently available economic data and other relevant information. Key economic data central to the demand projections include the employment growth rates derived from EDD and Woods & Poole economic forecasts, as well as employment density parameters. However, the demand projections comprise an indicator useful to the urban decay analysis and generally indicate a likely trend toward future growth and associated industrial demand.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to aesthetics is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.13-1 Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects associated with industrial uses. Based on the analysis below, the impact is *less than significant.*

Given that both the Initial Phase and full Specific Plan buildout would result in the development of industrial uses on contiguous parcels, the following discussion applies to both project components. In addition, the analysis includes an evaluation of the off-site roadway improvements triggered by the proposed project.

Initial Phase, Specific Plan Buildout

Full buildout of the proposed project would include 24,675,000 sf of new industrial space. The proposed industrial space comprises a 17.8 percent addition to the existing 138.4 million sf industrial inventory in San Joaquin County (as of the third quarter of 2024). As presented above, the San Joaquin County economy as a whole is projected to experience demand for industrial space in the near- and long-term future. For example, the demand projected from 2024 to 2040 totals 45.8 million sf. During the 2024 to 2040 period, Pacific Gateway East is anticipated to be developed with 11,124,274 sf of industrial uses, along with a portion of Pacific Gateway Central with 6,856,474 sf, which is pro-rated at 22 percent, or 1,523,661 sf. The project total of 12,647,935 sf represents approximately 28 percent of the forecast San Joaquin County demand from 2024 to 2040.

Considering the longer-term projection, the balance of the Pacific Gateway Central development area (5,332,813 sf), plus the Pacific Gateway West and Gateway Center development areas (6,168,882 square feet and 525,370 square feet, respectively) are anticipated to be delivered in the 2040 to 2060 period (e.g., by 2056). Projected demand during this time totals 98.5 million sf, or 4.9 million sf per year. For the time period from 2040 to 2060, the project's space represents approximately 12 percent of the forecast demand in San Joaquin County. Overall, the project represents less than one-fifth of the County's demand for the 2024 to 2060 period.

For the project's industrial space to potentially have a negative impact on the market, which would thus have the potential to result in urban decay, the project would need to draw tenants away from existing buildings without the potential for that space to be re-tenanted, thus increasing the vacancy rate to an unhealthy level. ALH identified four major factors that suggest these circumstances are unlikely to happen:

1. As described above, ample projected demand exists compared to the project's expected supply. Although in the period up to 2040 the project's anticipated phases represent 28 percent of projected demand, this ratio falls to 12 percent over the next 20 years from 2040 to 2060, when project buildout is estimated.
2. The vacancy rate of 7.8 percent as reported by Colliers for San Joaquin County indicates the market is relatively healthy. CoStar statistics for the two-county market area of San Joaquin and Stanislaus counties show a 6.4 percent vacancy rate, well below that experienced during the height of the Great Recession: 13.1 percent in 2009 and 2010. Although net absorption has slowed in relation to construction deliveries since 2021, developers have responded by postponing breaking ground on new buildings.

3. Development of the project would be driven by market conditions and tenant demand. To the extent that demand for the project's industrial buildings is less robust than expected, then construction would slow to better align with demand. This may mean that development timing of later phases could be pushed further out into the future.
4. Finally, as previously discussed, warehouse buildings have evolved over the past 10 to 15 years and, as a result, older product is not as competitive with modern warehouses. New buildings are often larger and have higher ceiling heights than older buildings. Additionally, modern warehouses often have more power, more extensive HVAC systems, and are built to withstand heavier loads.

Based on the above, the proposed project is not anticipated to negatively impact the existing industrial base in San Joaquin County or in Patterson in Stanislaus County.

Off-Site Improvements Study Area

As discussed further in Chapter 3, Project Description, of this EIR, future potential development within the Off-Site Improvements Study Area would consist of improvements to existing roadways, and would not include any industrial development. As such, future development within the Off-Site Improvements Study Area would not cause the potential for urban decay.

Conclusion

Based on the above, the industrial development associated with the proposed project is not anticipated to cause significant adverse physical impacts related to economic and social changes and/or effects associated with urban decay. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

4.13-2 Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects associated with hotel uses. Based on the analysis below, the impact is *less than significant.*

As part of full buildout of the proposed Specific Plan, the proposed project would include the development of a 100-room hotel within the Gateway Center development area. Development of the proposed hotel would not be included in the Initial Phase of the proposed project. The following discussion applies to both project components. In addition, the analysis includes an evaluation of the off-site roadway improvements triggered by the proposed project.

Initial Phase, Specific Plan Buildout

In order to assess the proposed project's potential market impact, ALH took the future projection of hotel room supply and demand and then examined the occupancy impacts with the addition of just the project's planned hotel rooms. The project's 100

rooms are added to the supply in 2033. The results of this analysis are summarized in Table 4.13-9, below.

Table 4.13-9
Historic and Projected Tracy Area Hotel Occupancy with the Proposed Project Hotel

Year	Annual Occupancy (percent)
2016	79.6
2017	77.9
2018	79.6
2019	75.2
2020	68.0
2021	81.9
2022	74.4
2023	67.0
2024	73.8
2025	74.5
2026	75.3
2027	76.2
2028	77.0
2029	77.8
2030	78.6
2031	79.7
2032	80.7
2033	70.2
2034	71.1
2035	72.1
2036	73.0

Note: Values above the bolded lane are historic and values below the bolded line are projected.

Source: ALH Economics, 2024.

The resulting supply and demand analysis reflecting the addition of just the proposed project indicates that absent any other additions to new supply, the competitive market is estimated to achieve annual occupancy of 80.7 percent prior to the first full year of project hotel operations. Once the project hotel enters the market, occupancy is projected to drop, as the supply of rooms outpaces demand. The initial occupancy rate is projected to drop by 13 percent, or to 70.2 percent, as the project hotel is anticipated to increase the existing supply by 16 percent (from 608 to 708 rooms). This is both a large increase in supply and corresponding decline in occupancy. However, the projected occupancy of 70.2 percent is nonetheless greater than the optimal industry occupancy rate of 70 percent, as well as what the market experienced in 2023 and 2020. Subsequent to 2033, the occupancy rate is forecasted to modestly improve each year, remaining in the low 70 percent range. Given these projections, therefore, ALH believes the competitive hotel market would likely manage to continue operations, without the closure of any existing competitive hotels. Accordingly, the expectation is that the project's market introduction would not cause any existing hotel to experience an occupancy decline so severe as to result in closure and risk the potential for the hotel property to experience physical decline.

It is difficult to predict how demand might increase with the availability of a hotel in a new market location south of Tracy, as well as the future location of the University, which would comprise an additional, unique, source of demand for the hotel. The University would likely generate a steady stream of demand, peaking at key points in time such as initial student move-in, graduation, and end of year move-out. These peaks would generate seasonal peaks in demand, especially at the project hotel (versus the other more distant hotels). This would be a gradual impact on demand, as the hotel is anticipated to be completed more than a decade before the full buildout of the University.

Based on the above, the proposed project is not anticipated to negatively impact the existing base of hotel operations in the City of Tracy.

Off-Site Improvements Study Area

As discussed further in Chapter 3, Project Description, of this EIR, future potential development within the Off-Site Improvements Study Area would consist of improvements to existing roadways, and would not include any hotel development. As such, future development within the Off-Site Improvements Study Area would not cause the potential for urban decay.

Conclusion

Based on the above, the hotel development associated with the proposed project is not anticipated to cause significant adverse physical impacts related to economic and social changes and/or effects associated with urban decay. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

4.13-3 Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects associated with retail uses. Based on the analysis below, the impact is *less than significant.*

Given that both the Initial Phase and full Specific Plan buildout would result in the development of retail uses on contiguous parcels, the following discussion applies to both project components. In addition, the analysis includes an evaluation of the off-site roadway improvements triggered by the proposed project.

Initial Phase, Specific Plan Buildout

The proposed project would include the development of commercial uses located within the University Center and the Gateway Center development area. Retail development is not included as part of the Initial Phase of the proposed project.

The internally generated retail demand estimates from employee (project-wide), hotel guest, and University student spending suggest the potential to annually support over 70,000 sf of retail space, which exceeds the 38,908 sf of retail planned for the University Center, strongly suggesting that the retail space is likely to be supportable.

In addition, ALH did not identify cumulative retail developments in the site vicinity, which would result in focusing demand at the project's retail space and limiting the potential for any urban decay to result from development of the University Center retail space.

As discussed above, compared to the University Center retail, it is not as easy at this juncture to estimate demand for the Gateway Center retail space given a lack of specificity of the composition of the retail tenants. However, the next nearest highway-related retail nodes are approximately 10 miles northwest and 10 miles southeast of the project site, which suggests a gap in the market for highway travelers needing to stop for a break, restock supplies, get a meal or a snack, etc. Such distance will limit the potential for negative impacts on these existing nodes, and will heighten demand for Gateway Center retail.

Off-Site Improvements Study Area

As discussed further in Chapter 3, Project Description, of this EIR, future potential development within the Off-Site Improvements Study Area would consist of improvements to existing roadways, and would not include any hotel development. As such, future development within the Off-Site Improvements Study Area would not cause the potential for urban decay.

Conclusion

Based on the above, the retail development associated with the proposed project is not anticipated to cause urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region. Other proposed and pending projects in the region under the cumulative context would generally include buildout of the project site in conjunction with the cumulative development within the same market area. A summary of such projects in the region is included in Exhibits 7 and 8 of the UDS prepared for the proposed project (see Appendix P). For more details regarding the cumulative setting, refer to Chapter 6, Statutorily Required Sections, of this EIR.

ALH did not identify cumulative retail developments in the project vicinity and, thus, ALH concluded that the proposed project, in combination with cumulative development, would not cause adverse physical impacts related to urban decay associated with retail development.

4.13-4 Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects in combination with cumulative development associated with industrial uses. Based on the analysis below, the impact is *less than significant*.

Given that both the Initial Phase and full Specific Plan buildout would result in the development of industrial uses on contiguous parcels, the following discussion applies to both project components.

Planned Future Supply of Industrial Space

In order to identify potential future projects for the cumulative analysis, ALH prepared a cumulative supply list based on information from San Joaquin County and the cities of Lathrop, Stockton, and Tracy, as well as the City of Patterson in Stanislaus County (see Exhibits 7 and 8 of Appendix P to this EIR). The future supply list includes 35 projects that are 150,000 sf or larger and are under construction, approved, under review, or are future phases of established industrial parks. Table 4.13-10 below summarizes the potential future supply by status and location.

As indicated in Table 4.13-10, Tracy has the greatest amount of potential future supply at 17.7 million sf (30 percent of total), followed by Stockton at 15.2 million sf (26 percent of total). Patterson has 12.8 million sf, followed by Unincorporated San Joaquin County at 8.6 million sf.

Lathrop has the smallest potential future supply, comprising 5.2 million sf, or nine percent of the total. Stockton has the most space currently under construction, while Lathrop has the most space approved. Stockton has the most space under review and Patterson has the most space in the future phases of master-planned industrial parks, closely followed by Tracy.

Two projects are under construction in the cumulative setting of the proposed project, with a total of 2.2 million sf of space: a new Walmart fulfillment center totaling 1,422,961 sf in Stockton and an 820,000-sf building in Patterson that is slated to be 50 percent occupied by its owner, Safavieh, Inc. The likely timing of completion of these projects is in 2025 to 2026.

The approved projects category totals 12.8 million sf, about 21 percent of the total, in 13 buildings/projects. Five of the projects are in Lathrop, including buildings at TriPoint Logistics Center and Lathrop Gateway, as well as the Ashley Furniture distribution center totaling 1.4 million sf. The remaining areas each have two approved projects. The largest approved project is in Stockton, a three-building development totaling 2.27 million sf by Arnaiz Development.

Table 4.13-10
Industrial Space Future Supply Summary by Location and Status

Development Status	Tracy	Lathrop	Stockton	Unincorporated San Joaquin County	Patterson	Total
Under Construction	0	0	1,422,961	0	820,000	2,242,961
Approved	859,238	4,891,376	3,471,726	1,435,855	2,100,820	12,759,015
Under Review	9,826,233	0	10,349,827	5,360,000	0	25,536,060
Future Phases	7,036,891	272,496	0	1,822,117	9,840,411	18,971,915
Totals						
Square Feet	17,722,362	5,163,872	15,244,514	8,617,972	12,761,231	59,509,951
Percent of Total	30	9	26	14	21	100

Source: ALH Urban & Regional Economics, 2024.

The under review category includes 15 entries totaling 25.5 million sf, or 43 percent of the total. Most of the under review projects are in Tracy, including three buildings at the International Park of Commerce, plus two Costco developments. The largest project under review is South Stockton Commerce Center in Stockton with 6.1 million sf. Another large project under review in unincorporated San Joaquin County in the Tracy sphere of influence, Prologis is pursuing entitlements for Phase 2 of its International Park of Commerce, with 5.36 million sf in five buildings.

The future phases of master-planned industrial parks category totals 18.97 million sf, 84 percent of which is in two projects: 7.0 million sf representing future phases at IPC in Tracy; and 8.9 million sf of future phases at I-5 Trade Center in Patterson. Other future phases include approximately 1.8 million sf at North Tracy Commerce Center, 272,500 sf at TriPoint Logistics Center, and the estimated unbuilt balance of 970,800 million sf at Keystone Pacific Business Park in Patterson.

Cumulative Industrial Project Impacts

The purpose of an urban decay analysis is not to conduct a market study to determine the degree to which demand for a planned project does or does not exist, but rather to assess what impact the proposed project could have on the existing real estate base assuming it is built.

The same applies to analysis under the cumulative projects scenario. Sometimes demand analysis is a component of the urban decay analysis, to assess the degree to which future demand may provide overall market support and thus offset any negative impacts that might be attributable to the project and cumulative projects under study. Such is the case in this analysis, where the following discussion examines the relationship between projected cumulative project supply, including the proposed project, and the identified industrial demand.

Table 4.13-11 shows the projected industrial supply and demand in San Joaquin County and Patterson. As shown therein, the projected demand in San Joaquin County plus Patterson totals 47.4 million sf during the 2024-2040 timeframe, and another 102.5 million sf during the subsequent 2040-2060 timeframe. These total 149.9 million sf over the next 36 years. The planned supply among all the projects identified in the industrial market area totals approximately 59.5 million sf, which is about 40 percent of the projected demand. Including the proposed project, the planned future supply totals 84.2 million sf. Thus, potential supply including the project represents about 56 percent of projected demand. An implicit analytical assumption is that all planned projects materialize, which may or may not be the case for every planned future development, especially for projects seeking entitlements.

As shown in Table 4.13-11, a projected surplus of demand exists in San Joaquin County, while Patterson has about 7.1 million sf of potential excess supply. As previously noted, Patterson is a small component of the overall Stanislaus County market, with only a portion of the Stanislaus County forecasted demand directed to properties in Patterson. Currently, Patterson's industrial inventory comprises 15 percent of the total Stanislaus County inventory.

Table 4.13-11
Summary of Industrial Supply and Demand in San Joaquin County and Patterson, 2024 – 2060

Supply/Demand Characteristic	San Joaquin County			Patterson[1]			Grand Total
	2024-2040	2040-2060	Total	2024-2040	2040-2060	Total	
Period Demand	45,759,680	98,504,921	144,264,602	1,644,255	4,008,384	5,652,639	**149,917,240**
Planned Supply[2]	21,212,660	25,536,060	46,748,720	2,920,820	9,840,411	12,761,231	**59,509,951**
Cumulative Remaining Demand/(Excess Supply)[3]	24,547,020	97,515,882	97,515,882	(1,276,565)	(7,108,592)	(7,108,592)	**90,407,289**

Notes:
1 Patterson's current inventory is 15 percent of the total Stanislaus County inventory. Given Patterson's market evolution this analysis assumes Patterson has the potential to capture 20 percent of demand from 2024-2040, increasing to 25 percent of demand from 2040-2060. Therefore, the presented period demand figures comprise these percentages of average Stanislaus County demand (see Table 4.13-7) during the cited time periods.
2 See Table 4.13-10. To facilitate the analysis, all identified planned supply is entered in the first time period, from 2024-2040. For the 2040 to 2060 time period, planned supply comprises all under review projects plus all future phases of Patterson projects.
3 Positive figures comprise remaining demand, while negative figures in parentheses represent excess supply. Any remaining demand or excess supply figures are carried over into the next period to present cumulative demand and supply findings.

Source: ALH Urban & Regional Economics, 2024.

Given the pattern of new development in Patterson, and its emergence as a small logistics node, the analysis summarized in Table 4.13-11 assumes Patterson's share of future demand would increase over time. Therefore, the UDS assumes Patterson would capture 20 percent of demand during the 2024-2040 timeframe and an even higher 25 percent during the 2040-2060 timeframe. These assumptions result in estimated Patterson industrial space demand totaling 5.65 million sf through 2060. The future supply analysis indicated that 12.76 million sf of space are currently planned in Patterson, which is greater than all the demand allocated to Patterson to the year 2060.

For the planned space in Patterson to be absorbed without any resulting excess supply, three potential occurrences could happen. First, Patterson could divert demand away from other markets, such as the San Joaquin County industrial market. If this happened, then there could be less remaining demand available in San Joaquin County after absorption of the planned supply. Second, Patterson would need to capture a higher share of Stanislaus County demand than assumed in the analysis.

However, as shown in Table 4.13-7, 100 percent of the average estimate of demand for Transportation and Warehousing in Stanislaus County through 2060 totals 24.3 million sf, with 8.2 million sf to the year 2040 and another 16 million sf thereafter to the year 2060. Hence, unless the third potential occurrence happens, with future demand varying significantly from the forecast, which is possible given the potential changing economic and employment trends, Patterson would need to capture at more than 50 percent of Stanislaus County's demand for the current planned supply to experience successful absorption.

The land available in Patterson's industrial parks is being marketed as ready to develop; however, these projects would not likely move forward until there is a committed tenant. This land would likely remain vacant until it attracts companies willing to trade a longer distance for lower occupancy costs.

Conclusion

The identified planned supply of industrial space in the competitive cities and surrounding areas have the potential to absorb about 40 percent of the combined projected demand in San Joaquin County and Patterson in Stanislaus County (i.e., the cumulative projects would absorb 40 percent of demand if fully absorbed). Once building delivery begins, the 24.675 million sf proposed as part of the project would compete with much of the planned supply as well as the existing inventory. However, based on the supply and demand projections, there appears to be a favorable market balance indicating that the introduction of the proposed project into the market, alone or in combination with cumulative industrial development, would not lead to excessive vacancies in the market area. According to the UDS, the market is at a favorable vacancy rate (less than 10 percent) and, as noted above, ample demand for industrial space is forecasted through 2060 to accommodate the proposed project and cumulative development. Developers are also anticipated to pace their projects to meet demand. In addition, it appears that remaining demand would continue to be available for additional planned projects likely to emerge over time, as well as to fill vacancies among the existing market area building inventory. Therefore, the proposed project, in combination with the cumulative projects mentioned above, would not cause

adverse physical impacts related to urban decay associated with industrial development, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4.13-5 Cause the potential for urban decay resulting from significant adverse physical impacts related to economic and social changes and/or effects in combination with cumulative development associated with hotel uses. Based on the analysis below, the impact is *less than significant*.

Because the Initial Phase of the proposed project would not include the development of any hotel uses, the following analysis addresses potential cumulative impacts associated with full Specific Plan buildout.

Supply Additions and Projected Hotel Demand
To conduct a cumulative analysis, ALH researched information about other planned hotel projects in Tracy. Eight hotel projects are planned, totaling 765 rooms. This list includes two hotels under construction, Marriott Hotel (108 rooms) and La Quinta (87 rooms), three approved hotels totaling 303 rooms, and three hotels under review with 267 rooms. Adding the project's planned hotel rooms into the future supply results in the total addition of 865 hotel rooms to the Tracy market. If built, this number of rooms would result in a 142 percent increase in the number of competitive hotel rooms in or generally around Tracy.

Similar to the analysis for impacts of just the proposed project, ALH prepared a future projection of hotel supply and demand and then examined the occupancy impacts pursuant to the addition of the planned hotel projects. Also similar to the project impact analysis, the planned hotels are entered into the hotel rooms inventory the year after expected construction completion, as the following year comprises the first full year of operations. This means the Marriott and La Quinta hotels are anticipated to enter the market inventory in 2026 (first full year of operations). The approved hotels are projected to enter the market in 2028, assuming they commence construction in 2025 and take at least 18 months for completion. With respect to the three hotels under review, the timing of completion is speculative, so completion and operation dates are not estimated. As with the project-only analysis, the proposed hotel rooms are also added to the inventory in this analysis, in 2032 (with 2033 expected to be the first full year of operations).

The historic and projected occupancy rates with the cumulative supply additions are summarized in Table 4.13-12, below. The results after the 2026 addition of the under construction hotels indicates that hotel occupancy is projected to decline to 57.1 percent, following a much higher occupancy of 74.5 percent the year before. The occupancy rate is projected to ratchet up slightly to 57.7 percent, before the approved hotels are completed, after which the projected occupancy rate drops to 42.3 percent. Although the occupancy rate experiences modest yearly gains, it declines again to 41.2 percent in 2033 when the proposed hotel becomes operational. The projected

occupancy rate with all of the cumulative supply remains in the low 40 percent range through 2036.

Conclusion

The above analysis indicates that negative occupancy impacts on the existing competitive set of hotels could last for several years after completion of the under construction and approved hotels, as well as the proposed project. This conclusion is based on the assumption that the proposed hotel diverts demand from all hotels equally, which may not be likely due to its distance of over 10 miles from the existing hotels. It is quite possible that the competitive set of hotels could adjust their pricing in order to maintain market share. Additionally, the analysis conservatively did not quantify a demand boost for the proposed hotel based on its location near the University, which would most likely be generated for just the proposed hotel given its proximity to the University, versus any of the other existing or planned hotels. Finally, there could be other sources of hotel demand that emerge during the projection period that could boost hotel demand.

Table 4.13-12
Historic and Projected Tracy Area Hotel Occupancy with the Proposed Project and Cumulative Projects

Year	Annual Occupancy (percent)
2016	79.6
2017	77.9
2018	79.6
2019	75.2
2020	68.0
2021	81.9
2022	74.4
2023	67.0
2024	73.8
2025	74.5
2026	57.1
2027	57.7
2028	42.3
2029	42.8
2030	43.2
2031	43.8
2032	44.4
2033	41.2
2034	41.8
2035	42.3
2036	42.9

Note: Values above the bolded lane are historic and values below the bolded line are projected.

Source: ALH Economics, 2024.

Alternatively, hotel developers would not be able to attract financing to construct new hotels in a market that appears to have an oversupply. Thus, the developers of the approved hotels might delay commencement of construction until such time as demand warrants new hotel rooms. As such, ALH concluded that existing hotels would

be unlikely to be negatively impacted by the proposed project to the point that one or more hotel closures would ensue. Therefore, the proposed project, in combination with the cumulative projects mentioned above, would not cause adverse physical impacts related to urban decay associated with hotel development, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.14 Wildfire

4.14 WILDFIRE

4.14.1 INTRODUCTION

The Wildfire chapter of the EIR summarizes the setting information and identifies wildfire potential within the project area based on State and local mapping. The chapter also includes a review of completed, active, and planned fuel treatments projects within the region and consideration of site-specific factors that could affect wildfire potential at the project site.

4.14.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing wildfire setting in the project region, including the existing fire types, wildland fire hazards, public safety power shutoffs, and fire protection agencies and resources in the project region.

Fire Types

The following sections describe the three fire types to which various areas of San Joaquin County are at risk of experiencing.

Wildfires

Wildfires occur on mountains, hillsides, and grasslands. Vegetation, wind, temperature, humidity, and slope are all factors that affect how wildfires spread. In San Joaquin County, native vegetation, such as grasses, barleys, and scrubland, provide fuel that allows wildfires to spread easily across large tracts of land. Such plant species are capable of regeneration after a fire, making periodic wildfires a natural part of the local ecology. San Joaquin County is considered a rural/suburban County with wildfire as the most prevalent fire type. The climate of the San Joaquin County region keeps the grass dry, which makes the region's grass more readily combustible during fire season. As discussed in further detail in the Topography and Vegetation subsection, steep slopes bring grass and brush within reach of upward-moving flames, while impeding the access of firefighting equipment. Seasonal drought conditions exacerbate fire hazards.

Wildland-Urban Interface Fires

The wildland-urban interface (WUI) zone is an area where buildings and infrastructure (e.g., cell towers, schools, water supply facilities) mix with areas of wildland vegetation susceptible to ignition due to several factors, including topographical features, vegetation fuel types, local weather conditions, and prevailing winds. The interface is sometimes divided into the defense zone (areas near communities, usually about 0.25-mile thick) and threat zones (an approximately 1.25-mile buffer around the defense zone).

In the WUI zone, efforts to prevent ignitions and limit wildfire losses hinge on hardening structures and creating defensible space through a multi-faceted approach, including engineering, enforcement, education, emergency response, and economic incentive. Different strategies in the defense and threat zones of the WUI help to limit the spread of fire and reduce risks to people and property. As discussed in further detail in the Wildfire Classifications subsection, wildfire threat within the County ranges from Moderate to Very High.

Structural Fires

Urban fires occur in developed environments, destroying buildings, and other structures. Structural fires are often caused by faulty wiring or mechanical equipment or combustible construction materials and are able to proliferate due to the absence of fire alarms and sprinkler systems. The fires have been due largely to human accidents, although deliberate fires (arson) may be a cause of some events. Older buildings that lack modern fire safety features may face greater risk of damage from fires. To minimize fire damage and loss, the County's Fire Code, based on the California Fire Code (CFC), sets standards for building and construction. The CFC requires the provision of adequate water supply for firefighting, fire retardant construction, and minimum street widths, among other things. Fire prevention awareness programs and fire drills are conducted to teach residents how to respond quickly and correctly during fires.

Wildland Fire Hazards

The following section includes a discussion of the potential for wildland fires to occur in the project area and the agencies and resources available for wildland fire suppression.

Wildfire Classifications

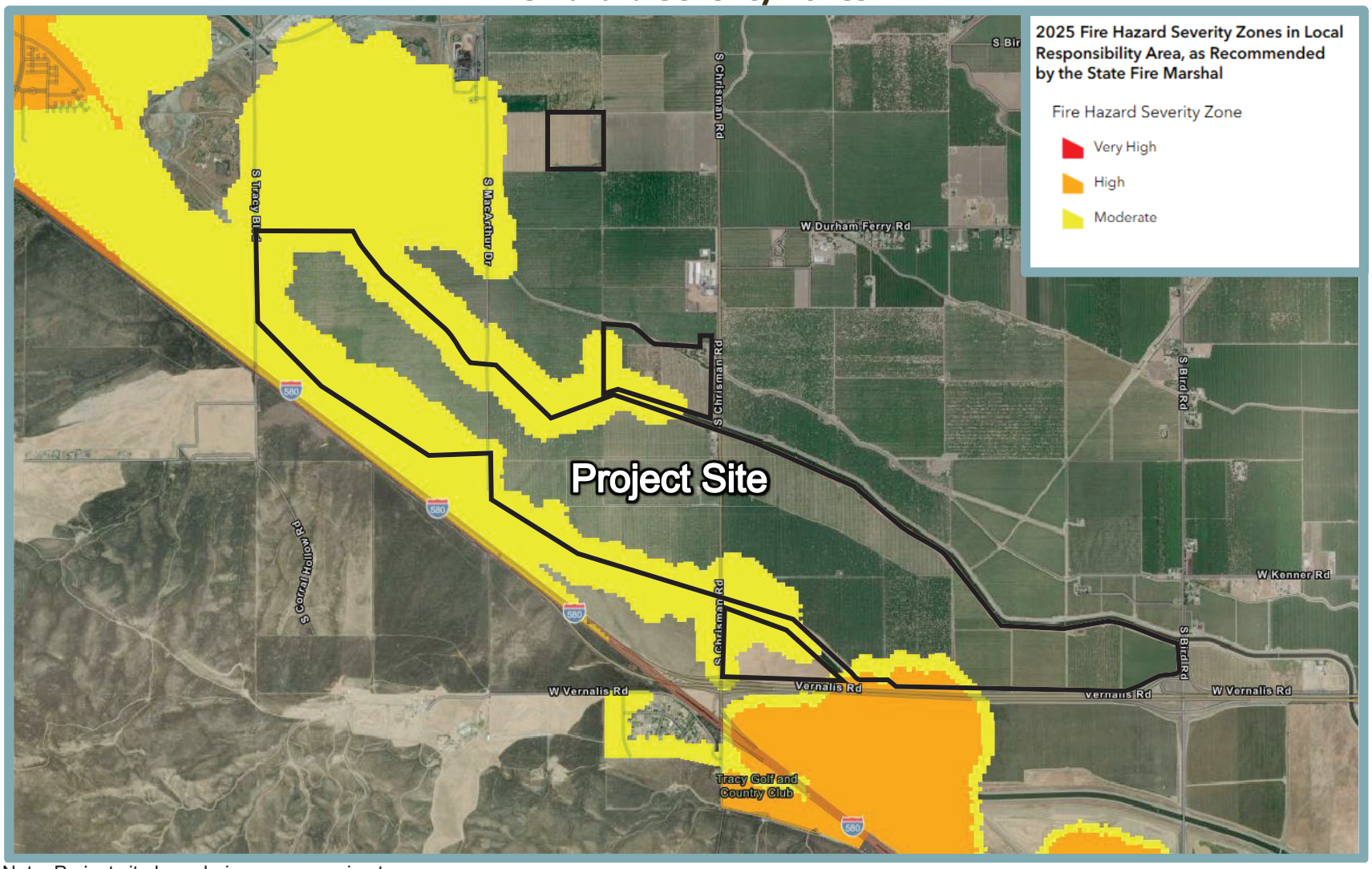
With respect to wildland fires, previous significant WUI fires within the State have precipitated the passage of statutes necessitating the classification of wildland fire hazard areas, according to a location's potential for causing ignitions to buildings. Such classifications are referred to as Fire Hazard Severity Zones (FHSZs) and provide the basis for application of various mitigation strategies to reduce risks to buildings associated with wildland fires. The zones also relate to the requirements for building codes designed to reduce the ignition potential to buildings located within the WUI zones. Pursuant to Government Code Section 51178, Very High FHSZs are determined by the Director of Forestry and Fire Protection, based on consistent statewide criteria and the severity of fire hazard that is expected to prevail in such areas. Very High FHSZs are based on fuel loading, slope, fire weather, and other relevant factors.

Public Resources Code (PRC) Sections 4201 through 4204 direct the California Department of Forestry and Fire Protection (CAL FIRE) to map fire hazards within State Responsibility Areas (SRAs), based on relevant factors such as fuels, terrain and weather. SRAs are recognized by the Board of Forestry and Fire Protection as areas where CAL FIRE is the primary emergency response agency responsible for fire suppression and prevention. The project site is not located within an SRA, but, rather, is located within a Local Responsibility Area (LRA). As shown in Figure 4.14-1, the project site is identified by CAL FIRE as containing Moderate and High FHSZ areas. Additionally, the project site is not located within a WUI zone (see Figure 4.14-2). The nearest Very High FHSZ is located approximately 7.35 miles south of the site, adjacent to Interstate 580 (I-580).

Topography and Vegetation

Topography, which includes slope and aspect, can play a significant role in wildfire risk. Fires burn faster uphill than downhill, due to fuels above a fire being brought into closer contact with upward moving flames. In addition, the process of heat transfer is influenced by topography, because heat rises (convection) and heat transfer through convection tends to move upward. Furthermore, during wildfires, burning materials on the forest floor also create convection currents that preheat the leaves and branches of shrubs and trees above the fire. Heat transfer, therefore, occurs more rapidly through fuels up a slope, resulting in fire traveling more quickly upslope than downslope.

Figure 4.14-1
Fire Hazard Severity Zones



Note: Project site boundaries are approximate.
Source: California Department of Forestry and Fire Resources, 2025.

*Figure not OCR compatible.

Figure 4.14-2
Wildland-Urban Interface Zones in Project Vicinity

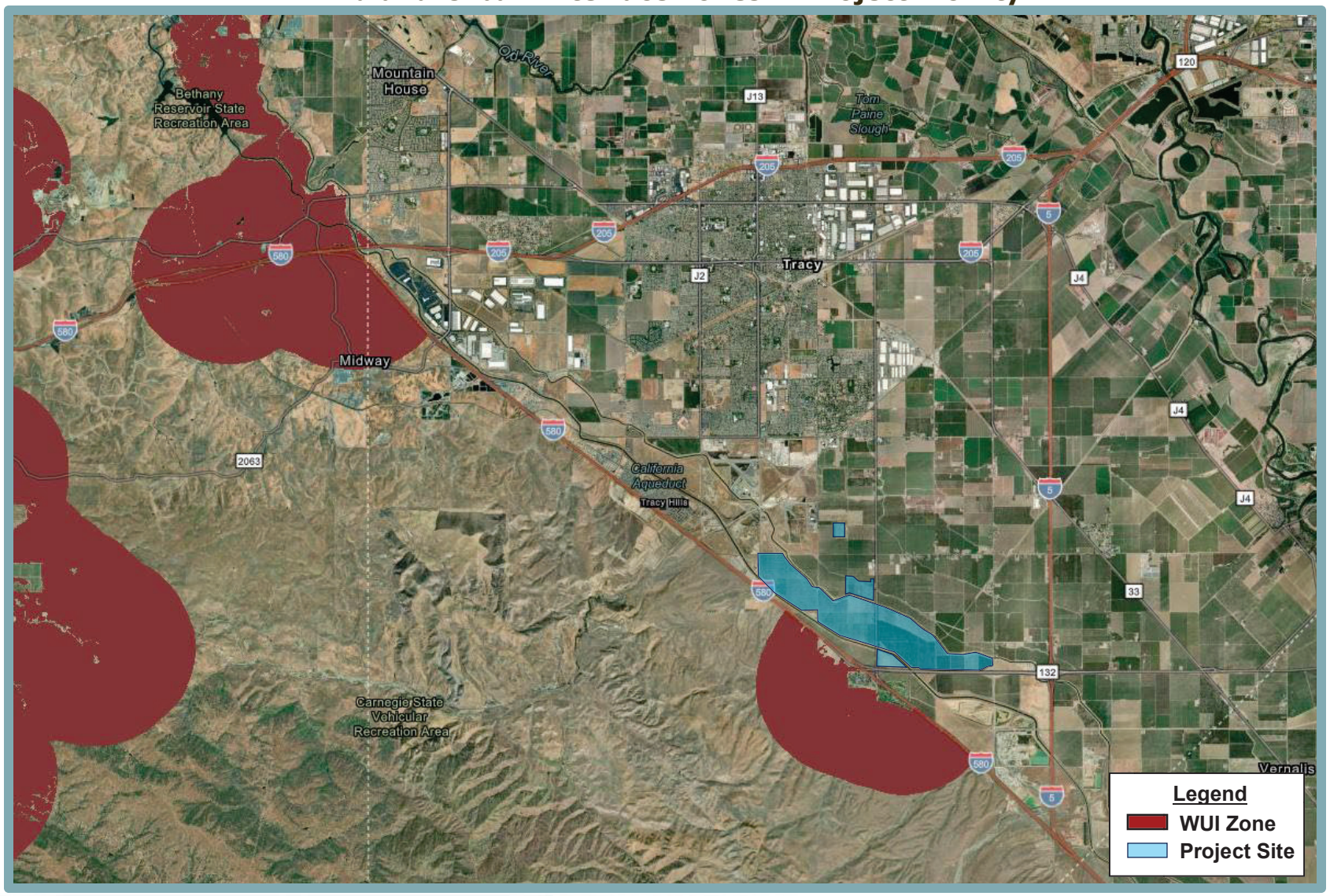


*Figure not OCR compatible.

Vertical air currents can also lift burning materials as floating embers, known as firebrands, which can settle in unburned areas ahead of a fire, starting smaller fires. The phenomenon is called "spotting" and can result in rapid advancement of a fire.

With respect to the project region's topography and vegetation, the region surrounding the project site does not contain steep slopes or significant slopes, such as those in steep-walled canyons or mountainous valleys. The elevation of the project site includes gentle slopes from the northwestern corner of the project site to the southeast. The absence of steep slopes limits wildfire risks related to topography.

In addition, existing development is located in the project vicinity, which somewhat reduces the available natural fuel sources near the project site. The agricultural machinery manufacturing facility, A. B. FAB, Inc., is located in the northern portion of the project site along South Chrisman Road, and the Crown Nut Company almond processing site is located north of the project site boundaries and west of South Chrisman Road. The construction of such sites included clearing the area of vegetation and, to a limited extent, installing new impervious surfaces. Vegetation has been similarly cleared south of the project site as part of the existing I-580 and Vernalis Road, as well as west of the Gateway Center Development Area because of the 76 gas station.

Outside of the manufacturing and processing sites along South Chrisman Road, the project site consists of agricultural land, including almond and cherry orchards. The northern project site boundary includes a segment of the Delta-Mendota Canal, while portions of the southern project site boundary include a stretch of the California Aqueduct. Given the buffer of concrete and gravel on either side of the structures, the canal and aqueduct would provide a fuel break, as compared to agricultural areas associated with the surrounding land.

Prevailing Winds

The predominant wind direction in the project vicinity is most often from the west for the majority of the year from early February to late November.[1] During the rest of the year, winds most often occur from the north. The westerly direction of prevailing winds suggests that, during the majority of the year, winds would generally facilitate the spread of fire towards the east of the project site. Additionally, a fire burning to the west of the project site could potentially move towards the site.

Fire History

According to CAL FIRE, relatively few larger wildfires, defined as 10 acres or greater, have occurred within the region surrounding the project site over the past three years.[2] Wildfires did not occur in 2022 or 2023; the 2024 and 2025 wildfires within the County are listed below:

- In June 2025, the Quarry Fire burned 26 acres near Jackson Valley Road and SR 88, west of the communities of Buena Vista and Firebrick, approximately 50 miles north of the project site. Damages to structures or injuries to fire personnel and/or civilians were not reported.

[1] Weather Spark. *Climate and Average Weather Year Round in Tracy*. Available at: https://weatherspark.com/y/1156/Average-Weather-in-Tracy-California-United-States-Year-Round. Accessed January 2025.

[2] California Department of Forestry and Fire Protection. *Current Emergency Incidents*. Available at: https://www.fire.ca.gov/incidents/. Accessed October 2025.

- On May 15, 2025, the Acampo Fire burned 22 acres along Brandt Road east of the community of Lockeford, approximately 39.18 miles northeast of the project site. No damages to structures or injuries to fire personnel and/or civilians were reported.
- On May 14, 2025, the Duck Fire burned 68 acres east of the community of Farmington near Highway 4, approximately 31.62 miles northeast of the project site. No damages to structures or injuries to fire personnel and/or civilians were reported.
- On May 13, 2025, the Hansen Fire burned 16 acres along I-580 west of the City of Tracy, approximately 6.63 miles from the project site. No damages to structures or injuries to fire personnel and/or civilians were reported.
- In November 2024, the Duck Fire burned 73 acres in San Joaquin County, along North Waverly Road, approximately 5.21 miles northeast of the community of Farmington (approximately 31.64 miles northeast of the project site). No damages to structures or injuries to fire personnel and/or civilians were reported.
- In August 2024, the Grant Fire burned 16 acres in the San Joaquin and Alameda counties, along the westbound Interstate 205 (I-205) at the I-580/I-205 interchange, approximately 1.85 miles from the western City of Tracy boundaries (approximately 9.26 miles northwest of the project site). No damages to structures or injuries to fire personnel and/or civilians were reported.
- In July 2024, the Lammers Fire burned 20 acres at the intersection of South Lammers Road and Western Pacific Way just outside the City of Tracy boundaries (approximately 3.90 miles northwest of the project site). No damages to structures or injuries to fire personnel and/or civilians were reported.
- In July 2024, the Liberty Fire burned 104 acres in San Joaquin County, along East Liberty Road, north of the unincorporated community of Clements (approximately 43.93 miles northeast of the project site). No damages to structures or injuries to fire personnel and/or civilians were reported.
- In late June 2024, the Hollow Fire burned 210 acres in San Joaquin County along I-580 east and Corral Hollow Road. The Hollow Fire burned acres within two miles of the project site boundaries, but did not cross I-580 to burn acreage within the project site. No damages to structures or injuries to fire personnel and/or civilians were reported.
- In late June 2024, the 1-2 Fire burned 215 acres in San Joaquin County at North Waverly Road and East Flood Road, approximately 5.78 miles east of the community of Linden (approximately 34.32 miles northeast of the project site). No damages to structures or injuries to fire personnel and/or civilians were reported.
- In mid-June 2024, the Johnson Fire burned 19.5 acres in San Joaquin County along East Acampo Road, approximately 2.40 miles east of the unincorporated community of Clements (approximately 41.14 miles northeast of the project site). No damages to structures or injuries to fire personnel and/or civilians were reported.
- In early June 2024, the Corral Hollow Fire burned 14,168 acres across San Joaquin County at the Lawrence Livermore National Laboratory Site 300, southwest of the City of Tracy. According to the most recent CALFIRE Incident Update, dated June 6, 2024, the Corral Hollow Fire destroyed a structure and injured two firefighters. The Corral Hollow Fire burned to within 1,000 feet of the project site boundaries, but did not cross I-580 to burn acreage within the project site.
- In May 2024, the Flood Fire burned 57.7 acres in San Joaquin County at Flood Road and North Waverly Road, approximately 5.80 miles east of the community of Linden (approximately 33.96 miles northeast of the project site). No damages to structures or injuries to fire personnel and/or civilians were reported.

CAL FIRE strives to extinguish 95 percent of all wildland fires at 10 acres or less. Additional fires, beyond those listed above, have not occurred within the region surrounding the project site over the past three years.

Public Safety Power Shutoffs

In an effort to prevent fires, the electrical services provider Pacific Gas & Electric Co. (PG&E), which would provide electricity to the project site, initiated public safety power shutoffs (PSPS) in 2019, which may continue in subsequent years until fire risks associated with power lines are decreased. PSPS events involve PG&E turning off electrical service during times when the weather is predicted to have a heightened fire risk from gusty winds and dry conditions. Power outage events may occur in specific areas or for all PG&E customers across the County. Additionally, PG&E has enhanced the sensitivity of their equipment to automatically turn off power within one-tenth of a second after detecting a problem, known as the PG&E Enhanced Powerline Safety Settings (EPSS). Powerlines with EPSS are located in high fire-risk areas, as well as some lines adjacent to such areas. Within San Joaquin County, EPSS-capable circuits are located in the farthest southern areas and northeastern border of the County (see Figure 4.14-3). The project site is located on the other side of I-580, adjacent to an area with EPSS-capable powerlines.

The California Public Utilities Commission (CPUC) adopted the High Fire-Threat District (HFTD) Map in 2018 and revised the map on August 19, 2021,[3] which serves to assist in the public's protection from potential fire hazards associated with overhead powerline facilities and nearby aerial communication facilities by delineating fire-threat areas in the State. Fire-threat areas are designated as Tier 1, 2, or 3, with Tier 1 defined as a High Hazard Zone, Tier 2 as an Elevated Hazard Zone, and Tier 3 as an Extreme Hazard Zone. The project site is not located within an area designated as Tier 1, 2, or 3 (see Figure 4.14-4). As such, the site would not be regularly subject to PSPS events. Throughout PSPS events, emergency services in San Joaquin County remain functional with back-up power supplies, but many businesses and agencies are not operational, which can result in inadequate access to medical services and exposure to excessive heat or cold.

Fire Agencies and Resources

Several fire agencies provide fire protection services in the project region, including wildland fire and structural fire response. The San Joaquin County Fire Prevention Bureau (SJCFPD) provides numerous services for the public and construction industry throughout the unincorporated areas of San Joaquin County. In addition, the South San Joaquin County Fire Authority (SSJCFA) provides services under a Joint Powers Agreement between the City of Tracy and the Tracy Rural Fire Protection District (TRFPD). Both CAL FIRE and the SSJCFA are discussed in further detail below.

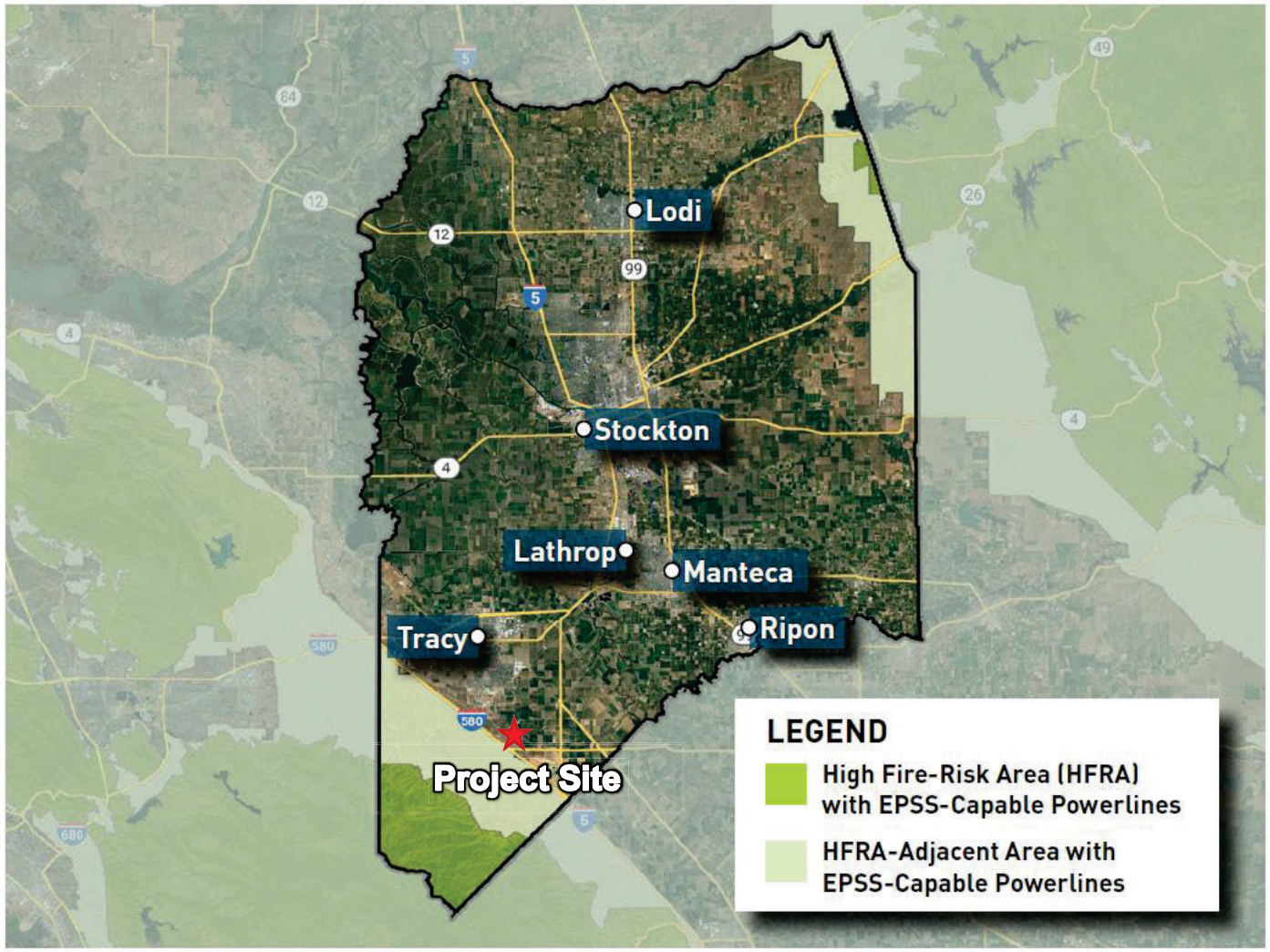
California Department of Forestry and Fire Protection

Wildland fire protection is provided either by the State (through CAL FIRE) or the federal government (through the U.S. Forest Service). According to the City's General Plan EIR, the Tracy Fire Department (TFD) provides services to the City of Tracy and over 200 square miles in the southern part of San Joaquin County.[4]

[3] California Public Utilities Commission. *Fire-Threat Maps and Fire-Safety Rulemaking*. Available at: https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking. Accessed January 2025.

[4] City of Tracy. *City of Tracy General Plan Draft Environmental Impact Report.* October 4, 2005.

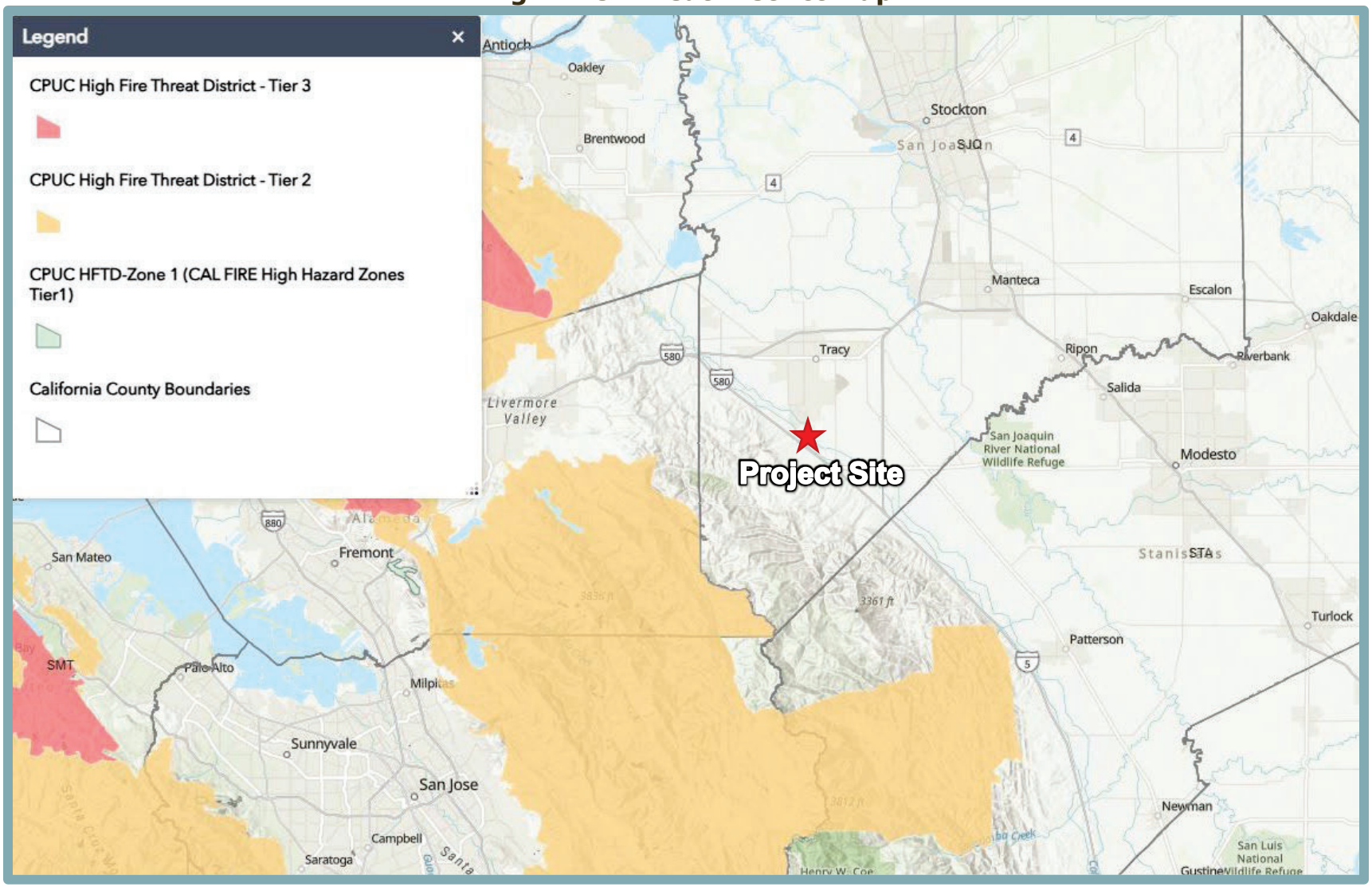
Figure 4.14-3
EPSS-Capable Powerlines



Source: Pacific Gas & Electric Company, 2023.

*Figure not OCR compatible.

Figure 4.14-4
High Fire Threat District Map



Source: California Public Utilities Commission, 2025.

TFD has a mutual aid agreement with CAL FIRE, which provides support and assistance for wildland fire response at the project site and strives to meet the National Fire Protection Association (NFPA) 1710 guideline for fire department response time of five minutes 90 percent of the time.

The nearest CAL FIRE station to the project site is Station 21, located at Site 300 on Corral Hollow Road, approximately 4.30 miles southwest of the project site. In addition, Station 94, located at 16502 West Schulte Road in the City of Tracy, is approximately 5.73 miles northwest of the project site. Station 21 houses four firefighters, one engine for pumping water and one for mobility, a patrol vehicle, and an ambulance; Station 94 is staffed by three personnel with access to an engine outfitted with an Advanced Life Support (ALS) unit and an additional fire engine more suited to undeveloped terrain. CAL FIRE has mutual and/or automatic aid agreements and, thus, may assist local fire agencies with structural fires and medical incidents. In addition, as is currently the case, incidents could occur where the TFD is called upon to provide mutual aid at or near the project area to send the closest available unit to an emergency incident, regardless of jurisdictional boundaries.

South San Joaquin County Fire Authority

In September 1999, TFD and TRFPD merged to form the SSJCFA through a Joint Power Agreement pursuant to Article 1, Chapter 5, Division 7, Title 1 of the San Joaquin County Municipal Code and, by extension, Section 6500 of the State Government Code.

Because the project site is located within an LRA, the SSJCFA is responsible for providing the primary wildland fire suppression response to the project site. SSJCFA includes services rendered through seven stations and one Fire Administration building. Four stations are located within the incorporated boundaries of the City of Tracy, while three additional fire stations are located within the Tracy Rural Fire Protection District. SSJCFA services include fire protection, rescue, a hazardous materials team, and emergency response services for a service area of approximately 170 square miles, including the City of Tracy and the surrounding rural community in the southern portion of San Joaquin County.

The closest SSJCFA station to the project site is Station 95, which is located approximately 1.36 miles northwest of the project site on the corner of Tracy Hills Drive and Criseldo Mina Avenue.[5] Station 95 is staffed with three personnel, an ALS engine, a pumper engine used primarily for fighting structural fires, and an additional engine designed for easier mobility across undeveloped terrain. The full-time firefighters are augmented by seasonal and volunteer firefighters enrolled in the Tracy Fire Reserve program that support the emergency response capabilities of the SSJCFA.

Emergency Vehicle Access

Fire access is the means by which firefighters enter an area to quickly mitigate a wildfire incident prior to spread to adjacent properties and critical infrastructure. For the purposes of fire apparatus access to the project site, fire engines could access the project site by way of South Chrisman Road and South MacArthur Drive, which bisect the project site in a north-to-south direction. The proposed project would also include construction of University Street, to provide access to the university campus, and North Street, which would provide access to the northwest corner of the project site. Both of the foregoing streets would connect to South MacArthur Drive, and North Street would connect to South Tracy Boulevard.

[5] South San Joaquin County Fire Authority. *Stations.* Available at: https://www.sjcfire.org/operations/stations. Accessed January 2025.

The existing roads that would serve as the primary evacuation routes during a wildfire event would include South Chrisman Road, South MacArthur Drive, and South Tracy Boulevard in the immediate project vicinity, as well as I-580 in the surrounding area.

4.14.3 REGULATORY CONTEXT

The following sections provide a summary of the federal, State, and local regulations pertaining to wildfire that are applicable to the proposed project.

Federal Regulations

The following federal environmental law is relevant to wildfire.

Healthy Forest Reforestation Act

In recognition of widespread declining forest health, the Healthy Forest Restoration Act (HFRA) was passed in 2003 to expedite the development and implementation of hazardous fuel reduction projects on federal land. A key component of the HFRA is the development of Community Wildfire Protection Plans (CWPP) as a mechanism for public input and prioritization of fuel reduction projects. A CWPP provides background information about a project area, discussion of community values at risk, community base maps, a fire risk assessment, and recommendations that identify treatment areas for reducing fuels and promoting education and awareness about wildland fires, as well as monitoring and assessment strategies. As shown in Figure 4.14-2, the project site is not located within or in proximity to a WUI zone.

State Regulations

The following are the State environmental laws and policies relevant to wildfire.

State Responsibility Area

Pursuant to PRC Sections 4125-4128, the Board of Forestry and Fire Protection classifies all lands in the State for the purposes of determining areas in which the financial responsibility of preventing and suppressing wildfire is primarily the responsibility of the State. The classified lands are termed SRA.

Fire Hazard Severity Zones

FHSZs are geographical areas designated pursuant to California PRC Sections 4201 through 4204 and classified as Very High, High, or Moderate in SRAs or as Local Agency Very High FHSZs designated pursuant to California Government Code Sections 51175 through 51189.

The California Code of Regulations (CCR), Title 14, Section 1280 entitles the maps of the geographical areas as “Maps of the Fire Hazard Severity Zones in the State Responsibility Area of California.”

California Public Resources Code Section 4291

California PRC Section 4291 sets forth minimum fire safety standards for development in or adjoining WUI zones, such as mountainous areas and forest-covered lands. Provisions of California PRC Section 4291 for such development include, but are not necessarily limited to, the following:

- Defensible space must be maintained 100 feet from the side, front and rear of a structure, or up to the property line where the property line is less than 100 feet from the structure;

- Any tree, shrub, or other plant adjacent to or overhanging a building must be free of dead or dying wood;
- The roof of any structure must be free of leaves, needles, or other vegetative materials;
- Prior to constructing a new building, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable State and local building standards; and
- Prior to final inspection approval of any building, the fire department must inspect the building and the fire suppression facilities to certify that the fire suppression improvements comply with the California Building Code and fire department service requirements.

The project site is not in or adjoining a WUI zone; therefore, the minimum fire safety standards set forth by PRC Section 4291 related to development in such areas would not apply to the proposed project.

California Building Code – Chapter 7A (Materials and Construction Methods for Exterior Wildfire Exposure)

Chapter 7A of the California Building Code (CBC) (Title 24 CCR, Part 2) includes definitions and standards for building materials, systems, and/or assemblies to be used for the exterior design and construction of new buildings located within a WUI zone, which is defined by the CBC as a geographical area identified by the State as a "Fire Hazard Severity Zone" in accordance with the PRC Sections 4201 through 4204 and Government Code Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires.

Chapter 7A of the CBC is intended to establish minimum standards for the protection of life and property by increasing the ability of a building located in any FHSZ within SRAs or any WUI zone to resist the intrusion of flames or burning embers projected by a vegetation fire and contributes to a systematic reduction in conflagration losses. All new buildings to be located in a FHSZ or WUI zone designated by the enforcing agency for which an application for a building permit is submitted on or after July 1, 2008, are required to comply with Chapter 7A of the CBC. Examples of the Chapter 7A standards include, but are not limited to, use of ignition-resistant materials, fire-intrusion design of roofing and vents, and use of glazed exterior windows and doors.

The project site is not in a WUI zone; however, the project site does contain FHSZ areas. Therefore, the standards set forth by CBC Chapter 7A related to development in such areas would apply to the proposed project.

Local Regulations

The following local goals and policies related to wildfire are applicable to the proposed project.

San Joaquin County General Plan

The following goals and policies from the San Joaquin County General Plan related to wildfire are applicable to the proposed project.

Infrastructure and Services Element

Goal IS-5 To maintain an adequate level of service in the water systems serving unincorporated areas to meet the needs of existing and future residents and businesses, while improving water system efficiency.

Policy IS-5.6 **Consistent Fire Protection Standards for New Development.** The County, in coordination with local water agencies and fire protection agencies, shall ensure consistent and adequate standards for fire flows and fire protection for new development.

Public Health and Safety Element

Goal PHS-1 To maintain a level of disaster preparedness necessary for the protection of public and private property, and the health, safety, and welfare of people living and working in San Joaquin County.

Policy PHS-1.10 **Emergency Vehicles Access.** The County shall require all new developments to provide, and existing developments to maintain, adequate primary and alternative access for emergency vehicles.

Policy PHS-1.13 **Public Awareness of Climate Change.** The County shall support public awareness of water conservation measures, agricultural changes, storm and flood preparedness, wildfire fire protection, air quality effects, extreme weather events, heat and human health, and disease prevention to help prepare for the potential impacts of climate change.

Goal PHS-4 To minimize the risk of wildland and urban fire hazards.

Policy PHS-4.3 **Fire Prevention Measures.** The County shall implement State recommendations for fire prevention in Fire Hazard Severity Zones and require new and/or existing development to provide clearance around structures, use fire-resistant ground cover, build with fire-resistant rooting materials, participate in fuel load reduction, and take other appropriate measures.

Policy PHS-4.6 **Fire Protection Coordination.** The County shall encourage well-organized and efficient coordination among fire agencies, CalFire, and the County.

San Joaquin County Code

The following applicable codes related to wildfire are from the San Joaquin County Code.

Building Code

Buildings constructed within the project site would be subject to the current building standards found in both the CBC and Title 8 of the County Code. The CBC enforces standards associated with the installation of fire sprinkler systems. Both State and local requirements would significantly assist in reducing the threat of wildfire spreading from undeveloped land to a building.

Fire Prevention Code

San Joaquin County has adopted the 2022 CFC under Section 4-1000 (Adoption) of the County Code. The CFC addresses emergency access, access gates, sprinkler systems, fire alarms within

buildings, and construction of access roads to accommodate fire apparatus. Specifically, the CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout new one- and two-family dwellings and commercial buildings 3,600 square feet (sf) and larger.

Abatement of Hazardous Weeds and Rubbish

Title 4, Division 1, Chapter 6, of the County Code requires the clearance of combustible vegetation and flammable refuse to limit fire hazards, a process known as "abatement." More specifically, Articles 4-1052 and 4-1057 require that hazardous vegetation be abated on parcels or lots anticipated to be used or developed, as well as on the public rights-of-way (ROWs) within the unincorporated portions of the County.

Critical Infrastructure Ordinance

Pursuant to Title 4, Division 5, Chapter 2, of the County Code, the County mitigates threats to critical infrastructure, such as levees. Such threats could include fires, as well as contamination, damage to public services, and interference with facilities integral to the ongoing function of the County (such as transportation or utilities services). The County mitigates such threats by prohibiting the storage of personal property within wildfire risk areas and ROWs used by emergency response services.

San Joaquin County Office of Emergency Services

San Joaquin County's Office of Emergency Services (OES) provides emergency management services in cooperation with local cities and special districts, including fire agencies. During an active incident, such as fire or flood, the OES helps initiate first responses. The functions of the OES include emergency planning, response, recovery, and mitigation, including preparation of a Local Hazard Mitigation Plan (LHMP).

San Joaquin County Local Hazard Mitigation Plan

The currently adopted San Joaquin County LHMP[6] was updated in January 2023 as required by the Federal Emergency Management Agency (FEMA), and was approved by FEMA and the County Board of Supervisors in April 2023.[7]

The LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 so that San Joaquin County would be eligible for the FEMA Pre-Disaster Mitigation and Hazard Mitigation Grant Programs, as well as lower flood insurance premiums. The LHMP is a multi-jurisdictional plan that geographically covers the entire area within San Joaquin County's jurisdictional boundaries, and was developed with input from various San Joaquin County departments, four cities within the County, and other agencies. The LHMP is intended to guide hazard mitigation planning to reduce the effects of hazard events, including wildfires.

San Joaquin County Emergency Operations Plan

The San Joaquin County EOP was developed by the San Joaquin County OES and adopted on February 17, 2022.[8] The EOP establishes a County emergency management structure, overall operational concepts, and provides the guidelines needed for emergency response planning, preparation, training and execution throughout unincorporated San Joaquin County. Such

6 San Joaquin County. *San Joaquin County Local Hazard Mitigation Plan*. January 2023.
7 San Joaquin County Office of Emergency Services. *Multi-Jurisdictional Hazard Mitigation Plan (MJHMP).* Available at: https://www.sjgov.org/department/oes/mjhmp. Accessed January 2025.
8 San Joaquin County Office of Emergency Services. *Emergency Operations Plan.* Adopted February 17, 2022.

strategies would be applicable to any natural disaster or manmade emergency occurring in or near San Joaquin County. Emergency events could include wildfires, landslides, storms, floods originating from dam failure, earthquakes, and countywide public health emergencies, all of which have potentially catastrophic long-term public safety, economic, social and political implications.

4.14.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to wildfire. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, Section XX, Wildfire, determination of significant impacts related to wildfire is based on whether the proposed project would result in any the following, if located in or near SRAs or lands classified as Very High FHSZs:

- Substantially impair an adopted emergency response plan or emergency evacuation plan;
- Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
- Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
- Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Pursuant to CEQA Guidelines Appendix G, the standards of significance listed above are only relevant when a project's location is within an SRA or Very High FHSZ. The project site is not located within land designated as either. Nevertheless, because portions of the project site contain Moderate and High FHSZ areas, this chapter evaluates the potential impacts of the proposed project based on the standards listed above.

Method of Analysis

The impact analysis contained in this chapter is based on a review of available CAL FIRE wildfire hazard mapping and recent wildfire history within San Joaquin County. In addition, State and local fire hazard regulations were evaluated to identify applicable design requirements for the proposed project to minimize wildfire risk (e.g., defensible space).

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

4.14-1 Substantially impair an adopted emergency response plan or emergency evacuation plan. Based on the analysis below, the impact is *less than significant*.

Emergency events, like wildland fires, are unpredictable. The location of the fire, the time of day an event occurs, the direction of travel, and the rate of spread are unknown. Due to such uncertainty, the use of traditional capacity analysis, such as AM and PM

peak hour operations at study intersections, is limited for the analysis of emergency events. Furthermore, while San Joaquin County has an adopted LHMP and EOP intended to provide emergency resources and plans in response to local hazards (including wildfires), the County has not adopted emergency evacuation routes for the project site. However, in the event of an emergency, emergency responders do have measures that can be deployed to aid in the movement of the public from danger. For instance, during evacuation events, State and/or local emergency responders provide active traffic control at intersections, close roads, provide detours for through traffic, and actively manage available travel lanes to facilitate evacuation away from the emergency. Such measures would be initiated in the event that an evacuation is deemed necessary.

For the purposes of this analysis, the existing roads within and adjacent to the project site, South Chrisman Road and South MacArthur Drive, would serve as the primary evacuation routes during a wildfire event. In addition, the surrounding existing roadways (including South Tracy Boulevard, I-5, State Route [SR] 132, and I-580) would also serve to assist in evacuating residents. Because the same roads would provide emergency access to the Initial Phase of development and the Specific Plan Buildout, the following discussion combines the foregoing components.

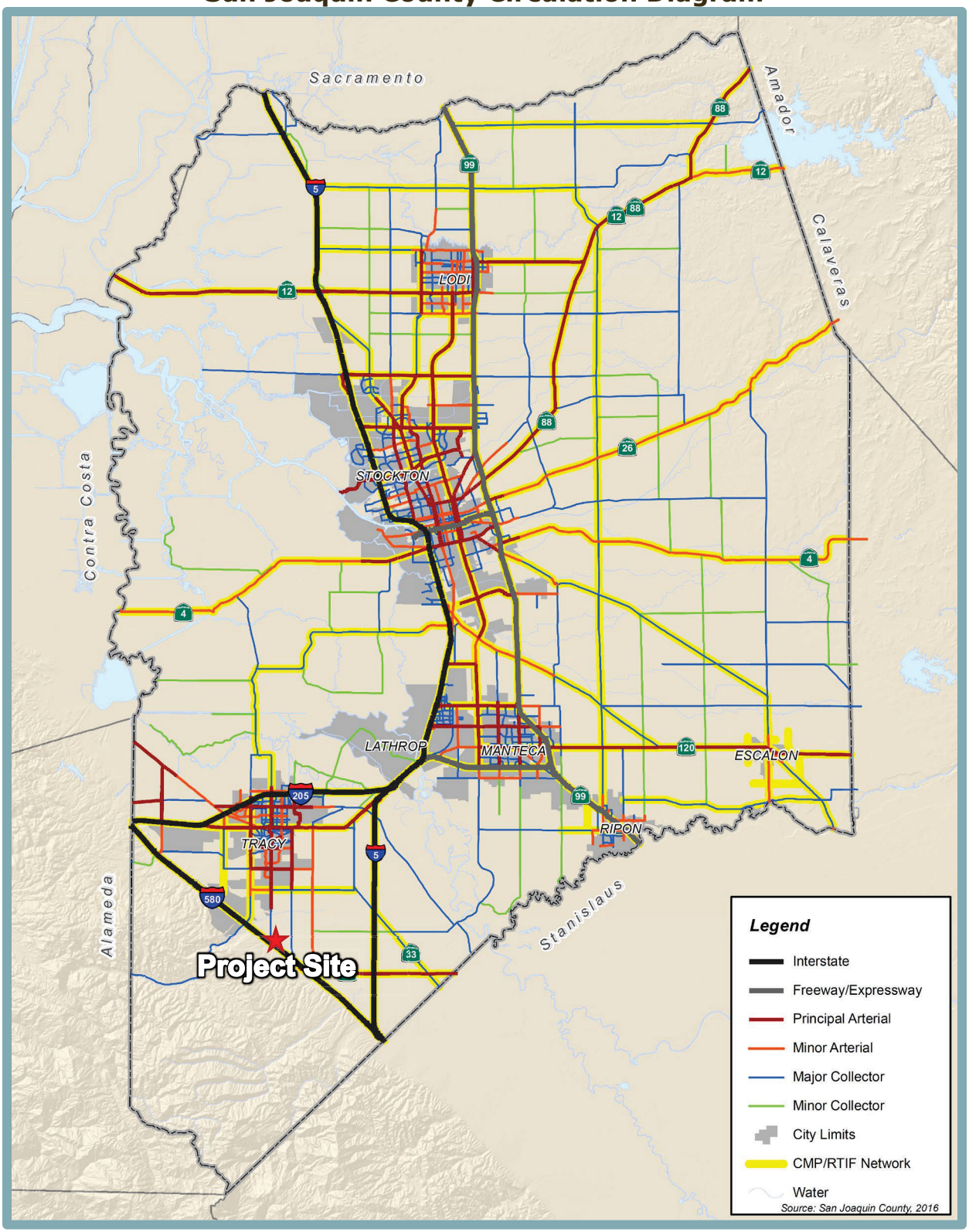
Initial Phase, Specific Plan Buildout

The County's General Plan depicts the countywide circulation system in Figure TM-1, reproduced as Figure 4.14-5 below. As shown therein, County roadways are classified based on the linkages they provide and their function, both of which reflect their importance to land use patterns, travelers, and the public's general welfare. The County's roadway system classifies roadways as follows: minor and major collectors, minor and principal arterial roadways, freeway/expressways, and interstates. In general, roadways higher in the hierarchy are meant to collect traffic from roads lower in the order.

As discussed in Chapter 4.12, Transportation, of this EIR, South Chrisman Road and South MacArthur Road are two-lane, north-south minor arterial roadways that provide a direct route north to the principal arterial roads within the City of Tracy. The currently narrow roadways could lead to substantial congestion in the event that all occupants within the proposed development, such as warehouse employees and university students, evacuated the area at the same time.

According to the Local Traffic Operational Analysis (LTA) prepared for the proposed project, noteworthy improvements associated with the proposed project include the widening of South Chrisman Road from two lanes to four lanes between I-205 and Linne Road, with the exception of the segment between 11th Street and Grant Line Road, which would be widened to six lanes. South Chrisman Road would also be widened to a six-lane roadway from the proposed B Street to SR 132. The LTA also includes the widening of a portion of Linne Road from Corral Hollow Road to Tracy Boulevard from two to four lanes. The widening of the deficient segments of Chrisman Road and Linne Road would ensure the roadways operate at acceptable levels, including during evacuation scenarios.

Figure 4.14-5
San Joaquin County Circulation Diagram



In the event of a wildfire, future employees and students located on-site would be provided sufficient warning through SJReady, a community notification system implemented through partnership between San Joaquin County and Everbridge to alert residents about emergency events and other important public safety information. SJReady enables San Joaquin County to provide the public with critical information through various channels, including wireless emergency alerts, direct broadcasts, and the National Oceanic and Atmospheric Administration's (NOAA) weather radio.[9] All members of the public can sign up for SJReady through their website and elect to receive notifications of emergency situations, thereby facilitating easier responses.

During wildfire events, emergency responders would be able to access the project site to combat fires, which would serve to reduce the hazardous conditions that lead to evacuation. As part of the proposed project, new internal roadways would be constructed, which would connect to existing roads in the project vicinity.

The internal roadway network would provide access throughout the project site by way of a looped route and would consist of two-lane local industrial streets. The looped network would provide access to the individual industrial warehouses and would feature ROWs wide enough to accommodate emergency vehicles. Accordingly, the proposed project would provide adequate emergency access to the project site and would not be expected to conflict with any potential evacuation routes. In addition, the proposed project would include a new fire station within the Pacific Gateway East development area, which would be staffed with a three-person ALS engine company. According to SSJCFA correspondence, the proposed fire station would ensure that adequate fire protection services are available to safeguard the proposed development and surrounding areas.[10]

During project construction, temporary lane closures on nearby roads could be required; however, any temporary lane closures would be coordinated with County OES and local emergency services providers. Furthermore, complete closure of the roadways may only be necessary when bridge replacement work is being conducted at the Delta-Mendota Canal and California Aqueduct crossings for road widening purposes. The closures would be addressed through implementation of a traffic control plan, as required by Mitigation Measure 4.12-1 included in Chapter 4.12, Transportation, of this EIR.

Based on the above, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.

Off-Site Improvements Study Area

The proposed project includes improvements to nearby roadways, including the widening of off-site sections of South Chrisman Road into four-lane major arterial, as well as the construction of new off-site roads, including North Street and West University Street. Portions of South MacArthur Drive would also be improved to be

[9] San Joaquin County Office of Emergency Services. *Stay Informed.* Available at: https://sjready.org/stay-informed. Accessed January 2025.

[10] South San Joaquin County Fire Authority. *Fire Protection Requirements for Pacific Gateway Project.* December 23, 2024.

two-lane industrial streets. Other potential off-site roadway improvements may be implemented by the proposed project, subject to approval by other involved agencies, such as the City of Tracy and Caltrans.

Similar to the Initial Phase and the Specific Plan Buildout discussion above, temporary lane closures could be required during project construction. Complete closure of the roadways may be required in limited cases and would be coordinated with the County and local emergency services through implementation of Mitigation Measure 4.12-1 in Chapter 4.12, Transportation, of this EIR. The proposed roadway improvements would be constructed to San Joaquin County, City of Tracy, or Caltrans standards depending on the location of the improvement. Such roadway improvements would aid the evacuation of the project site during any emergency situations during project operation. Furthermore, as previously discussed, first responders would provide active traffic control at intersections during evacuation events and may close the new roads, provide detours for through traffic, and/or actively manage the proposed travel lanes to facilitate evacuation away from the emergency.

Conclusion

Based on the above, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.14-2 Due to factors such as on-site fuel sources, slope, and prevailing winds, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Based on the analysis below, the impact is *less than significant*.

CEQA Guidelines Appendix G indicates that the extent and nature of on-site fuel sources, such as vegetation, which would serve as fuel for a wildfire, should be evaluated to determine the potential for a project to exacerbate wildfire risk. The project site is located in a predominantly agricultural area of southern San Joaquin County and contains the associated agricultural vegetation (predominantly orchard trees). The project site also contains limited buildings and frontage trees associated with the on-site agricultural machinery manufacturing facility (A.B. FAB, Inc.). Areas surrounding the site also currently contain agricultural vegetation and trees.

Development of the Initial Phase and the Specific Plan Buildout would result in the construction of similar land uses on contiguous parcels. Thus, the following discussions evaluate the potential impacts associated with both components of the proposed project related to the exacerbation of wildfire risks due to factors such as on-site fuel sources, slope, and prevailing winds.

Initial Phase, Specific Plan Buildout

Wildfire risks due to on-site fuel sources, slope, and prevailing winds are discussed below.

Wildfire Risks Due to Existing On-Site Fuel Sources

Development of the proposed project would include site clearing activities, which would remove on-site vegetation and would create buffers between the proposed industrial development and any agricultural vegetation that would remain between the initial and future construction phases. The primary natural vegetation area near the project site is located west of I-580 in the foothills. The area is not irrigated, as compared to the on-site orchards and surrounding agricultural uses; thus, the area would be more subject to drying and serving as a fuel source (as evidenced by the Hollow Fire). The project site is separated from the natural vegetation area by I-580. Development of the site with industrial uses would also reduce the risk of wildland fire to surrounding areas, because site improvements, such as roadways, driveways, and irrigated landscaping, would reduce readily combustible vegetation. Additionally, wildfire risks would not be anticipated to be exacerbated during project operation, as none of the proposed uses involve operation components that would increase the risk of wildfire.

More specifically, the proposed project would reduce on-site fuel sources through the development of approximately 1,375.80 acres of limited industrial use, 160,000 sf of general commercial use, 93,000 sf of industrial park use, a university campus, a VFW facility, a new fire station, and various open space and public park facilities across the 1,576.70-acre project site, the sum of which would remove the majority of on-site vegetation. The proposed project would be required to comply with all applicable State and local standards and regulations associated with prevention of wildfire hazards, including the San Joaquin County Building and Fire Prevention Codes, which serve to adopt and amend the CBC and CFC. The CFC requires that an automatic fire sprinkler and/or fire extinguishing system be installed throughout commercial buildings 3,600 sf and larger. In addition, the project would be subject to the applicable provisions set forth in County Code Title 4, Division 5, Chapter 2, which contains requirements related to protecting critical infrastructure throughout the County. Although large portions of the project site are not located within a WUI or Very High/High FHSZ, County Code Chapter 6 of Title 4, Division 1 establishes hazardous vegetation abatement standards for improved parcels with which the proposed project would be required to comply. Furthermore, the adopted CBC requires the installation of fire sprinkler systems, which would further reduce wildfire risks. Overall, both State and local requirements would significantly reduce the threat of wildfire spreading from undeveloped land to the proposed structures, as well as the potential of fire spreading from the site to surrounding areas.

The proposed project would incorporate the Delta-Mendota Canal and California Aqueduct as buffers and setbacks throughout the project site between the proposed industrial uses and the existing surrounding agricultural uses. The buffers would vary in width but would generally include landscaping adjacent to the internal roadways and the proposed buildings. Such landscaping would introduce new sources of vegetation after any existing vegetation was cleared during site preparation. However, as set forth in the General Landscaping Standards of the County's Development Title, the

landscape buffers would include irrigation scheduling in accordance with the County's Maximum Applied Water Allowance limit, which would ensure the proposed vegetation is sufficiently watered to not result in excessively dry fuel sources.[11] In addition, the majority of the landscape buffers would be located adjacent to the parking lots associated with the proposed warehouses and industrial buildings. The lack of fuel in such areas would reduce the risk of fire spreading to adjacent areas.

During project construction, equipment without appropriate CAL FIRE-approved spark arrestors could result in direct flame impingement on combustible materials, such as existing on-site vegetation or building construction supplies. The proposed project would include such spark arrestors. In addition, as discussed in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, as required by San Joaquin County Air Pollution Control District (SJCAPCD) rules and regulations, such as Regulation VIII, the project site's unpaved surfaces and bulk materials would be watered regularly during construction, minimizing fire hazards should sparks created by construction equipment contact combustible materials on-site. As such, the risk of direct flame impingement on combustible materials during project construction would be minimized.

Overall, development of the proposed project would not exacerbate wildfire risks due to on-site vegetation and building construction supplies, thereby exposing residents in the project vicinity to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire, and a less-than-significant impact would occur.

Wildfire Risks Due to Slope

The project site does not contain steep or significant slopes, such as those in canyons or mountainous valleys. The lack of slopes limits wildfire risks related to topography in the project region. As such, slope would not affect on-site fire behavior, as compared to the mountainous areas associated with the Diablo Range in the County's southernmost region. Therefore, the proposed project would not exacerbate wildfire risks due to slope, and a less-than-significant impact would occur.

Wildfire Risks Due to Prevailing Winds

With respect to prevailing winds at the project site, as previously discussed, winds from the west are most dominant at the site for the majority of the year. In addition, winds occur from the north during winter. The predominant direction of prevailing winds suggests that, during the majority of the year, winds could be reasonably assumed to facilitate spread of fire towards the east of the site. Additionally, a fire burning to the west of the project site could potentially move towards the project site, such as the Hollow Fire. However, as discussed above, the majority of on-site fuel sources would be removed as part of project development, which would ensure the proposed project does not exacerbate the wildfire risk due to prevailing winds during project operation.

During project construction, equipment without appropriate spark arrestors could result in sparks being carried by the wind onto combustible materials. As previously discussed, use of CAL FIRE-approved spark arrestors and compliance with SJCAPCD rules and regulations, including Regulation VIII related to project site watering, would

[11] San Joaquin County. *San Joaquin County Development Title Update*. [pg. 189]. November 29, 2022.

minimize fire hazards should sparks created by construction equipment contact combustible materials on-site. As such, the risk of direct flame impingement on combustible materials during project construction would be minimized and a less-than-significant impact would occur.

Off-Site Improvements Study Area

As discussed in Chapter 3, Project Description, of this EIR, the prospective off-site development areas include a range of intersection and roadways located between the project site and Interstate 205 (I-205), located north of the City of Tracy. The off-site improvements would be limited to existing roadways, which are not subject to wildfire risks. Because the proposed off-site improvements would occur within areas lacking substantial fuel sources or slopes, and would include the further removal of vegetation, development of the off-site improvements would not exacerbate wildfire risks.

Conclusion

Based on the above, the proposed project would not exacerbate wildfire risks and thereby expose project occupants and residents in the project vicinity to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, a ***less-than-significant*** impact could occur.

Mitigation Measure(s)

None required.

4.14-3 Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Based on the analysis below, the impact is *less than significant*.

Development of the Initial Phase and Specific Plan Buildout would result in the construction of similar land uses on contiguous parcels. Thus, the following discussion applies to the potential for both components to require the installation or maintenance of associated infrastructure that may exacerbate fire risk.

Initial Phase, Specific Plan Buildout

The proposed project would include installation of various infrastructure components, including roadways, new site-specific fire water sources, power lines, on-site sewer lift stations, and other utilities. All potential physical environmental impacts that could result from development of the proposed project, including the off-site improvements, have been evaluated throughout the technical chapters of this EIR.

The proposed roadways would not exacerbate fire risks, as General Plan Policy PHS-4.3 requires new development to use fire-resistant ground cover, participate in fuel load reduction, and take other appropriate fire prevention measures. Any landscaping located adjacent to or within the proposed roadways would include irrigation scheduling to ensure the proposed vegetation would not result in excessively dry fuel sources. Additionally, power lines and other utilities constructed for the proposed

project would be undergrounded, which would reduce fire risks during operations. Through compliance with the San Joaquin County Code, the proposed project would be required to ensure that regular maintenance of the vegetation within the proposed open space areas is conducted. Such maintenance activities would include the removal and reduction of hazardous fuels, which would reduce the potential for fire to occur within the project site and spread to adjacent areas. Furthermore, as discussed under Impact 4.14-2 above, the proposed buildings would be subject to all applicable standards set forth by the CBC and CFC, including the use of automatic fire sprinkler and/or fire extinguishing systems. Therefore, the proposed infrastructure improvements would not substantially exacerbate wildfire risk.

The proposed project would also maintain an independent water supply for the purposes of fire flow. As discussed in Chapter 3, Project Description, of this EIR, the proposed project would include a separate groundwater well to meet the fire water quantity and pressure needs for all phases of project development. Fire water would be provided through a dedicated fire system separate from the proposed domestic water system and would include an estimated 600,000-gallon storage tank and an associated booster pump. The storage volume may be split between pressure zones, but a fire booster pump would be necessary at each tank location. The proposed location for the primary fire system components, including the fire well, storage tank, and booster pump, would be located within the Initial Phase boundaries. The fire hydrants within the project site would meet all applicable SSJCFA requirements. The emergency water supply infrastructure would be sized to accommodate only the proposed project, and long-term maintenance and operation of such would not involve any activities that would result in an increase in wildfire risk.

The initial construction and utility placement activities associated with project development could cause a temporary increase in fire risks due to the use of heavy equipment, which would contain such combustible materials as fuels and oils. However, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous materials, which would help to minimize the potential for accidents, including fire. Furthermore, equipment used for cutting on-site vegetation would be equipped with CAL FIRE-approved spark arrestors to prevent the escape of carbon or other flammable particles.

Off-Site Improvements Study Area

The long-term maintenance of the proposed roadways would not exacerbate fire risks. During the construction activities associated with off-site improvements, a temporary increase in fire risks associated with the use of heavy equipment, which would contain such combustible materials as fuels and oils, could occur. However, as discussed above, the project contractor would be required to comply with all California Health and Safety Codes and local County ordinances regulating hazardous materials, which would help to minimize the potential fire.

Conclusion

Based upon the above, the proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may

result in temporary or ongoing impacts to the environment. Therefore, the project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)
None required.

4.14-4 Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Based on the analysis below, the impact is *less than significant*.

Wildfires alter landscapes and can result in post-event hazards triggered primarily by rainfall. Rainfall that is normally captured and stored by vegetation can run off across post-wildfire landscapes almost instantly, causing creeks and drainage areas to flood much sooner during a storm and with more water than is expected under unburned conditions. Soils burned at moderate and high severities tend to have reduced infiltration capacity and are more easily eroded. The potential post-fire flooding, soil erosion, and debris flows can impact recreational areas, homes, structures, roads, and other infrastructure within, adjacent to, and downstream from burned areas.

Wildfire-related flooding and increased runoff may continue for several years in a burn area. However, while some of the largest debris-flow events happen during the first post-fire storm season, post-fire debris flows do not typically occur beyond the second rainy season. While multiple factors can affect debris-flow occurrence, such flows are generally triggered by one of two processes: surface erosion caused by rainfall runoff, and landsliding caused by rainfall seeping into the ground. Surface erosion runoff processes are by far the most prevalent contributors to debris flows. Landsliding contributes less to fire-related debris flow, but prolonged heavy rains may increase soil moisture even after a wildfire.[12] The wetted soil can then fail, producing infiltration-triggered landslides. The landslides could be shallow or deep-seated (i.e., greater than 10 to 15 feet deep).

Development of the Initial Phase and Specific Plan Buildout would result in the construction of similar land uses on contiguous parcels. Thus, the following discussion applies to the potential for both components to expose people or structures to significant risks related to fire.

Initial Phase, Specific Plan Buildout
The project site does not feature steep or significant slopes. As such, the proposed project would not be vulnerable to risks associated with downslope or downstream flooding or landslides. Additionally, through development of the proposed project, the majority of on-site fuel sources would be removed as part of site improvements, thereby reducing the potential for substantial fire-burned areas to occur on-site. The reduction in on-site areas vulnerable to wildfires would similarly reduce the potential for post-fire on-site runoff to transport substantial sediment.

[12] U.S. Geological Survey. *Post-Fire Flooding and Debris Flow*. Available at: https://ca.water.usgs.gov/wildfires/wildfires-debris-flow.html. Accessed January 2025.

Off-Site Improvements Study Area

The prospective off-site improvement areas include a range of intersections and roadways located between the project site and I-205, none of which are located on steep slopes. In addition, the region surrounding the project site does not contain steep or significant slopes, such as canyons or mountainous valleys. Therefore, development of the off-site improvements would not risks related to runoff, post-fire slope instability, or drainage changes.

Conclusion

Based on the above, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. For more details regarding the cumulative setting, see Chapter 6, Statutorily Required Sections, of this EIR.

4.14-5 Increase in wildfire risk attributable to the proposed project, in combination with cumulative development. Based on the analysis below, the cumulative impact is *less than significant*.

Development of the Initial Phase and Specific Plan Buildout would result in the construction of similar land uses on contiguous parcels. Thus, the following discussion applies to the potential for both components to require the installation or maintenance of associated infrastructure that may exacerbate fire risk.

Initial Phase, Specific Plan Buildout

The cumulative setting for this EIR encompasses full project buildout, as well as various industrial, commercial, and residential projects within the City of Tracy and the County. Future development within the project site would result in changes to the existing land use environment through conversion of agricultural land to developed uses that would result in a reduction of existing vegetation. Development of other projects in the area, such as the Tracy Hills development northeast of the project site, would change the existing landscape from undeveloped and agricultural land to more intensively developed areas. Other projects would consist of impervious surfaces, which serve as fire breaks.

The project site is not located within an SRA. As shown in Figure 4.14-1, the entirety of the project site is located outside of a Very High FHSZ, but portions are located in

Moderate and High FHSZs. Additionally, all development facilitated by full project buildout would be subject to existing regulations and guidelines designed to prevent wildlife hazards. In addition, the projects would be required to comply with the CBC and CFC as adopted by the County and City Codes. As such, all buildings constructed in the area would be required to include fire sprinklers and fire alarms where applicable, as determined by the County Fire Marshal at building permit stage. In addition, future development projects would be subject to the applicable County Code provisions related to the protection of critical infrastructure throughout the County and the hazardous vegetation abatement standards for improved parcels. Finally, similar to the project site, development of any parcels within the area currently containing agricultural vegetation would remove such existing fuel sources, thereby reducing the cumulative risk of wildfire hazards. Overall, compliance with State and local standards would minimize wildfire risks at each cumulative project location.

Based on the above, the proposed project would have a ***less-than-significant*** cumulative impact related to exacerbating wildfire risk in combination with buildout of the Pacific Gateway Specific Plan and the projects planned for the area.

Mitigation Measure(s)

None required.

5. Effects Not Found to be Significant

5. EFFECTS NOT FOUND TO BE SIGNIFICANT

5.1 INTRODUCTION

Section 15128 of the CEQA Guidelines requires that an EIR briefly describe why various environmental effects were determined not to be significant and therefore were not discussed in detail in the EIR. The Effects Not Found to be Significant chapter of this EIR summarizes environmental issues that were determined not to be significant with implementation of the proposed project. The reasons for the conclusion of non-significance are provided for each issue area, as applicable, below.

5.2 FORESTRY RESOURCES

Consistent with Appendix G of the CEQA Guidelines, the proposed project was determined to have no impact with regard to the following issue areas:

- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] Section 12220[g]), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.

The project site and the Off-Site Improvements Study Area are not considered forest land (as defined in PRC Section 12220[g]), timberland (as defined by PRC Section 4526), and are not zoned Timberland Production (as defined by Government Code Section 51104[g]). As such, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland, or result in the loss of forest land or conversion of forest land to non-forest use. In addition, the project site, off-site stormwater detention basin, and associated storm drain pipe are generally located in an existing agricultural area or areas that consist of previously paved roadways. Similarly, potential improvements within the Off-Site Improvements Study Area would consist of a range of intersection and roadway improvements that would be triggered by full buildout of the proposed project, as shown in Figure 3-14 and Figure 3-15 of Chapter 3, Project Description, of this EIR. Such improvements would be located either within the existing rights-of-way (ROWs) or other previously-disturbed areas associated with the intersection or roadway being improved. As such, development of the project site or the Off-Site Improvements Study Area associated with the proposed project would not result in environmental changes which, due to their location or nature, could result in conversion of forest land to non-forest use. Therefore, the project would result in no impact.

5.3 BIOLOGICAL RESOURCES

Consistent with Appendix G of the CEQA Guidelines, the proposed project was determined to have no impact with regard to the following issue areas:

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

As discussed in Chapter 4.4, Biological Resources, of this EIR, sensitive vegetation communities were not mapped within the project site or Off-Site Improvements Study Area. However, cattail marsh and other wetland features were identified within the project site, including one water basin and 10 marshes, and two artificial agricultural water basins, south of the Delta-Mendota Canal. In addition, wetlands were identified in the Off-Site Improvements Study Area where Corral Hollow Creek bisects South Chrisman Road, as well as at the Vernalis Road/South Bird Road intersection. The Biological Resources Assessments (BRAs) prepared for the project site and the Off-Site Improvements Study Area by Bargas Environmental Consulting (Bargas) (see Appendix G and Appendix H of this EIR)[1,2] concluded that the aquatic resources identified within the project site and the Off-Site Improvements Study Area lack bed, bank, and associated riparian habitat. Therefore, it is reasonably anticipated that the features would not be regulated by CDFW, do not contain sensitive natural communities or riparian habitat pursuant to the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS), and the proposed project would not result in impacts to riparian habitats or other sensitive communities.

Chapter 4.4, Biological Resources, of this EIR, presents the local policies and ordinances protecting biological resources in San Joaquin County, including General Plan policies and the San Joaquin County Municipal Code, that are relevant to the proposed project. As analyzed throughout this EIR, due to the nature of the proposed project, or through implementation of mitigation measures, development of the proposed project and the Off-Site Improvements Study Area would be consistent with all applicable County General Plan policies, as well as the San Joaquin County Municipal Code. As discussed in Chapter 4.4 of this EIR, the project site is comprised mostly of orchards and is planted primarily with commercial fruit- and nut-bearing trees, including almond and cherry. Additionally, tree tobacco (*Nicotiana glauca*) were observed within the project site. The removal of a native oak, heritage oak tree, or historical tree requires an approved improvement plan application (Chapter 9-1505.3), which requires replacement of the tree subject to requirements described in Chapter 9-1505.4. Such provisions do not apply to horticultural or orchard trees proposed for removal. Therefore, the on-site tree species are not protected. As such, although the proposed project would require the removal of on-site trees, Specific Plan Buildout would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Based on the above, the proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS, or, conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, the project would result in no impact.

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1 Bargas Environmental Consulting. *Biological Resources Assessment, Pacific Gateway Specific Plan Project, San Joaquin County, California*. February 2025.

2 Bargas Environmental Consulting. *Biological resources letter report for the Pacific Gateway Specific Plan Project off-site areas at Chrisman Road in San Joaquin County, California*. February 28, 2025.

5.4 POPULATION AND HOUSING

Consistent with Appendix G of the CEQA Guidelines, the proposed project was determined to have no impact with regard to the following issue areas:

- 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); or
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

The project site is currently developed with active agricultural land, including almond and cherry orchards, and an agricultural machinery manufacturing facility (A.B. FAB, Inc.). In addition, potential implementation of intersection and roadway improvements within the Off-Site Improvements Study Area would occur either in existing roadway ROW or in other previously disturbed areas. The project site, at its nearest point, is approximately one mile from the southern boundary of the City of Tracy; yet the site is nonetheless generally located in an existing agricultural area with agricultural uses located to the north (e.g., orchards, Crown Nut almond processing plant), to the south between the Aqueduct and I-580, and to the east of Bird Road. Because neither the project site nor the Off-Site Improvements Study Area is currently developed with residences that would be demolished as part of project buildout, the proposed project would not result in the displacement of existing housing or residents, and no impact would occur.

The County's General Plan designates the majority of the project site as General Agriculture (A/G). In addition, 19 acres located at the furthest eastern point of the project site, is designated Resource Conservation (OS/RC), and a parcel in the southernmost portion of the site is designated Rural Service Commercial (C/RS). The project site is zoned by the County as AG-40-acres (AG-40), and the parcel in the southernmost portion of the site that is designated C/RS is zoned Rural Service Commercial (C-RS). The proposed project would include a General Plan Map Amendment to redesignate the site from 1,556.61 acres of Agriculture, 19 acres of OS/RC, and 1.09 acres of C/RS to approximately 1,387.35 acres of Limited Industrial (I/L), 18.54 acres of General Commercial (C/G); 86.13 acres of Public Facilities (P/F), 28.91 acres of Parks and Recreation (OS/PR), and 40 acres of A/G, with the remaining acreage allocated to roads. The proposed project would also include a Rezone to ensure conformance with the proposed General Plan Amendments. The proposed General Plan Amendment and Rezone would result in industrial and commercial uses not anticipated for the project site, and would generate new employees.

As discussed in Chapter 3, Project Description, of this EIR, the proposed project includes implementation of a Specific Plan that would result in up to 24,675,000 square feet (sf) of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.5-acre University campus plus 9.8 acres for future expansion, a Veterans of Foreign Wars (VFW) post, and various open space, parks, a new fire station, stormwater management basins, and pedestrian and bicycle facilities within the 1,576.7-acre project site.

According to Chapter 4.13, Urban Decay, of this EIR, the maximum anticipated number of on-site employees by land use resulting from the proposed project include 14,955 industrial workers, 300 University workers, 94 retail workers, and 60 hotel workers. It should be noted that the University would include the development of 1,000 "beds" for prospective students, however, the housing would be temporary in nature and would not constitute residential use or contribute to the anticipated residential population. According to the 2024 U.S. Census, the population in San

Joaquin County is 816,108 people. Conservatively assuming, even if all new employees would be new County residents, the County population would only increase by approximately two percent ((14,955+300+94+60)/816,108= 0.0188). As such, the increase in population would comprise only a portion of the County's existing population, and would not result in a substantial increase in population or demand for housing in the vicinity of the project site.

Based on the above, the proposed project would not induce substantial population growth in an area, either directly or indirectly; or displace substantial numbers of existing people or housing, and no impact would occur.

6. Statutorily Required Sections

6. STATUTORILY REQUIRED SECTIONS

6.1 INTRODUCTION

The Statutorily Required Sections chapter of the Draft EIR includes discussions regarding those topics that are required to be included in an EIR, pursuant to the California Environmental Quality Act (CEQA) Guidelines, Section 15126.2. The chapter includes a discussion of the proposed project's potential to result in growth-inducing impacts; the cumulative setting analyzed in this EIR; energy conservation; significant irreversible environmental changes; and significant and unavoidable impacts caused by the proposed project.

6.2 GROWTH-INDUCING IMPACTS

State CEQA Guidelines Section 15126.2(e) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that could induce growth. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, it should not be assumed that induced growth is necessarily significant or adverse. This analysis examines the following potential growth-inducing impacts related to implementation of the proposed project and assesses whether the effects are significant and adverse (see CEQA Guidelines, Section 15126.2[e]):

1. Foster population and economic growth, or the construction of housing.
2. Eliminate obstacles to population growth.
3. Affect service levels, facility capacity, or infrastructure demand.
4. Encourage or facilitate other activities that could significantly affect the environment.

Foster Population and Economic Growth, or the Construction of Housing

As discussed in further detail in Chapter 3, Project Description, of this EIR, the proposed project includes implementation of a Specific Plan that would result in up to 24,675,000 square feet (sf) of Limited Industrial (I-L) use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.5-acre University campus plus 9.8 acres for future expansion, a Veterans of Foreign Wars (VFW) post, as well as various open space, parks, a new fire station, stormwater management basins, and pedestrian and bicycle facilities within the 1,576.7-acre project site. Because the project requires approval of a General Plan Amendment (GPA) and Zone Reclassification, buildout of the project site with the proposed uses, as well as any associated population or economic growth, has not been anticipated or analyzed in the San Joaquin County 2035 General Plan Environmental Impact Report (General Plan EIR). However, because the

proposed project is limited to industrial, commercial, and public uses, buildout would not directly result in an increase in population or construction of housing. It should be noted that the University would include the development of student housing offering 1,000 beds, and the Specific Plan would incorporate an "Expansion Area" for potential future growth which could accommodate up to 600 additional beds of student housing. A hotel would also be developed within the General Commercial area. However, such housing would be temporary in nature and would not constitute residential use. Therefore, the proposed project would not directly induce population growth.

While construction of the proposed project would result in an increase in construction employment opportunities, construction would be temporary, and jobs would likely be filled by the local employee base. Therefore, an increase in permanent population and a demand for housing in the vicinity of the project site as a result of the construction-related employment opportunities associated with the proposed project would not occur.

The proposed project would also provide long-term employment opportunities associated with operation of the proposed industrial, commercial, and public facilities. Full buildout of the proposed project would include 24,675,000 sf of new industrial space. As discussed in further detail in Chapter 4.13, Urban Decay, of this EIR, the proposed industrial space comprises a 17.8 percent addition to the existing 138.4 million sf of industrial space in San Joaquin County (as of the third quarter of 2024). The San Joaquin County economy as a whole is projected to experience demand for new industrial space in the near- and long-term future. During the 2024 to 2040 period, Pacific Gateway East along with a portion of Pacific Gateway Central is estimated to develop approximately 12,647,935 sf of industrial space, representing approximately 28 percent of the forecast San Joaquin County industrial space demand. Considering the longer-term projection, the balance of the Pacific Gateway Central development area plus the Pacific Gateway West and Gateway Center development areas are anticipated to be delivered in the 2040 to 2060 period (e.g., by 2056). Projected demand during this time totals 98.5 million sf, or 4.9 million sf per year. For the time period from 2040 to 2060, the project's space represents approximately 12 percent of the forecast demand in San Joaquin County. Overall, the project represents less than one-fifth of the County's anticipated demand for industrial uses for the 2024 to 2060 period. As such, the increase in jobs associated with project buildout, consisting of 14,955 industrial workers, 300 University workers, 94 retail workers, and 60 hotel workers, would comprise only a portion of the County's existing and anticipated employment levels. Based on the above, while the project would generate economic growth, such growth would be within the anticipated demand for industrial uses. Conservatively assuming, even if all new employees were new County residents, the County population would only increase by approximately two percent ((14,955+300+94+60)/816,108= 0.0188). As such, the increase in population would comprise only a portion of the County's existing population, and would not result in a substantial increase in population or demand for housing in the vicinity of the project site.

Thus, while the project would foster economic growth, a less-than-significant impact related to population and economic growth would occur.

Eliminate Obstacles to Population Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with such services, would be expected

to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

As discussed in Chapter 4.11, Public Services and Utilities, of this EIR, the proposed project is currently served by surface water, well, and groundwater sources. The proposed project's domestic water needs would be met primarily through surface water supplied by Byron-Bethany Irrigation District (BBID), with supplemental use of groundwater, if needed, through installation of one or more new wells. Treated water would be provided by a new public water system created to serve the project and permitted through the State of California, or through County Service Area 16 (CSA-16), if it is feasible to administratively consolidate with that existing system. Necessary facilities would be constructed to serve the entire pressure zone for the Initial Phase and the proposed University and VFW sites. The potable water storage would be expanded as the project builds out. However, the on-site water system would be sized to serve only the proposed project. Water infrastructure would not be extended beyond the project site to serve other areas, and the proposed project does not include residential uses. Thus, the proposed water system is not anticipated to result in elimination of obstacles to population growth, nor would the proposed water system directly or indirectly induce population growth.

As detailed in Chapter 3, Project Description, of this EIR, the proposed wastewater system would be self-contained and would not require service from an outside agency. Wastewater produced by the proposed project would be treated and disposed of on-site at a wastewater treatment facility (WWTP) located in the Pacific Gateway East development area. Similarly, storm drainage for the project would consist of a system of storm drain inlets, piping, and bio-treatment and retention basins sized for the 100-year, 10-day storm. The proposed systems would be sized to accommodate the proposed project only. Therefore, the proposed wastewater treatment and storm drainage systems would not serve to eliminate obstacles to population growth in the project vicinity.

Based on the above, all utility infrastructure improvements involved in the proposed project would exclusively serve the proposed project. Therefore, the project would not be anticipated to eliminate any obstacles to population growth.

Affect Service Levels, Facility Capacity, or Infrastructure Demand

Increases in population that could occur as a result of a proposed project may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. As previously discussed, the proposed project primarily consists of industrial uses, with some commercial and public service uses also proposed. While the project includes a University with 1,600 dorm rooms, increased demand for fire protection and emergency medical response would be accommodated by the new on-site fire station. As a condition of approval, the proposed project would be required to fund and construct the fire station located on a 2.59-acre parcel east of South Chrisman Road and north of the California Aqueduct, within the Pacific Gateway East development area once the project site exceeds 6,000,000 sf, which would be after the Initial Phase development. The SSJCFA, on behalf of the TRFD, confirmed that with the provision of the on-site fire station, adequate capacity would be available to provide fire protection services for the proposed project. In a personal communication, the San Joaquin County Sheriff's Office stated that the proposed project would not generate the demand for police protection services such that the construction of a new facility would be required.

Similarly, because the proposed project primarily consists of industrial, commercial, and public service uses, and does not include new residential units, the proposed project would not be anticipated to result in a direct increase in new school-aged population within the Tracy Unified School District (TUSD) and Jefferson Elementary School District (JESD) boundaries. Additionally, full Specific Plan Buildout would include the development of an on-site university campus with 1,600 dorm beds, which would be intended to meet a need for higher education in the region. Therefore, the proposed project would not be expected to substantially increase demand for school services provided by the TUSD and JESD.

Regarding water supply, it is intended that the proposed project's domestic water needs would be met primarily through surface water supplied by BBID, with supplemental use of groundwater, if needed, through installation of one or more new wells. As discussed in Chapter 4.11, Public Services, and Utilities, of this EIR, water storage would be required for the Initial Phase of the proposed project and potable water storage would be expanded as the project builds out. The need for water supplies generated by the proposed project would be accommodated by wastewater treatment facilities and infrastructure proposed as part of the project. The projected future demand for primary water supply sources is 801 acre-feet per year (AFY), which is below the current demand of existing agricultural uses at the project site of 4,538 AFY and below the total existing groundwater use within the project site of 2,380 AFY. The proposed project would result in a reduction in water pumped from the Delta-Mendota and Tracy Subbasins when compared to existing use of groundwater for agriculture at the project site.

Similarly, wastewater generated by the proposed project would be accommodated by wastewater treatment facilities and infrastructure proposed as part of the project. Wastewater generated by the proposed project will be treated on-site through a new WWTP located in the Pacific Gateway East development area. The WWTP would use Membrane Bioreactor (MBR) technology in above-ground steel tank systems to produce treated wastewater suitable for irrigation and waste activated sludge suitable for landfill disposal. To serve the Initial Phase of the proposed project, the sewer collection system and package wastewater treatment facility would be constructed, as would the recycled water storage and pump station. Any expansions to the wastewater system over the years of project operations would be accomplished by the addition of treatment package units. The new sewer infrastructure would be designed and constructed in accordance with the applicable standards set forth in the San Joaquin County Improvement Standards, ensuring the new sewer infrastructure is constructed in conformance with proper materials and sizing. Because wastewater generated by the proposed project would be treated in an on-site WWTP, specifically sized to serve the proposed project, and which could be expanded to match buildout of the Specific Plan, adequate capacity would be available to treat wastewater flows generated by the proposed project.

The landfill that would serve the proposed project has adequate capacity to manage the solid waste generated as result of the project.

In conclusion, the proposed project would not increase population such that service levels, facility capacity, or infrastructure demand would require construction of new facilities that could cause significant environmental impacts.

Encourage or Facilitate Other Activities That Could Significantly Affect the Environment

This EIR provides a comprehensive assessment of the potential for environmental impacts associated with implementation of the proposed project. Please refer to Chapters 4.1 through 4.14 of this EIR, which comprehensively address the potential for impacts from development on the project site.

6.3 CUMULATIVE IMPACTS

CEQA Guidelines, Section 15130 requires that an EIR discuss the cumulative and long-term effects of the proposed project that would adversely affect the environment. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects" (CEQA Guidelines, Section 15355[a]). "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines, Section 15355[b]).

The need for cumulative impact assessment reflects the fact that, although a project may cause an "individually limited" or "individually minor" impact that, by itself, is not significant, the increment may be "cumulatively considerable," and, thus, significant, when viewed together with environmental changes anticipated from past, present, and probable future projects (CEQA Guidelines, Section 15064[h][1], Section 15065[c], and Section 15355[b]). Accordingly, particular impacts may be less than significant on a project-specific basis but significant on a cumulative basis if their small incremental contribution, viewed against the larger backdrop, is cumulatively considerable. However, it should be noted that CEQA Guidelines, Section 15064(h)(4) states, "[…]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

Section 15130(b) of CEQA Guidelines indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, but that analysis should reflect the severity of the impacts and their likelihood of occurrence, and that the analysis should be focused, practical, and reasonable. To be adequate, a discussion of cumulative effects must include the following elements:

> (1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency's control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provided that such documents are referenced and made available for public inspection at a specified location;
>
> (2) A summary of the individual projects' environmental effects, with specific reference to additional information and stating where such information is available; and

(3) A reasonable analysis of all of the relevant projects' cumulative impacts, with an examination of reasonable, feasible options for mitigating or avoiding the project's contribution to such effects (Section 15130[b]).

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130[c]). Section 15130(a)(3) states that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund the project's fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

A discussion of cumulative impacts is provided within each of the technical chapters of this EIR pursuant to CEQA Guidelines Section 15130.

Cumulative Setting

The lead agency should define the relevant geographic area of inquiry for each impact category (id., Section 15130[b][3]), and should then identify the universe of "past, present, and probable future projects producing related or cumulative impacts" relevant to the various categories, either through the preparation of a "list" of such projects or through the use of "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact" (id. Section 15130[b][1]).

As discussed above, two approaches exist for identifying cumulative projects and their associated impacts. The "list" approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The "projection" approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative impacts. This EIR uses the list approach for the cumulative analysis, which is based upon a summary of anticipated projects in the County and surrounding areas.

Projects considered within the cumulative setting for this EIR include those that have the potential to impact similar environmental resources, infrastructure, or public services and facilities as compared to the proposed project. For the purposes of this EIR, a list of reasonably foreseeable industrial, retail, and residential development projects was compiled for the project region (including San Joaquin County, and the cities of Stockton, Tracy, and Lathrop) (see Appendix Q). Based on the list of reasonably foreseeable projects included in the City of Tracy New Construction Industrial & Commercial Development Pipeline Report and the City of Lathrop Commercial - Industrial Development Pipeline Report Status; as well as information from the City of Stockton Community Development Department; San Joaquin County Planning Department; Colliers; Cushman & Wakefield; and ALH Urban & Regional Economics, the cumulative development totals are listed in Table 6-1.

Table 6-1
Cumulative Development Potential

Jurisdiction	Industrial (sf)	Retail (sf)	Residential (Units)
San Joaquin County	11,055,673	--	--
City of Tracy	17,612,132	287,555	9,011
City of Stockton	3,202,910	--	--
City of Lathrop	1,197,188	--	--
Total	**33,067,903**	**287,555**	**9,011**

In general, the cumulative development potential in Table 6-1 was used to assess cumulative impacts within each technical chapter of the EIR. However, geographic setting features prominently in any cumulative impact analysis. For example, for hydrology, as discussed in Chapter 4.8, Hydrology and Water Quality, of this EIR, the geographic setting for the cumulative analysis is defined by watershed boundaries. The project site is located within a 15,590-acre watershed comprised of various drainage areas (see Figure 4.8-1 of this EIR). Therefore, the inquiry focuses on whether any of the above-listed cumulative development potential could occur within the defined watershed boundaries.[1] This approach is confirmed by CEQA Guidelines Section 15130(b)(2), which states:

> When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect.

The geographic setting may also differ for certain CEQA topics. Examples include air quality and criteria pollutants analysis, for which the cumulative geographic setting is the San Joaquin Valley Air Basin (SJVAB). Global climate change is, by nature, a cumulative impact. Emissions of GHG contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed project, the geographical context for global climate change in this EIR is limited to the State of California.

In the case of aesthetics, other proposed and pending projects in the region under the cumulative context would generally include buildout of the project site in conjunction with cumulative development within the same viewshed. As shown in Figure 4.1-25 of the Aesthetics chapter, cumulative development within the same viewshed would consist of the Tracy Hills Specific Plan, anticipated to result in the conversion of approximately 2,725 acres of farmland;[2] the Cordes Ranch Specific Plan, anticipated to result in the conversion of approximately 1,700 acres of farmland;[3] and the Ellis Specific Plan, anticipated to result in the conversion of approximately 320 acres of farmland.[4]

In the case of transportation, the cumulative analysis is based on a set of protections included in a widely used model - the City of Tracy Refined travel demand model. The cumulative transportation setting corresponds to the Year 2042, which is the horizon year of the City of Tracy travel demand model, which was used to develop cumulative traffic forecasts. This model has

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1 As discussed in Chapter 4.8, none of the reasonably foreseeable projects are located within the watershed boundaries.

2 City of Tracy. *Tracy Hills Specific Plan: Recirculated Draft Subsequent Environmental Impact Report* [pg. 4.2-1]. October 2015.

3 City of Tracy. *The Cordes Ranch Specific Plan Draft Environmental Impact Report* [pg. 4.2-7]. April 5, 2013.

4 City of Tracy. *Modified Ellis Project Draft Revised Environmental Impact Report* [pg. 4.2-1]. July 2012.

more granularity than the more regional SJCOG model and is therefore better capable of developing forecasts at a neighborhood/community level. The cumulative traffic noise analysis performed by the project noise consultant, Saxelby Acoustics, is based on the cumulative traffic volumes provided by the project transportation consultant, Fehr & Peers.

In the case of urban decay, the competitive market helps define the cumulative setting, which primarily focuses on the cities of Tracy, Lathrop, and Stockton, as well as southern San Joaquin County. Patterson, located in western Stanislaus County, about 18 miles southeast of the project site, is considered a secondary competitive location.

Please refer to the Cumulative Impacts and Mitigation Measures section of each technical chapter for a discussion of cumulative impacts for each CEQA topic.

6.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Pursuant to CEQA Guidelines Section 15126.2(d), this EIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed project, should the project be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in, or contribute to, the following significant irreversible environmental changes:

- Irreversible consumption of construction materials, such as lumber, associated with the proposed project;
- Irreversible consumption of energy and natural resources, such as water, electricity, and natural gas, associated with project buildout;
- Irreversible conversion of agricultural land to non-agricultural use; and
- Irreversible conversion of biological habitat to urban use.

6.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

According to the CEQA Guidelines, an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented (CEQA Guidelines Section 15126.2[b]). Such impacts would be considered unavoidable when the determination is made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less than significant. This section identifies significant impacts that could not be eliminated or reduced to a less-than-significant level by mitigations imposed by the County. The final determination of the significance of impacts and the feasibility of mitigation measures would be made by the County as part of the County's certification action. The significant and unavoidable impacts of the proposed project are summarized below.

Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. (Impact 4.1-1 [Specific Plan Buildout only])

Interstate-580 forms a portion of the western boundary of the project site and is the only officially designated State scenic highway located within San Joaquin County. The Pacific Gateway West, Pacific Gateway Central, and Gateway Center development areas are located in close proximity to Interstate 580 (I-580) and would include a considerable amount of new industrial development. The current condition of the proposed development areas is characterized by open agricultural lands (e.g., orchards and vineyards), which are considered a scenic resource by the County. The project at full buildout would significantly disrupt the visual quality of the open agricultural landscape to the east of I-580. Based on the above, Specific Plan Buildout would substantially damage scenic resources within view of a State scenic highway. Feasible mitigation does not exist to reduce the impact to a less-than-significant level. Due to the substantial damage to scenic resources within a State scenic highway, the impact associated with buildout of the proposed Specific Plan would remain significant and unavoidable.

Have a substantial adverse effect on a scenic vista or, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point). (Impact 4.1-2 [Initial Phase and Specific Plan Buildout only])

Given that the immediate vicinity of the site is primarily rural in nature, the analysis within this EIR considers the project area to be non-urbanized. Thus, the relevant CEQA threshold, pursuant to Appendix G, is whether the proposed project would substantially degrade the existing visual character or quality of public views of the site and its surroundings. The project site area contains multiple key viewpoints, including views from I-580 and South Chrisman Road towards the project site. Several of the views analyzed in the EIR from public roadways consist of agricultural land and/or the Diablo foothills, west of I-580. Depending on the view, in some cases, the proposed project would change existing public viewsheds of the site from predominantly agricultural landscape to industrial and commercial development. In addition, the proposed project would substantially interfere with existing scenic vistas of the Diablo Range foothills from a select number of views identified in Impact 4.1-2.

Feasible mitigation does not exist to reduce the impact to a less-than-significant level beyond the development standards included in the Specific Plan. Due to the substantial adverse effects on a scenic vista and the substantial degradation of the existing visual character and quality of public views of the project site, the impact associated with buildout of both the Initial Phase of the proposed project and the full Specific Plan would remain significant and unavoidable.

Long-term changes in scenic resources within a state scenic highway, scenic vistas and visual character associated with development of the proposed project in combination with cumulative development. (Impact 4.1-4)

The geographic setting for analysis of long-term cumulative changes in scenic resources along a state scenic highway, scenic vistas and visual character associated with the proposed project is cumulative buildout of the project site in conjunction with all other development within the same viewshed. As shown in Figure 4.1-25, this would consist of the Tracy Hills Specific Plan; the Cordes Ranch Specific Plan; and the Ellis Specific Plan. I-580 is an officially designated state

scenic highway from I-205 to I-5 with views of the Diablo Range foothills, open agricultural lands, and, on especially clear days, the Sierra Nevada foothills. Similar to the project, the identified cumulative development abuts I-580 and may also significantly damage the highway's scenic resources. The cumulative impacts to scenic resources along a state scenic highway could be *cumulatively considerable* and *significant and unavoidable*.

A large portion of the foregoing development is proposed on what is currently agricultural land. While the General Plan EIR determined that compliance with the General Plan's goals, policies, and actions, combined with other State and local regulations, would reduce project-level aesthetic impacts to a less-than-significant level, the project would require a GPA. As the site was not anticipated for development as part of the General Plan EIR, and as discussed under Impact 4.1-2, the quality of scenic vistas and the existing visual character of the project site would be significantly altered with implementation of the proposed project, a significant impact to scenic vistas and visual character associated with the proposed project would occur. Feasible mitigation does not exist to reduce the impact to a less-than-significant level. Due to the substantial adverse effects on scenic resources within a state scenic highway and scenic vistas and the substantial degradation of the existing visual character and quality of public views of the project site, the impact associated with the proposed project in combination with cumulative development would remain cumulatively considerable and significant and unavoidable.

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, or conflict with existing zoning for agricultural use, or a Williamson Act contract. (Impact 4.2-1)

The majority of the project site is currently zoned for agricultural uses by San Joaquin County and is comprised of cherry and almond orchards. As such, the proposed commercial, industrial, and public service uses would conflict with the project site's existing zoning designation. With respect to Williamson Act contracts, eight parcels within the project site, totaling approximately 789.85 acres, are currently subject to Williamson Act contracts. Notices of Nonrenewal have been filed for the Williamson Act Parcels, and a Williamson Act contract cancellation application was filed separately on November 8, 2024. Approval of the Williamson Act contract cancellation application is considered an administrative function. Nonetheless, the reasonably foreseeable consequence of site development and Willamson Act contract cancellation is the conversion of agricultural land for another non-agricultural use.

According to the Farmland Mapping and Monitoring Program (FMMP), approximately 1,454 acres of the project site are mapped as Prime Farmland, with approximately 65 acres of the site mapped as Farmland of Local Importance; the on-site agricultural machinery manufacturing facility is mapped as Other Land Specified as Semi-agricultural and Rural Commercial Land. Because the proposed project would result in the conversion of Prime Farmland to non-agricultural use and would conflict with Williamson Act contracts, a significant impact would occur. Furthermore, pursuant to the County's Code of Ordinances, because the entire project site is designated for agricultural uses, the proposed General Plan Map Amendment, Rezone, and Specific Plan would result in a significant impact. While implementation of Mitigation Measure 4.2-1 would preserve an equivalent acreage of Farmland elsewhere through compliance with the County's Agricultural Mitigation Ordinance, the proposed project would result in the conversion of agricultural land to

urban uses, and would not create new agricultural land; as such, the proposed project would lead to an overall loss of Farmland. Therefore, the impact would remain significant and unavoidable.

Impacts related to the cumulative loss of agricultural land. (Impact 4.2-3)

Based on a cumulative list of projects within San Joaquin County and the City of Tracy, a cumulative total of approximately 28,667,805 sf of industrial uses, approximately 364,591 sf of retail uses, and approximately 9,011 residential units are reasonably foreseeable; a large portion of the foregoing development is proposed on what is currently agricultural land. As discussed above, Mitigation Measure 4.2-1 would require the proposed project to comply with the County's Agricultural Mitigation Ordinance; other reasonably foreseeable projects located in the project vicinity would similarly be required to comply with either the County Ordinance or the City of Tracy's Agricultural Mitigation Fee Ordinance (Chapter 12.28). However, even with the implementation of Mitigation Measure 4.2-3, which implements Mitigation Measure 4.2-1, the proposed project, in combination with other reasonably foreseeable development, would convert Prime Farmland to non-agricultural uses. Thus, the proposed project would result in the permanent loss of agricultural land attributable to the project and development of the Initial Phase and Specific Plan Buildout, as well as other cumulative development, would contribute incrementally towards the cumulative impact related to conversion of important farmland. Therefore, the impact would remain significant and unavoidable.

Conflict with or obstruct implementation of the applicable air quality plan. (Impact 4.3-1)

According to Chapter 4.3-1, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, if a project proposes development that is greater than anticipated in the San Joaquin Council of Government's (SJCOG's) growth projections, the project would be considered to conflict with the regional air quality attainment plans and the State Implementation Plan (SIP), and could potentially result in a significant air quality impact. Given that the proposed project would require a GPA, the proposed project has not been anticipated by the County in the General Plan. Thus, development of the project would not have been included in the growth assumptions of the SIP. Because the SIP takes into account growth assumptions to determine when and how air quality standards could be achieved, emissions that are not accounted for in the SIP have the potential to conflict with the attainment goals set forth in the SIP.

In addition, adopted San Joaquin County Air Pollution Control District (SJVAPCD) rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of ambient air quality standards (AAQS), or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with the applicable air quality plan. Thus, if a project's operational emissions exceed the SJVAPCD's thresholds of significance, a project would be considered to conflict with or obstruct implementation of the SJVAPCD's air quality planning efforts. While the proposed project incorporates various policy and rule-required implementation measures, as well as project-specific mitigation measures, that would reduce project-related emissions even with inclusion of such measures, operational emissions associated with the Initial Phase and Specific Plan Buildout would exceed the SJVAPCD's thresholds of significance, as shown in the quantitative analysis provided in Impact 4.3-3.

The EIR includes several mitigation measures to address the impact; however, additional feasible mitigation sufficient to reduce the proposed project's operational criteria pollutant emissions to

below the SJVAPCD's thresholds of significance is not currently available. Therefore, even with implementation of the aforementioned mitigation measures, the impact would remain significant and unavoidable.

Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project operation. (Impact 4.3-3)

Emissions of reactive organic gas (ROG) and oxides of nitrogen (NO_X) would be generated during operations of the proposed project from both mobile and stationary sources. As shown in Table 4.3-14 and Table 4.3-15 of Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, maximum annual and daily unmitigated operational ROG, NO_X, carbon monoxide (CO), and respirable particulate matter (PM_{10} – annual only) emissions associated with the Initial Phase are projected to exceed the SJVAPCD annual thresholds of significance. Similarly, based on the California Emissions Estimator Model (CalEEMod) results, the estimated maximum annual unmitigated operational ROG, NO_X, CO, PM_{10}, and fine particulate matter ($PM_{2.5}$) emissions from Specific Plan Buildout are projected to exceed the SJVAPCD annual thresholds of significance. Thus, the proposed project would result in a net increase of a criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard.

With implementation of mitigation measures included in the EIR, maximum daily operational emissions associated with the Initial Phase are projected to be below the applicable thresholds of significance for all criteria pollutants. However, maximum annual operational emissions associated with the Initial Phase are projected to still exceed the applicable thresholds of significance for ROG, NO_X, and PM_{10}, and maximum annual operational emissions from Specific Plan Buildout are also projected to remain above the applicable thresholds of significance for ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$.

In addition, a development project would be subject to the Indirect Source Review (ISR) requirements under SJVAPCD Rule 9510 if full buildout of the project would include or exceed the size limits specified by the SJVAPCD. As the proposed project would exceed the size limit specified, the proposed project would be subject to Rule 9510, which requires a reduction of operational NO_X and PM_{10} emissions of 33.3 percent and 50 percent, respectively, compared to the unmitigated baseline. While implementation of Mitigation Measures 4.3-3(a) and 4.3-3(b) would reduce the proposed project's operational NO_X emissions by more than 33.3 percent below the unmitigated baseline, PM_{10} emissions would not be reduced by 50 percent. Thus, the proposed project would be required to implement further SJVAPCD-approved on-site emission reduction measures and/or off-site mitigation fees to reduce the proposed project's operational PM_{10} emissions sufficient to comply with Rule 9510. Even with implementation of further measures and/or fees sufficient to meet the ISR requirements, the proposed project's operational emissions would still exceed the SJVAPCD's thresholds of significance.

Finally, implementation of Mitigation Measures 4.12-4(a) through 4.12-4(f) as set forth in the Transportation Chapter of this EIR, would require compliance with SJVAPCD Rule 9410 and implementation of TDM strategies to reduce the number of vehicle trips that would be generated by employees associated with the proposed project. However, existing evidence indicates that the effectiveness of the TDM strategies with regard to vehicle trip reduction can vary based on a variety of factors, including the context of the surrounding built environment (e.g., urban versus suburban) and the aggregate effect of multiple TDM strategies deployed together. Moreover, many TDM strategies are not just site specific, but also rely on implementation and/or adoption

by private entities (e.g., elective use of carpool program by residents) and other agencies (e.g., transit service operators). Thus, the effectiveness of Rule 9410 and the TDM strategies set forth within Mitigation Measures 4.12-4(a) through 4.12-4(f) cannot be quantified at this time and subsequent vehicle trip reduction effects cannot be guaranteed.

Additional measures for the reduction of mobile source emissions (beyond the proposed project's inherent site and/or design features and the measures included in Mitigation Measures 4.12-4[a] through 4.12-4[f]), sufficient to reduce criteria pollutant emissions to below the applicable thresholds of significance, are not available, nor feasible for the proposed project at this time. As such, even with the implementation of the aforementioned mitigation measures, the impact would remain significant and unavoidable.

Expose sensitive receptors to substantial pollutant concentrations. (Impact 4.3-4)

As discussed in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, operations during Specific Plan Buildout conditions (i.e., Scenario 3) would result in a cancer risk impact in excess of the SJVAPCD's thresholds to two residences located near the center of the project site along South Chrisman Road, just below the University Center development area. Thus, Specific Plan Buildout could expose sensitive receptors to substantial concentrations of toxic air contaminants (TACs) during operations.

Mitigation Measure 4.3-4 would require the installation of high efficiency particulate air (HEPA) filters within the maximally exposed sensitive receptors within the project area, as recommended by various guidance documents as an approach to addressing operational impacts, including the California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. As shown in Table 4.3-23 of Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, with implementation of Mitigation Measure 4.3-4, cancer risks would be reduced to below the SJVAPCD significance threshold. However, because installation of HEPA filters in the existing residences would require resident approval, neither San Joaquin County, nor the project applicant, can legally impose such improvements on private properties. Therefore, impacts associated with Specific Plan Buildout operations could remain significant and unavoidable.

Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard. (Impact 4.3-7)

As discussed under Impact 4.3-3 in Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, operation of the proposed project would result in emissions that exceed the SJVAPCD's thresholds of significance. In accordance with SJVAPCD guidance, because the proposed project would result in emissions above the applicable thresholds of significance, the proposed project would correspondingly be considered to result in a significant cumulative impact to air quality. Furthermore, if a project's criteria pollutant emissions exceed the SJVAPCD's emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the SJVAPCD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards.

Because operational criteria pollutant emissions associated with the Initial Phase and Specific Plan Buildout would not be reduced to below the applicable thresholds of significance, even with mitigations, and additional feasible mitigation sufficient to reduce the proposed project's operational criteria pollutant emissions associated with the Initial Phase and Specific Plan Buildout to below the SJVAPCD's thresholds of significance is not currently available, the proposed project's incremental contribution to the significant cumulative effect would remain cumulatively considerable and significant and unavoidable.

Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. (Impact 4.3-8)

SJVAPCD has not adopted quantitative thresholds of significance for GHG emissions that would apply to the proposed project. In the absence of an applicable local numeric threshold, San Joaquin County has determined it is appropriate to utilize Placer APCD's bright-line 10,000 $MTCO_2e$/year GHG threshold to evaluate the cumulative significance of the increase in GHG emissions associated with the proposed project. As presented in Table 4.3-24 of Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, the proposed project would result in GHG emissions well beyond 10,000 $MTCO_2e$/yr associated with both the Initial Phase and Specific Plan Buildout. Thus, the proposed project would generate GHG emissions that may have a significant impact on the environment. As such, the proposed project could generate GHG emissions either directly or indirectly, that may have a significant impact on the environment.

Implementation of Mitigation Measure 4.3-8(a) would require that the proposed project incorporate solar photovoltaic panel (PV) panels for "Base Building" energy needs for I-L zoned buildings as shown in Figure 3-4 of Chapter 3, Project Description, of this EIR. In addition, implementation of Mitigation Measure 4.3-3(b) would require use of zero emission equipment, including forklift equipment and yard mules, at all industrial warehouse buildings greater than 300,000 sf, and use of zero emission landscape equipment to maintain all landscaping associated with individual on-site buildings and all on-site parks and open space. As shown in Table 4.3-25 of Chapter 4.3, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, implementation of Mitigation Measures 4.3-8(a) and 4.3-3(b) would result in a meaningful reduction in operational GHG emissions associated with both the Initial Phase and Specific Plan Buildout. However, given that individual tenants for the proposed industrial warehouses are currently unknown, additional feasible measures associated with the proposed project that would have meaningful GHG reductions cannot be determined at this time. In addition, several measures typical of industrial warehouse projects have already been determined to be infeasible for the proposed project.

Based on the above, additional feasible mitigation measures are not currently available to meaningfully reduce GHG emissions associated with the proposed project. Therefore, implementation of the proposed project could generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG, and the proposed project's incremental contribution to this significant cumulative impact would be cumulatively considerable and significant and unavoidable.

Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5. (Impact 4.5-1)

The Archival Research and Windshield Survey conducted for the Off-Site Improvements Study Area identified 32 structures that have the potential to be eligible for listing on the CRHR. Thus,

the EIR includes mitigation to require further evaluation by an architectural historian who meets the Secretary of the Interior's Standards prior to any relevant intersection or road improvements to determine whether the structures would meet the criteria for inclusion on the CRHR. Without such evaluations, construction of the off-site improvements could potentially impact historic buildings and structures eligible for listing. Mitigation Measure 4.5-1(b) would require additional survey work on the buildings and structures adjacent to or abutting proposed improvement areas, including a formal evaluation to determine if buildings or structures in the area meet the criteria for listing on the CRHR. Specific and appropriate mitigation would be developed by the architectural historian relative to the specific project impacts. In addition, similar to Mitigation Measure 4.5-1(a), Mitigation Measure 4.5-1(c) requires that roadway improvements within the Off-Site Improvements Study Area located above the CRHR-listed San Joaquin Pipelines and Hetch Hetchy Aqueduct meet the Secretary of the Interior's specific design standards, further reducing potential impacts resulting from the development of the proposed roadways over historical structures in the project vicinity.

Implementation of the foregoing mitigation measures would reduce the above potential impacts to known historical resources pursuant to CEQA guidelines. While the Initial Phase would not impact the existing structures listed under the NRHP or CRHR, the proposed bridge widenings and roadway and intersection improvements associated with Specific Plan buildout and the Off-Site Improvements Study Area could potentially impact resources eligible for listing under the NRHP or CRHR. Additionally, until site-specific evaluations of the buildings and structures abutting the Off-Site Improvements Study Area are conducted, the degree to which potential impacts to existing historic structures can be avoided cannot be determined. Therefore, in order to establish a conservative analysis, the impact is considered to remain significant and unavoidable, even with mitigation.

Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Impact 4.10-1)

Many of the prospective off-site roadway improvement areas are located along undeveloped lands, or sparsely populated areas, especially south of West Linne Road along South Chrisman Road. One potential off-site roadway improvement includes the widening of Chrisman Road to four lanes from Eleventh Street to SR 132. The roadway improvement would likely include roadway construction activity within 50 feet of existing noise-sensitive receptors. At such a distance, construction noise would be expected to range between 76 to 90 dBA L_{max}. Additional off-site improvements would likely be required along West Linne Road, between Tracy Boulevard and South Chrisman Road. Receptors along this stretch of roadway are located within approximately 60 feet to approximately 400 feet. At 60 feet, construction noise would be expected to range between 74 to 88 dBA L_{max}. Due to the programmatic nature of the off-site improvements, temporary construction of off-site improvements could potentially result in an increase in noise levels at sensitive receptors exceeding the threshold of 12 dBA. Therefore, construction activities associated with the off-site improvements could generate a substantial temporary increase in ambient noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, and a significant impact could occur.

Implementation of Mitigation Measure 4.10-1(c) would require the proposed project to prepare a construction noise management plan prior to approval of grading or building permits for development within the Off-Site Improvements Study Area. Noise management measures would

include, but not be limited to, limiting the allowable construction hours and implementation of noise minimization best management practices (BMPs). Such noise management measures would help to reduce the above potential temporary noise impact. However, due to the programmatic nature of the off-site improvements, the effectiveness of the measure would vary by location within the Off-Site Improvements Study Area and may not prevent ambient noise-level increases due to project construction from exceeding 12 dBA, relative to existing levels. Therefore, even with implementation of Mitigation Measure 4.10-1(c), the above potential impact related to construction noise level increases associated with the Off-Site Improvements Study Area would remain significant and unavoidable.

Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Impact 4.10-2)

Based upon the detailed traffic noise analysis shown in Appendix D of the Environmental Noise Assessment (see Appendix M of this EIR), a total of 150 sensitive receptors were identified as impacted due to either the increase in traffic noise, or the proposed project causing noise levels to exceed the applicable exterior noise standards under Existing Plus Specific Plan Buildout traffic conditions.

Mitigation Measure 4.10-2(b) would require each future subdivision application to submit a traffic noise analysis to determine the appropriate quiet pavement improvement(s) on roadway segments in the site vicinity required to ensure that traffic noise level increases attributable to the proposed project shall not exceed the Federal Interagency Committee on Noise (FICON) thresholds. However, even with implementation of Mitigation Measure 4.10-2(b), 27 sensitive receptors would still be exposed to traffic noise levels in excess of the applicable thresholds of significance under the Existing Plus Specific Plan Buildout conditions, and four sensitive receptors would be impacted under the Cumulative Plus Specific Plan Buildout conditions.

In general, the reduction in the number of impacted sensitive receptors from Existing Plus Specific Plan Buildout conditions to Cumulative Plus Specific Plan Buildout conditions is associated with the background growth in traffic, based on traffic volume information provided by Fehr & Peers, as well as the incorporation of additional planned roadway improvements under Cumulative conditions. The background growth in traffic results in a higher background ambient noise level under Cumulative baseline conditions, thereby “diluting” the proposed project’s incremental contribution to the ambient noise levels. As for the planned cumulative roadway improvements, these would have the effect of redistributing some of the traffic along the area roadways, thereby shifting noise levels along such roadways.

Because a number of sensitive receptors impacted under Existing Plus Specific Plan Buildout conditions would no longer be impacted under Cumulative Plus Specific Plan Buildout conditions, it is reasonable to require the proposed project only to implement the approximately 4.2 miles of quiet pavement required under Cumulative Plus Specific Plan Buildout conditions, as set forth in Mitigation Measure 4.10-5. Further, given the long-term buildout of the proposed project, it is reasonable to allow the project applicant to conduct future traffic noise assessments at each phase of development (beyond the Initial Phase) to confirm which roadway segments require quiet pavement treatment for that particular phase.

As previously stated, even with implementation of mitigation measures, impacts related to operational traffic noise levels at existing sensitive receptors under Specific Plan Buildout conditions would remain significant and unavoidable.

Generation of a substantial permanent increase in ambient noise levels associated with development of the proposed project in combination with future development. (Impact 4.10-5)

As shown in Table 4.10-17 of Chapter 4.10, Noise, of this EIR, the proposed project would result in significant noise level increases on a total of eight roadway segments under Cumulative Plus Specific Plan Buildout conditions. Mitigation Measure 4.10-5 would implement Mitigation Measure 4.10-2(b), as discussed above. As shown in Table 4.10-18 of Chapter 4.10 Noise, of this EIR, the installation of quiet pavement along the roadway segments predicted to see a significant increase in traffic noise levels under Cumulative Plus Specific Plan Buildout conditions would reduce such noise levels to below the applicable thresholds of significance at all but four sensitive noise receptors. Because, even with implementation of Mitigation Measure 4.10-5, four sensitive receptors would still be exposed to traffic noise levels in excess of the applicable thresholds of significance, the cumulative impact would remain cumulatively considerable and significant and unavoidable.

Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, during operations. (Impact 4.12-3)

The proposed project would cause an inconsistency with several San Joaquin County General Plan policies (TM-1.3, TM-1.6, TM-1.11, TM-1.12, TM-2.3) pertaining to promoting the use of public transit, encouraging multi-modal transportation, providing alternative choices to single occupant driving, and supporting existing and future sustainable land use patterns. Thus, the project would result in a significant impact to transit facilities.

Implementation of Mitigation Measure 4.12-3 would reduce significant impacts associated with transit facilities by extending the San Joaquin Regional Transit District (RTD) fixed-route bus service to the project site and operating a private shuttle that circulates within the project site and off-site to the Altamont Commuter Express (ACE) Station in the City of Tracy. However, given that the required measures are not guaranteed to be approved by San Joaquin RTD and are outside of the County's jurisdiction, the County, as lead agency, cannot legally impose the mitigation measures. Therefore, implementation of Mitigation Measure 4.12-3 cannot be guaranteed.

Due to uncertainties regarding the ability for the aforementioned mitigation measure to reduce impacts to transit facilities, transit facility and service impacts would be considered to remain significant and unavoidable.

Result in VMT which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3, subdivision (b). (Impact 4.12-4)

Warehouse and office uses constructed as part of full Specific Plan Buildout would result in VMT per employee averages of 42 percent and 104 percent, respectively, above the significance threshold. Accordingly, the warehouse component of the Initial Development Phase and the warehouse and office components of the Specific Plan buildout could result in a significant impact



related to employee VMT. With respect to VMT impacts resulting from construction of the university campus, although the university would include some student housing, the considerable travel distance between the university and likely off-site student and staff residence locations suggests that the university would not be considered a "VMT efficient" land use. Thus, the TIA concluded that the VMT impacts associated with the Initial Phase development of the University Campus and full buildout of the University Center under Specific Plan Buildout would be significant.

Compliance with Mitigation Measure 4.12-4(a) would reduce project-generated VMT per employee by requiring the project applicant to comply with SJVAPCD Rule 9410, which requires major employers in the region to implement an Employer Trip Reduction Implementation Plan (eTRIP). Compliance with Mitigation Measure 4.12-4(b) would reduce project-generated VMT per employee by requiring the applicant to institute a TDM program to reduce external vehicle trips generated by the proposed project. With respect to the VMT reduction measures associated with the University component of the proposed project, TDM Strategies 1, 2, 4, and 5 from Mitigation Measure 4.12(b) would consist of a voluntary Commute Trip Reduction (CTR) program, implementation of an employee parking cash-out program, extending public transit service to the project, and providing a private employee shuttle system. Additionally, Mitigation Measure 4.12-4(f) provides two options for employee parking cash-out or paid parking, which would further reduce potential impacts to VMT associated with the University component of the proposed project.

While the TDM strategies included as part of compliance with SJVAPCD Rule 9410 (Mitigation Measure 4.12-4[a]) would also provide some VMT savings, the savings that would be achieved are unknown given the uncertainty of which strategies would be selected and to how many employers that program would apply. Similarly, while the net effect of the measures from Mitigation Measure 4.12(b) would be an eight percent reduction in VMT, the resulting VMT per employee estimates would remain well above the significance threshold for determination of a VMT impact. With regard to Mitigation Measure 4.12-4(f), estimating the VMT savings would be speculative as information such as where university students and staff would live and how they would react to parking pricing is unknown. Additionally, the proportion of the University's VMT that is attributable to students versus staff is currently unknown.

Based on the above, due to average VMT in excess of the San Joaquin County VMT Thresholds, and uncertainties regarding the ability for mitigation to reduce VMT to a less-than-significant level, VMT impacts would be considered significant and unavoidable.

Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Impact 4.12-5)

The EIR determined that vehicle trips associated with Specific Plan buildout would result in freeway ramp queueing impacts at a few study locations. In addition, the increase in traffic in proximity to Jefferson School, attributable to the proposed project, would be considerable and is anticipated to cause conflicts with motorists entering/exiting Jefferson School from both public streets to drop-off or pick-up students. This would be considered a significant safety impact.

The EIR also identified a significant project impact related to train conflicts. Specific Plan Buildout would add between 4,000 and 5,000 trips per day at two at-grade crossings on South Chrisman Road between Linne Road and Eleventh Street. Project-added traffic would be modest at the

other crossings. However, because Specific Plan Buildout would add substantial levels of traffic to the two South Chrisman Road at-grade railroad crossings, the potential exists for increased conflicts between vehicles and trains. Thus, the TIA concluded that impacts could be significant.

While the roadway improvements required under Mitigation Measures 4.12-5(a) though 4.12-5(f) could help to reduce roadway hazards, the measures would require approvals from multiple agencies and public utilities. Given that the required measures are not guaranteed to be approved by California Department of Transportation (Caltrans), the City of Tracy, the Jefferson School District, or other outside approving agencies, and are outside of the County's jurisdiction, the County, as lead agency, cannot legally impose the mitigation measures. Therefore, implementation of the mitigation measures cannot be guaranteed; and impacts would be considered to remain significant and unavoidable.

Result in cumulative conflicts or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b). (Impact 4.12-8)

As discussed in Chapter 4.12, Transportation, of the EIR, the warehouse and office components of the proposed project would generate VMT per employee above the unincorporated County baseline average. Therefore, the proposed project would result in impacts regarding VMT associated with work-related land uses. In addition, the University component of the proposed project would not be considered a VMT-efficient land use. As such, a significant impact could occur during both the Initial Development Phase and full Specific Plan Buildout.

Compliance with Mitigation Measure 4.12-8(a) would Implement Mitigation Measure 4.12-4(a) and 4.12-4(b), as defined above. Compliance with Mitigation Measures 4.12-8(a) and 4.12-8(b) would reduce project-generated VMT by requiring the project applicant to implement various TDM strategies. The effectiveness of the aforementioned mitigation measures would be similar under both baseline and cumulative conditions, with the difference being that transit service in the region would likely be more robust under cumulative conditions, which would enable the private shuttle TDM strategy to become more effective. Nonetheless, with implementation of the aforementioned mitigation measures, the project's incremental contribution to the significant cumulative impact would remain cumulatively considerable and significant and unavoidable due to uncertainties regarding the ability for mitigation to reduce VMT to a less-than-significant level.

Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) under cumulative conditions. (Impact 4.12-9)

Additional development anticipated under cumulative conditions, and associated vehicle trips, would combine with project traffic to create significant impacts associated with the same project-level impacts discussed under 4.12-5 (freeway ramp queueing, incompatibility with Jefferson School, and train conflicts).

Similar to the conclusion for Impact 4.12-5, while the roadway improvements required for this impact would help to reduce roadway hazards, the measures would require approvals from multiple agencies and public utilities. Given that the required measures are not guaranteed to be approved by Caltrans, the City of Tracy, the Jefferson School District, or other outside approving agencies, and are outside of the County's jurisdiction, the County, as lead agency, cannot legally impose the mitigation measures. Therefore, implementation of the mitigation measures cannot be guaranteed; and impacts would be considered to remain significant and unavoidable.

7. Alternatives Analysis

7. ALTERNATIVES ANALYSIS

7.1 INTRODUCTION

The Alternatives Analysis chapter of the EIR includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required pursuant to CEQA Guidelines Section 15126.6. Generally, the chapter includes discussions of the following: the purpose of an alternatives analysis; alternatives considered but dismissed; a reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts; and the environmentally superior alternative.

7.2 PURPOSE OF ALTERNATIVES

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126.6(a) of the CEQA Guidelines, is to "[…] describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> [...]capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Section 15126.6(f) of CEQA Guidelines states, "The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Section 15126.6(f) of CEQA Guidelines further states:

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

In addition, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

The CEQA Guidelines provide the following guidance for discussing alternatives to a proposed project:

- An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6[a]).
- Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code [PRC] Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if

these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6[b]).

- The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination […] Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison (CEQA Guidelines Section 15126.6[d]).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6[d]).
- The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (CEQA Guidelines Section 15126.6[e][1]).
- If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

Project Objectives

Based on the above, reasonable alternatives to the project must be capable of feasibly attaining most of the basic objectives of the project. The proposed project is being pursued with the following developer-stated objectives:

1. Identify a site that would support an industrial and university-focused project with supportive business, commercial, and recreational uses.
2. Establish development of a commercially sufficient scale to be self-supporting, in terms of infrastructure and public service needs.
3. Accommodate a mix of industrial designated uses supporting future advanced manufacturing, e-commerce, and related distribution opportunities.
4. Establish a four-year university campus serving the post-secondary educational needs of residents within South San Joaquin County.
5. Create a mix of jobs that will contribute to economic development within the County.
6. Establish site-specific wet and dry utility infrastructure, including water and wastewater treatment infrastructure designed and developed to meet project demands at all phases of development.
7. Locate on an established STAA-designated transportation corridor or established truck route with access to a federal interstate and/or State highway system serving the Bay Area and greater Central Valley communities.

8. Locate on a site that is sufficiently distant from the urban core to reduce the potential impacts on sensitive receptors and other incompatible urban land uses.
9. Establish agricultural buffers and "right to farm" policies to protect existing agricultural operations and Williamson Act designated lands outside of the project boundary.
10. Implement a range of sustainability measures aimed at conserving resources, decreasing energy and water consumption, and reducing the impact on air quality, greenhouse gases, and water pollution.

Impacts Identified in the EIR

In addition to attaining the majority of project objectives, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. The significant but mitigable and significant and unavoidable impacts identified in the EIR are presented in Table 7-5; the significant and unavoidable impacts identified in the EIR are also presented below.

- ***Aesthetics.*** The EIR determined that the proposed project would result in significant and unavoidable impacts related to substantially damaging scenic resources within view of I-580, a state scenic highway, substantially affect scenic vistas, and substantially degrading the existing visual character or quality of public views of the site and its surroundings, including agricultural views from South Chrisman Road and views of the Diablo Range foothills. In addition, the EIR determined that the proposed project would result in significant and unavoidable impacts related to long-term changes to scenic resources within view of a state scenic highway, scenic vistas, and visual character associated with development of the proposed project in combination with reasonably foreseeable cumulative development.

- ***Agricultural Resources.*** The EIR determined that the proposed project would result in a significant and unavoidable impact related to the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. The proposed project would result in the conversion of agricultural land to urban uses, and even with implementation of mitigation consistent with the County's Agricultural Mitigation Ordinance, would not create new agricultural land; as such, the proposed project would lead to an overall loss of Farmland. In addition, the EIR determined that the proposed project in combination with reasonably foreseeable cumulative development would result in a significant and unavoidable impact related to the loss of agricultural land.

- ***Air Quality, Greenhouse Gas Emissions, and Energy.*** The EIR determined that the proposed project would result in significant and unavoidable impacts related to the following: conflict with or obstruct implementation of an applicable air quality plan; result in a net increase of any criteria pollutant for which the region is non-attainment during project operation; and exposing sensitive receptors to substantial pollutant concentrations. Specifically, the proposed project's operational emissions would exceed the San Joaquin Valley Air Pollution Control District's (SJVAPCD) thresholds of significance for ROG, NO_X, CO, PM_{10}, and $PM_{2.5}$. In addition, the EIR identified a potentially significant and unavoidable impact related to cancer risk health effects on residents in the project vicinity in excess of the SJVAPCD's thresholds. Finally, the EIR determined that the amount of criteria pollutant emissions generated by the proposed project would result in a cumulatively considerable net increase of a criteria pollutant for which the project region

is in non-attainment, and that the project's greenhouse gas (GHG) emissions could have a significant and unavoidable impact on the environment.

- ***Cultural and Tribal Cultural Resources.*** The EIR determined that the proposed bridge widenings and roadway and intersection improvements associated with Specific Plan buildout and the off-site improvements could potentially impact resources eligible for listing under the NRHP or CRHR. Until site-specific evaluations of the buildings and structures abutting the off-site improvement study areas are conducted, the degree to which potential impacts to existing historic structures can be avoided cannot be determined. Therefore, in order to establish a conservative analysis, the EIR concludes that the potential impact would remain significant and unavoidable.

- ***Noise.*** The EIR determined that the proposed project could result in a substantial temporary increase in ambient noise levels in the vicinity of off-site improvement areas. Because the effectiveness of the construction noise best management practices set forth in Mitigation Measure 4.10-1(c) would vary by off-site improvement study area and may not prevent ambient noise-level increases from exceeding 12 dBA (i.e., increase threshold used in the EIR for construction noise), the EIR concluded that impacts could be significant and unavoidable. In addition, the EIR determined that Specific Plan buildout would create substantial permanent traffic noise level increases at several existing sensitive receptors, even with implementation of quiet pavement mitigation. This finding was made for both Existing and Cumulative Plus Specific Plan Buildout conditions.

- ***Transportation.*** The EIR determined that the proposed project would conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, during operations due to uncertainties regarding the ability for the identified mitigation measures to reduce impacts to transit facilities. Similarly, the EIR also identified a significant and unavoidable impact related to vehicle miles traveled (VMT) due to uncertainties regarding the ability for mitigation to reduce VMT to a less-than-significant level. In addition, the EIR determined that the proposed project could result in a significant and unavoidable impact related to substantially increasing hazards to vehicle safety due to a geometric design feature or incompatible uses because the required mitigation measures are not guaranteed to be approved by Caltrans, the City of Tracy, or other outside agencies. The EIR also identified significant and unavoidable impacts related to impacts under cumulative conditions, including: conflicting with a program, plan, ordinance or policy addressing the circulation system; conflicts or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b); and substantially increasing hazards to vehicle safety.

7.3 SELECTION OF ALTERNATIVES

The requirement that an EIR evaluate alternatives to the proposed project or alternatives to the location of the proposed project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained, while reducing the magnitude of, or avoiding, one or more of the significant environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the CEQA Guidelines require the EIR to "set forth only those alternatives necessary to permit a reasoned choice." As stated in Section 15126.6(a), an EIR need not consider every conceivable alternative to a project. Rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The CEQA

Guidelines provide a definition for "a range of reasonable alternatives" and thus limit the number and type of alternatives that may need to be evaluated in a given EIR. According to the CEQA Guidelines Section 15126.6(f):

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

First and foremost, alternatives in an EIR must be feasible. In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> [...] capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Finally, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

Alternatives Considered But Dismissed From Further Analysis

Consistent with CEQA, primary consideration was given to alternatives that could reduce significant project impacts, while still meeting most of the basic project objectives.

As stated in Guidelines Section 15126.6(c), among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:

(i) failure to meet most of the basic project objectives,
(ii) infeasibility, or
(iii) inability to avoid significant environmental impacts.

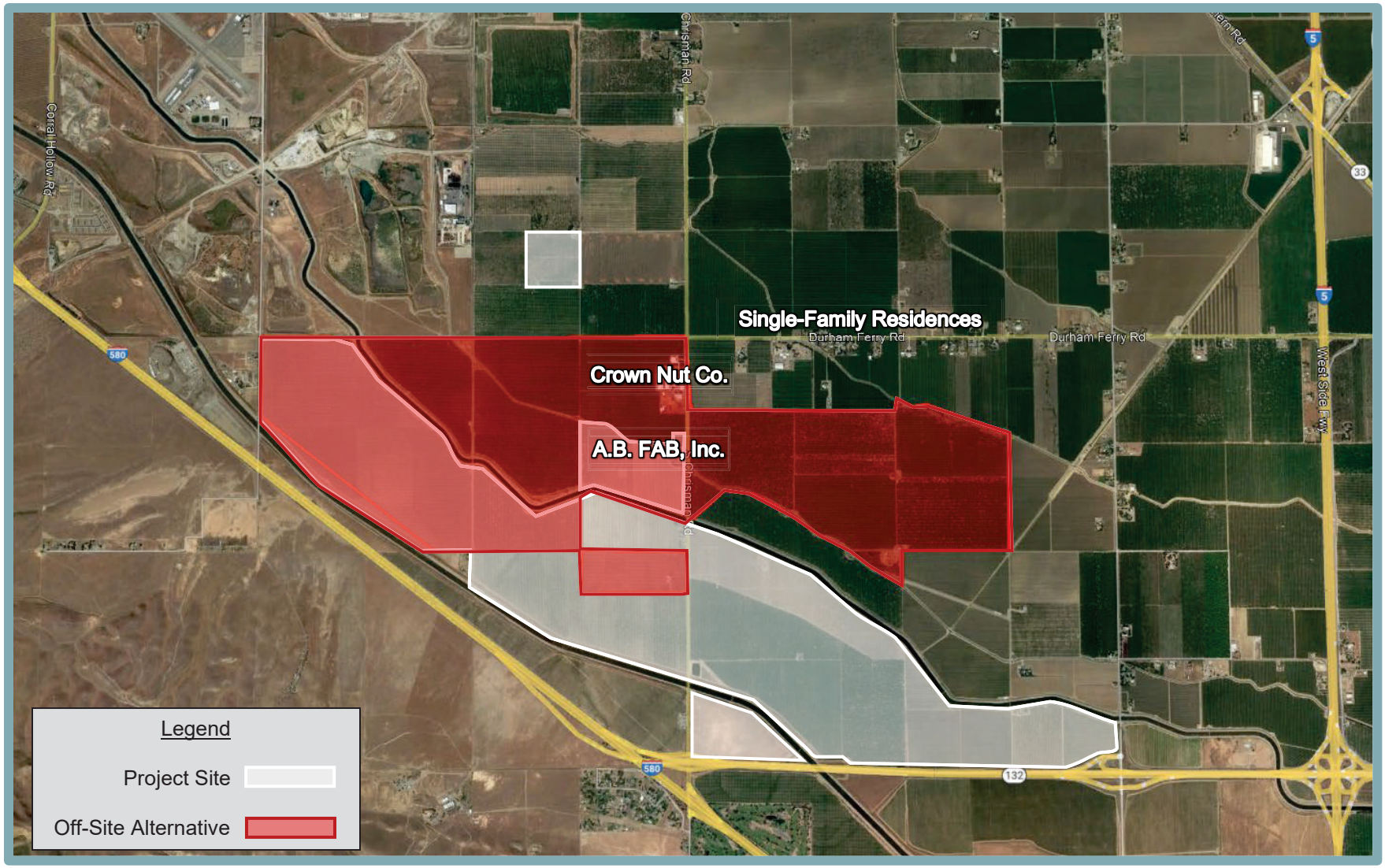
Regarding item (ii), infeasibility, among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). The aforementioned factors do not establish a fixed limit on the scope of reasonable alternatives.

An off-site alternative was considered but dismissed from detailed analysis in this EIR. The reasons for dismissal, within the context of the three above-outlined permissible reasons, are provided below.

Off-Site Alternative

Due to the large size of the project, any off-site location for the proposed project would similarly be located in predominantly agricultural areas of the unincorporated County. The applicant originally proposed to locate the project to the immediate north of the current project site. The original Specific Plan application for the Pacific Gateway Project, which includes some overlap with the current project site (e.g., mainly the West area of the Specific Plan), is shown in Figure 7-1.

Figure 7-1
Off-Site Alternative Location



Note: Site boundaries are approximate.

*Figure not OCR compatible.

This off-site alternative location is in closer proximity to the existing single-family residential uses fronting Durham Ferry Road to the northeast. This serves to emphasize the relative lack of existing sensitive receptors in close proximity to the current project site, primarily limited to the few homes along South Chrisman Road and at the south end of MacArthur Drive. It is reasonable to assume that relocating the approximately 1,576-acre project site to another location will bring with it placing additional sensitive receptors in closer proximity. As discussed in Chapter 1, Introduction, of this EIR, the Pacific Gateway applicants, in response to community and staff feedback, withdrew the previous application, and filed new applications on September 27, 2024, for a 1,576.70-acre site located generally south of the lands part of the previous application. The applicants indicated their primary intent in relocating the project to the south was to address concerns about the potential for extensive truck traffic along Durham Ferry Road, as well as potential land use compatibility questions. The current project location is estimated to result in an approximately 73 percent reduction in project-related trucks trips on Durham Ferry Road, as compared to the original project location. In addition, the currently proposed project includes 1,504,804 fewer sf at total buildout than the previous application.

Relocating the project to an alternative location would not be anticipated to avoid or substantially lessen the proposed project's significant and unavoidable aesthetics, agricultural resources, air quality, GHG, noise, and transportation impacts.

Overall, there is no substantial evidence to suggest that there are off-site alternative locations that could accomplish most of the basic project objectives and avoid or substantially lessen any of the proposed project's significant impacts. As a result, the Off-Site Alternative is dismissed from detailed evaluation.

Alternatives Considered in this EIR

The following alternatives are considered and evaluated in this section:

- No Project (No Build) Alternative;
- Reduced Project Alternative 1 (32 Percent); and
- Reduced Project Alternative 2 (56 Percent).

Each of the project alternatives is described in detail below, with a corresponding analysis of each alternative's impacts in comparison to the proposed project. As discussed above, reasonable alternatives to the project must be capable of avoiding or substantially lessening one or more of the significant effects of the proposed project. Therefore, this chapter focuses on the resource areas and specific impacts listed above and in Table 7-5 that have been identified in this EIR for the proposed project as requiring mitigation to reduce significant impacts to less than significant, or have been found to remain significant and unavoidable. While an effort has been made to include quantitative data for certain analytical topics, where possible, qualitative comparisons of the various alternatives to the project are primarily provided. Such an approach to the analysis is appropriate as evidenced by CEQA Guidelines Section 15126.6(d), which states that the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed.

The analysis evaluates impacts that would occur with the alternatives relative to the significant impacts identified for the proposed project. When comparing the potential impacts resulting from implementation of the foregoing alternatives, the following terminology is used:

- "Fewer" = Less than proposed project;
- "Similar" = Similar to proposed project;
- "Greater" = Greater than proposed project; and
- "None" = No impact.

When the term "fewer" is used, the reader should not necessarily equate this to elimination of significant impacts identified for the proposed project. For example, in many cases, an alternative would reduce the relative intensity of a significant impact identified for the proposed project, but the impact would still be expected to remain significant under the alternative, thereby requiring mitigation. In other cases, the use of the term "fewer" may mean the actual elimination of an impact identified for the proposed project altogether. Similarly, use of the term "greater" does not necessarily imply that an alternative would require additional mitigation beyond what has been required for the proposed project. To the extent possible, this analysis will distinguish between the two implications of the comparative words "fewer" and "greater."

In addition, the following Reduced Project Alternatives would be anticipated to require fewer off-site roadway improvements than the proposed project. As discussed throughout this EIR, full buildout of the Pacific Gateway Specific Plan would trigger a range of intersection and roadway improvements under the control of various agencies (e.g., Caltrans, San Joaquin County, City of Tracy). The feasibility of the off-site improvements associated with the proposed project is unknown at this time for various reasons, although the improvements were identified by the Local Transportation Analysis (LTA) prepared for the proposed project. Similarly, determining the specific set of improvements associated with the Reduced Project Alternatives would require preparation of traffic analyses, which is beyond the scope of this alternatives evaluation. It can be reasonably inferred that because the alternatives discussed below are reduced in size and scale from the proposed project, the number of required off-site improvements would not exceed the off-site improvements associated with the proposed project, the potential physical environmental effects of which are evaluated throughout this EIR. Therefore, the discussions below largely focus on on-site impacts.

See Table 7-5 at the end of this chapter for a comparison of the environmental impacts resulting from the considered alternatives and the proposed project.

No Project (No Build) Alternative

CEQA requires the evaluation of the comparative impacts of the "No Project" alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative shall:

> "[…] discuss […] existing conditions […] as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." (*Id.*, subd. [e][2]) "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the 'no project' alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the property's existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed. In certain instances, the no project alternative means 'no build,' wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the

> project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (*Id.*, subd. [e][3][B]).

The No Project (No Build) Alternative assumes that the current conditions of the project site would remain and the site would not be developed. As described in this EIR, the project site is currently developed with active agricultural land, including almond and cherry orchards, and an agricultural machinery manufacturing facility (A.B. FAB, Inc.). Under the No Project (No Build) Alternative, the existing on-site agricultural operations would continue. As such, under the Alternative, the entire project site is conservatively assumed to be subject to continuing disturbance through agricultural activities such as planting and harvesting. The No Project (No Build) Alternative would not meet any of the project objectives.

Aesthetics

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. Because the No Project (No Build) Alternative would not introduce any new structures or buildings on the site, the Alternative would not degrade the existing visual character or quality of public views of the site and its surroundings. Thus, no impacts related to aesthetics would occur under the No Project (No Build) Alternative as compared to the proposed project. The significant and unavoidable impacts related to aesthetics would be eliminated under the No Project (No Build) Alternative.

Agricultural Resources

The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. The project site is currently comprised of orchards and a limited amount of vineyards; as such, the No Project (No Build) Alternative would preserve the site for agricultural uses. The project site includes approximately 1,454 acres of Prime Farmland and approximately 65 acres of Farmland of Local Importance. Therefore, the significant and unavoidable impacts related to the conversion of farmland to non-agricultural uses would be eliminated under the Alternative, and Mitigation Measures 4.2-1 and 4.2-2 would not be required. Overall, impacts related to agricultural resources would not occur under the No Project (No Build) Alternative.

Air Quality, Greenhouse Gas Emissions, and Energy

Because the No Project (No Build) Alternative would not involve development of the project site, construction and operational activities would not occur under the alternative. Therefore, the Alternative would not generate criteria pollutant emissions above and beyond the current agricultural operations. As such, this Alternative would not conflict with or obstruct implementation of an applicable air quality plan nor generate construction or operational emissions in excess of the SJVAPCD's significance thresholds (Impact 4.3-1).

As discussed in Impact 4.3-4 of the Air Quality, Greenhouse Gas Emissions, and Energy chapter of the Draft EIR, Specific Plan Buildout would generate sufficient heavy-duty truck trips along South Chrisman Road to create a significant cancer risk effect to the maximally exposed residential receptor (i.e., existing residence located near the center of the project site along South Chrisman Road, just below the University Center development area) and a second residence located just north of the maximally exposed residential receptor. Draft EIR Mitigation Measure 4.3-4 would require the installation of high efficiency particulate air (HEPA) filters within the maximally exposed sensitive receptors within the project area, as recommended by various guidance documents as an approach to addressing operational impacts, including the California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply

with the California Environmental Quality Act. With implementation of Mitigation Measure 4.3-4, cancer risks would be reduced to below the SJVAPCD significance threshold for the proposed project (Draft EIR, Table 4.3-23). However, because installation of HEPA filters in the two existing impacted residences would require resident approval, neither San Joaquin County nor the project applicant can legally impose such improvements on private properties. Therefore, the Draft EIR determined that this impact associated with Specific Plan Buildout operations could remain *significant and unavoidable*. While heavy trucks currently transport agricultural products to/from the project site, and these trucks generate diesel particulate matter (DPM), the proposed project would substantially increase the number of heavy trucks. Thus, this Alternative would continue to expose sensitive receptors to pollutant concentrations (i.e., DPM) through existing operations, but the proposed project's potential significant and unavoidable impact would be avoided.

The other impacts identified for the proposed project related to air quality and GHG emissions, including those that are significant and unavoidable impacts (Impact 4.3-2, Impact 4.3-3, Impact 4.3-7, and Impact 4.3-8), would not occur under the No Project (No Build) Alternative, and the mitigation measures identified within Chapter 4.3 would not be required. Overall, this Alternative would continue existing operations with corresponding air quality and GHG emissions and energy usage, but the proposed project's potential significant and unavoidable impacts would be avoided.

Biological Resources

Under the No Project (No Build) Alternative, construction activities involving ground disturbance (e.g., grading, trenching for utilities) would not occur on the project site. However, the current agricultural operations do entail a certain amount of on-site ground disturbance that could impact special-status wildlife. Unlike the proposed project, the No Project (No Build) Alternative would not increase the level of on-site ground disturbance above the baseline. As such, the Alternative would not have an increased potential to impact Swainson's hawk, white-tailed kite, song sparrow, northern harrier, Crotch's bumble bee, birds protected under the MBTA, burrowing owl, and San Joaquin kit fox. In addition, the No Project (No Build) Alternative would not result in any substantial adverse effects on wetlands, other sensitive natural communities, and/or have a substantial adverse effect on federal or State protected aquatic resources. As such, none of the mitigation measures related to biological resources required for the proposed project would be required under the Alternative. Overall, this Alternative would continue existing operations, avoiding the increased impacts identified for the proposed project related to biological resources.

Cultural and Tribal Cultural Resources

Because additional land disturbance, above and beyond the baseline agricultural disturbance, would not occur under the No Project (No Build) Alternative, the Alternative would not have the potential to result in increased impacts to cultural and tribal cultural resources. Because the off-site improvements would not be required due to the lack of on-site development, the potentially significant and unavoidable impact related to causing a change in the significance of a historical resource located adjacent to the off-site improvement study areas would not occur. Overall, the mitigation measures identified within Chapter 4.5 would not be required because the impacts identified for the proposed project related to cultural and tribal cultural resources would not occur under the No Project (No Build) Alternative.

Geology and Soils

Because the No Project (No Build) Alternative would not include grading, trenching, vertical construction, or other ground-disturbing activities associated with development, the recommendations related to such included in a final geotechnical engineering report would not

apply. In addition, the Alternative would not have the potential to destroy a unique paleontological resource or site or unique geologic feature. Because development would not occur, Mitigation Measures 4.6-3(a) and 4.6-3(b), requiring preparation of final geotechnical engineering reports and implementation of recommendations therein, would not be necessary. Nor would Mitigation Measure 4.6-6 be required, because extensive ground-disturbing activities associated with construction would not occur and any subsurface paleontological resources would not be encountered. Because existing operations would pump more groundwater from the Tracy and Delta-Mendota subbasins, the No Project (No Build) Alternative would have a greater contribution to subsidence induced by groundwater pumping than the project.

Hazards and Hazardous Materials

The No Project (No Build) Alternative would not include any development; thus, the Alternative would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment related to the on-site improperly stored hazardous substances and petroleum products. As such, Mitigation Measures 4.7-1, 4.7-2(a) and 4.7-2(b) would not be required. However, the existing hazardous materials located on-site would remain under the No Project (No Build) Alternative. As such, the project site would not undergo any remediation efforts, potentially reducing the project site's suitability for any future development. Overall, impacts related to hazards and hazardous materials would not occur under the No Project (No Build) Alternative.

Hydrology and Water Quality

The No Project (No Build) Alternative would not include any ground disturbance above the baseline level of disturbance due to ongoing agricultural operations, and, thus, would not result in increased impacts related to water quality during construction and/or operation. In addition, unlike the proposed project, the No Project (No Build) Alternative would not introduce impervious surfaces to the project site and alter existing drainage patterns. Thus, Mitigation Measures 4.8-1 and 4.8-2, as well as 4.8-4(a) and 4.8-4(b), would not be required. Because existing operations would pump more groundwater from the Tracy and Delta-Mendota subbasins, the No Project (No Build) Alternative would decrease groundwater supplies and/or interfere with groundwater recharge to a greater extent than the project.

Noise

The No Project (No Build) Alternative would enable ongoing agricultural operations which generate noise, particularly during harvesting and transport of agricultural products to/from the project site. However, this baseline level of noise would be less than that which would be generated by the proposed project due to traffic noise increases and on-site operational noise levels. As such, the No Project (No Build) Alternative would have fewer impacts related to substantial permanent noise level increases and the proposed project's significant and unavoidable permanent noise impact would be eliminated. The significant and unavoidable temporary (construction noise associated with certain off-site improvement areas) noise impact identified for the proposed project would not occur under the No Project (No Build) Alternative. Therefore, the mitigation measures identified in Chapter 4.10 of this EIR would not be required. This Alternative would continue existing operations along with corresponding noise levels, avoiding the increased noise of the proposed project.

Transportation

The No Project (No Build) Alternative would not generate construction or operational traffic on local roadways, nor generate demand for safe bicycle travel and public transit in the project vicinity. Thus, unlike the proposed project, this Alternative would not conflict with a program, plan, ordinance, or policy, addressing bicycle and transit facilities, nor would the Alternative exacerbate existing queues at freeway ramp facilities. Notwithstanding, the ongoing agricultural operations that would occur under this Alternative would continue to contribute to traffic on the surrounding roadways, including heavy-truck traffic and agricultural machinery, which could pose hazards to the local roadway system, though not to the degree of the proposed project (e.g., heavy truck increases near Jefferson School and along Durham Ferry Road). The proposed project's significant and unavoidable VMT impact would also be eliminated under this Alternative. Thus, the mitigation measures identified in Chapter 4.12 would not be required. This Alternative would continue existing operations along with corresponding VMT levels and traffic hazards, but would avoid the increased VMT and traffic hazards associated with the proposed project.

Reduced Project Alternative 1 (32 Percent)

The Reduced Project Alternative 1 (32 Percent) would eliminate the entire Pacific Gateway West Development Area and the far southeastern corner of the Pacific Gateway East Development Area to reduce the project site size from approximately 1,576.70 acres to 1,283.22 acres (see Figure 7-2). In comparison to the proposed project, Reduced Project Alternative 1 would result in an approximately 32 percent reduction in industrial building square footage, for a developed total of approximately 16,704,335 square feet (sf) of industrial building space (7,970,665 sf less than the proposed project). Similar to the proposed project, this Alternative would include 93,000 sf of Industrial Park space and 160,000 sf of General Commercial space, inclusive of the VFW post, hotel, and other related uses, as well as Public Facilities uses, inclusive of the University and fire station.

This Alternative would also include similar utility systems to support development, inclusive of an on-site wastewater treatment package plant, water treatment infrastructure, and an off-site stormwater retention basin. Because the Reduced Project Alternative 1 would include development of similar uses as the proposed project, albeit, at a reduced scale, the project objectives would be met.

Aesthetics

Similar to the proposed project, Reduced Project Alternative 1 would include development on the project site with commercial, industrial, and public uses. However, the Alternative would be located on a reduced project site and would result in a 32 percent reduction in industrial buildings as compared to the proposed project. Due to the 7,970,665-sf reduction in industrial uses, the Alternative would inherently include fewer buildings to obscure existing agricultural landscape views and views of the Diablo Range and Sierra Nevada foothills, and scenic resources along Interstate (I-580), which could reduce the aesthetic effects as compared to the proposed project.

Figure 7-2
Reduced Project Alternative 1 (32 Percent)

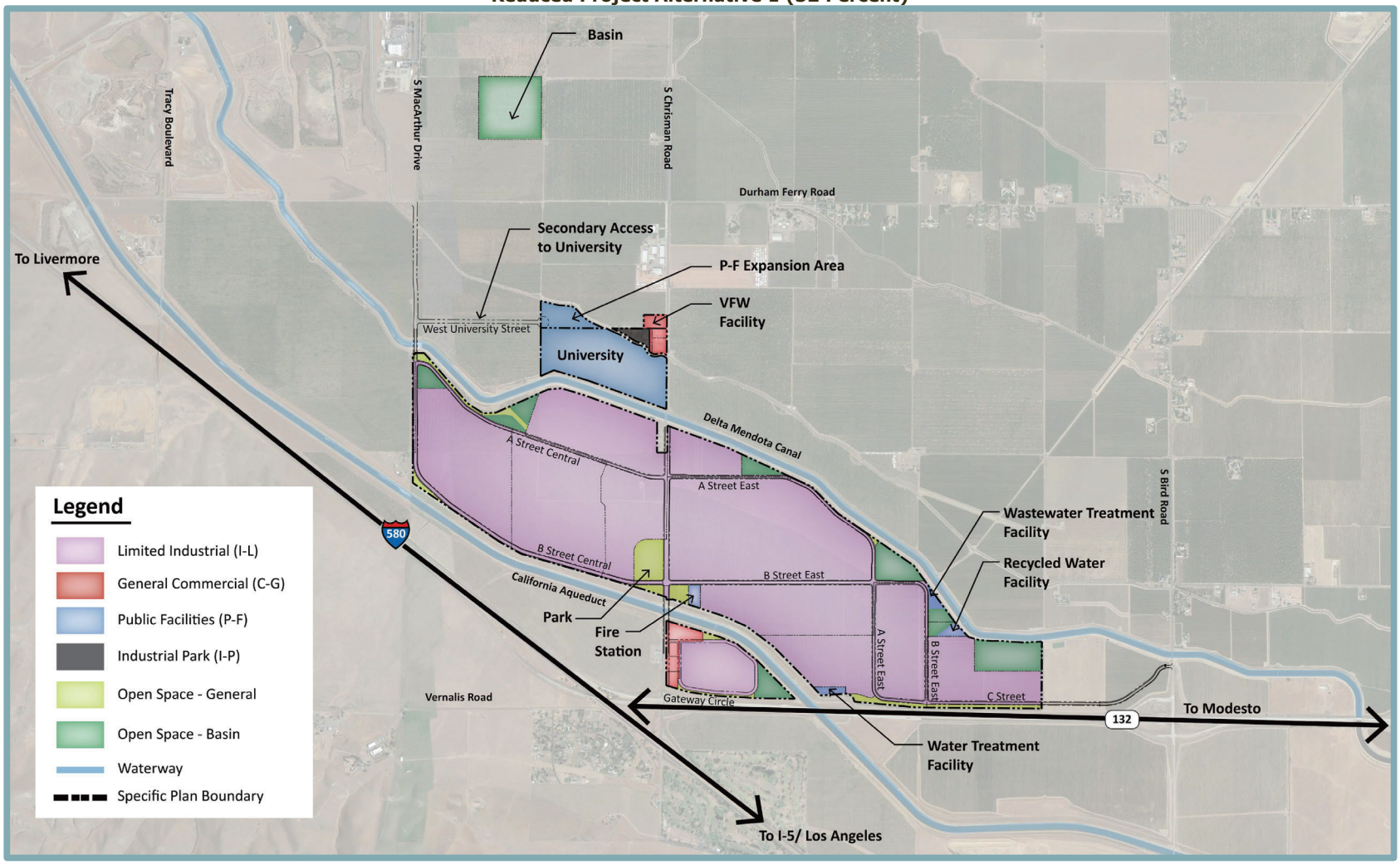


*Figure not OCR compatible.

For example, View 1 is from the eastbound lane of I-580 looking east toward the project site, through the proposed Pacific Gateway West Development Area. As discussed in the Draft EIR, I-580 is officially designated as a scenic highway by the State of California. As no development would occur within the Pacific Gateway West Development Area under this Alternative, the existing agricultural lands within this area would continue to be visible from I-580, and thus, the Alternative would not substantially degrade the existing visual character or quality of public views of the site and its surroundings from View 1. View 11 is from the Bird Road/State Route (SR) 132 On-Ramp looking west through the Pacific Gateway East Development Area. Under this Alternative, the foreground and middle-ground portions of the viewshed (approximately 0.5-mile) would remain undeveloped. Thus, unlike the proposed project scenario, the existing agricultural lands within the majority of this viewshed would remain intact, and development under the Alternative would not be anticipated to have a significant impact to View 11 related to substantially degrading the existing visual character or quality of the site and its surroundings.

Nonetheless, similar to the proposed project, development under this Alternative would be anticipated to substantially degrade the visual character or quality of public views of the site and its surroundings from View 2 and Views 4 through 10, resulting in a significant and unavoidable impact. Similarly, because such views would include the on-site scenic resources as seen from I-580, the Alternative would still result in a significant and unavoidable impact related to damaging scenic resources within a State scenic highway.

In addition, although the alternative development would introduce fewer sources of light or glare to the area than the proposed project, the sources would still be new compared to the existing conditions and Mitigation Measure 4.1-3 would still be required. Overall, impacts related to aesthetics would be fewer under Reduced Project Alternative 1 as compared to the proposed project, and the project-specific and cumulative significant and unavoidable impacts related to damaging scenic resources within a State scenic highway and substantially degrading the existing visual character or quality of public views of the site and its surroundings would still occur under the Alternative.

Agricultural Resources

Reduced Project Alternative 1 would include development of the site with commercial, industrial, and public uses, similar to the proposed project. The Draft EIR determined that the proposed project would impact approximately 1,454 acres of Prime Farmland. Due to the reduced acreage of Alternative 1, the Alternative would avoid converting approximately 293.48 acres of Prime Farmland that would otherwise be impacted by the proposed project. Nonetheless, because Prime Farmland is still located within the Reduced Project Alternative 1 footprint, the significant and unavoidable impacts related to the conversion of farmland to non-agricultural uses would not be eliminated under the Alternative.

Overall, due to the decreased disturbance area, impacts related to agricultural resources would be fewer under Reduced Project Alternative 1 as compared to the proposed project, and Mitigation Measures 4.2-1 and 4.2-2 would still be required. However, the significant and unavoidable impacts related to agricultural resources would still occur and feasible mitigation measures to reduce the identified significant and unavoidable impacts to a less-than-significant level are not available.

Air Quality, Greenhouse Gas Emissions, and Energy

Under Reduced Project Alternative 1, the project site would still be developed with commercial and industrial uses, as well as associated improvements. The Draft EIR (Impact 4.3-2) determined that the proposed project would have a significant impact related to construction criteria pollutant emissions, and while the Alternative would involve a reduced area of disturbance (293.48 acres less), emissions associated with project construction would still be anticipated to exceed the SJVAPCD's significance thresholds, thereby creating a significant impact related to such. Therefore, Mitigation Measures 4.3-2(a) through (c) would still be required under Reduced Project Alternative 1.

The Draft EIR (Impact 4.3-3) also determined that the proposed project would have a significant operational criteria pollutant emissions impact, and while Reduced Project Alternative 1 would reduce vehicle trips by 23 percent, thus substantially reducing operational emissions as shown in Table 7-1,[1] Ramboll has confirmed that this Alternative would generate operational emissions that would still exceed SJVAPCD's thresholds of significance. Thus, Mitigation Measures 4.3-3(a) through (c) would still be required for Reduced Project Alternative 1.

Table 7-1
Reduced Project Alternative 1 Annual Operational Emissions (tons/yr)

	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mitigated Proposed Project Emissions	151	336	392	4	229	67
Reduction as Compared to Proposed Project	-35	-77	-89	-1	-52	-15
Reduced Project Alternative 1 Annual Operational Emissions	116	259	303	3	177	52
SJVAPCD Significance Thresholds	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Thresholds?	**YES**	**YES**	**YES**	**NO**	**YES**	**YES**

Source: Ramboll, 2025.

Similarly, the significant and unavoidable impact associated with conflicting with or obstructing implementation of an applicable air quality plan (Impact 4.3-1) would still occur under the Alternative.

As discussed in Impact 4.3-4 of the Air Quality, GHG Emissions, and Energy chapter of the Draft EIR, Specific Plan Buildout would generate sufficient heavy-duty truck trips along South Chrisman Road to create a significant cancer risk effect to the maximally exposed residential receptor (i.e., existing residence located near the center of the project site along South Chrisman Road, just below the University Center development area) and a second residence located just north of the maximally exposed residential receptor. While heavy-truck trips would be reduced under this Alternative in the amount of 3,587 daily trips (11,171 versus 7,584), the cancer risk impact would still be anticipated to occur under the Reduced Project Alternative 1. Draft EIR Mitigation Measure 4.3-4 would require the installation of high efficiency particulate air (HEPA) filters within the

[1] This estimate of emissions reductions associated with Alternative 1 is intended to allow meaningful evaluation, analysis, and comparison with the proposed project, pursuant to CEQA Guidelines Section 15126.6(d). An equal-level modeling effort was not performed to determine emissions associated with Alternative 1. Rather, the reduction in vehicle trips between the proposed project and Alternative 1 was used as a proxy for total emissions scaling to calculate an estimated reduction in emissions, as project-related emissions are largely driven by mobile-related impacts.

maximally exposed sensitive receptors within the project area, as recommended by various guidance documents as an approach to addressing operational impacts, including the California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. With implementation of Mitigation Measure 4.3-4, cancer risks would be reduced to below the SJVAPCD significance threshold for the proposed project (Draft EIR, Table 4.3-23) and the same finding would apply to this Alternative. However, because installation of HEPA filters in the two existing impacted residences would require resident approval, neither San Joaquin County, nor the project applicant, can legally impose such improvements on private properties. Therefore, the Draft EIR determined that this impact associated with Specific Plan Buildout operations could remain significant and unavoidable, and such conclusion would be applicable to this Alternative.

The Draft EIR (Impact 4.3-8) determined that the proposed project would generate GHG emissions either directly or indirectly that may have a significant effect on the environment. While this Alternative would reduce industrial square footage by approximately 32 percent and vehicle trips by approximately 23 percent, thus reducing both mobile source and area source GHG emissions, the GHG emissions would still be considered substantial in recognition of the magnitude of GHG emissions estimated for the proposed project (see Table 4.3-25 of the Draft EIR).

Overall, impacts related to air quality, GHG emissions, and energy would be fewer under Reduced Project Alternative 1 as compared to the proposed project due to the decreased on-site industrial development and associated vehicle trips. The significant and unavoidable impacts related to air quality and GHG emissions would still occur under the Alternative.

Biological Resources

Similar to the proposed project, Reduced Project Alternative 1 would include ground-disturbing activities on the project site and, thus, would have the potential to impact Swainson's hawk, white-tailed kite, song sparrow (Modesto population), northern harrier, Crotch's bumble bee, and birds protected under the Migratory Bird Treaty Act (MBTA). Therefore, Mitigation Measures 4.4-2(a) and (b), and 4.4-3 through 4.4-6 would still be required. Given that Reduced Project Alternative 1 would reduce the total disturbance area by approximately 293 acres, as compared to the proposed project, the extent to which the above-listed special-status species could be impacted may be reduced in intensity.

Reduced Project Alternative 1 would avoid the easternmost wetland within the proposed project footprint, thereby reducing impacts to on-site aquatic resources. Nonetheless, Mitigation Measures 4.4-7(a) and (b), which mitigate impacts associated with aquatic resources on-site, would still be required under Reduced Project Alternative 1 because of the other aquatic resources located within the site boundaries.

Similar to the proposed project, this Alternative would be covered under the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), and thus, would be subject to additional measures, such as the Incidental Take Minimization Measures for San Joaquin kit fox and burrowing owl. Due to the decreased disturbance area, the Alternative could result in a reduced potential to affect the aforementioned species.

Overall, impacts to biological resources would be fewer under Reduced Project Alternative 1 compared to the proposed project, given that the amount of habitat disturbed during construction would be reduced.

Cultural and Tribal Cultural Resources

Similar to the proposed project, Reduced Project Alternative 1 would include development of the project site with commercial, industrial, and public uses. However, as noted above, the Alternative would result in a decreased overall disturbance area (by approximately 293 acres) within the project site relative to the proposed project. Nonetheless, Mitigation Measure 4.5-2(a) through (c) would still be required, because the potential for the Alternative to result in disturbance or destruction of archaeological resources and human remains would still occur. Similarly, Mitigation Measure 4.5-3 related to a substantial change in the significance of a tribal cultural resource, would still be required. In addition, the alternative development would still include the proposed widening of the crossings over the California Aqueduct and Delta-Mendota Canal; therefore, Mitigation Measure 4.5-1(a) would still be required.

The Draft EIR determined that the proposed bridge widenings and roadway and intersection improvements associated with Specific Plan buildout and the off-site improvements could potentially impact resources eligible for listing under the NRHP or CRHR. Until site-specific evaluations of the buildings and structures abutting the off-site improvement study areas are conducted, the degree to which potential impacts to existing historic structures can be avoided cannot be determined. Therefore, in order to establish a conservative analysis, the Draft EIR concludes that the potential impact would remain significant and unavoidable. Because Reduced Project Alternative 1 would still require a number of off-site roadway improvements, the potential significant and unavoidable impact related to causing a change in the significance of a historical resource located adjacent to the off-site improvement study areas could still occur. Therefore, Mitigation Measure 4.5-1(b), which requires surveys and evaluation of such structures, would still be required under the Alternative.

Overall, because of the reduced disturbance area that would occur under Reduced Project Alternative 1, potential impacts related to cultural and tribal cultural resources could be fewer under the Alternative as compared to the proposed project.

Geology and Soils

As noted above, Reduced Project Alternative 1 would include a smaller overall area of disturbance compared to the proposed project. Consequently, the potential for grading and other ground-disturbing activities to encounter and destroy a unique paleontological resource or site would be decreased. Nonetheless, because construction and grading activities would still occur over the substantial majority of the project site, Mitigation Measure 4.6-6 (regarding paleontological resources) would still be required. In addition, Mitigation Measure 4.6-3(a) and (b), which requires preparation of final geotechnical engineering reports for the project site and off-site improvement areas, respectively, would still be required to ensure the industrial buildings would be provided adequate structural support. Overall, impacts related to geology and soils would be similar or fewer under Reduced Project Alternative 1 as compared to the proposed project.

Hazards and Hazardous Materials

As discussed above, Reduced Project Alternative 1 would entail a similar buildout of the project as proposed. Although the overall disturbance area for the Alternative would be decreased as compared to the proposed project, the Alternative would still result in impacts related to the

potential for hazardous material release during construction vehicle/equipment maintenance and related to recognized environmental conditions (RECs) located within the off-site basin and near the storage building within the Pacific Gateway Central Development Area, which are still included in the alternative site boundaries. Thus, similar to the proposed project, Reduced Project Alternative 1 could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and/or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. As such, the mitigation measures identified in Chapter 4.7 would still be required. Overall, impacts related to hazards and hazardous materials under Reduced Project Alternative 1 would be similar to the impacts identified for the proposed project.

Hydrology and Water Quality

Given that the Reduced Project Alternative 1 would include a smaller overall area of disturbance compared to the proposed project, and reduction in industrial building square footage by 32 percent, the potential for the Alternative to result in construction or operational impacts related to water quality would be decreased. In addition, because a smaller portion of the site would be developed with impervious surfaces, the potential for changes in drainage patterns and increases in stormwater runoff rates would be reduced compared to the proposed project. Nonetheless, Mitigation Measures 4.8-1 and 4.8-2, as well as 4.8-4(a) and 4.8-4(b), would still be required to ensure that impacts to water quality during project construction and operation, as well as to on-site drainage patterns, would not occur. Overall, because the reduced surface area proposed under Reduced Project Alternative 1 would generate less stormwater runoff, impacts related to hydrology and water quality under the Alternative could be fewer compared to the proposed project.

Noise

Reduced Project Alternative 1 would include a smaller overall area of disturbance compared to the proposed project and, thus, the potential to result in construction impacts related to noise or vibration generation would be decreased. Notwithstanding, the majority of existing sensitive receptors are located proximate to areas that would remain part of the Alternative, and thus, a similar number of sensitive receptors would be anticipated to be adversely affected by construction noise. Similar to the findings for the proposed project, Mitigation Measure 4.10-1(a) could reduce the temporary on-site construction noise impact to a less-than-significant level for Reduced Project Alternative 1. It is noted that the potential significant and unavoidable construction noise impact associated with the prospective off-site roadway improvement areas would still be anticipated to occur under this Alternative.

The Draft EIR (Impacts 4.10-2 and 4.10-5) also found that the proposed project traffic noise increases would create a significant impact along several roadway segments where sensitive receptors are located. While a detailed traffic noise analysis would be required to determine conclusively whether a reduced number of roadway segments/sensitive receptors would be impacted by traffic noise level increases attributable to the Reduced Project Alternative 1, it is reasonable to assume that this may occur due to the fact that the Alternative would reduce the project's vehicle trips by approximately 23 percent. Nonetheless, Mitigation Measures 4.10-2(a) and (b) would still be required (installation of quiet pavement on impacted roadways), and in some cases, similar to the proposed project, traffic noise level reductions attributable to installation of quiet pavement may not reduce noise levels sufficient to reduce the increases below the applicable standard(s). Thus, the proposed project's (project-level and cumulative) significant and unavoidable operational traffic noise impact is expected to remain for this Alternative.



The Draft EIR (Impact 4.10-2) also determined that operational stationary noise sources (e.g., loading docks and on-site truck circulation) would exceed the County's nighttime noise standards at nearby residences. This operational noise impact would be reduced by Reduced Project Alternative 1 due to both the reduced scale of operations as well as the elimination of the Pacific Gateway West Development Area, where one impacted residence is located adjacent to the western boundary of said development area.

Overall, development of Reduced Project Alternative 1 would result in fewer impacts related to Noise as compared to the proposed project, although the significant and unavoidable impacts related to temporary and permanent increases in ambient noise would still occur.

Transportation

The Draft EIR (Impact 4.12-1) determined that construction of the proposed project would have a significant impact related to disrupting traffic along the surrounding roadway network. The Reduced Project Alternative 1 decreases the construction footprint by approximately 293 acres and would reduce total buildout square footage by approximately 32 percent, which would reduce the amount of on-site construction activity. However, roadway improvements associated with this Alternative would still necessitate bridge replacement on South Chrisman Road over the Delta-Mendota Canal and California Aqueduct. Thus, similar to the proposed project, the Alternative could result in road closures that would require detours for all traffic and implementation of Mitigation Measure 4.12-1.

As previously discussed, Reduced Project Alternative 1 would reduce industrial development by 32 percent, or approximately 7,970,665 sf, which would reduce project-related trips by approximately 23 percent (see Table 7-2).

Reduced Project Alternative 1 would not alter the Draft EIR findings of significant impacts associated with truck traffic passing by Jefferson School and truck traffic increases along Durham Ferry Road (Impact 4.12-5). Reasons for this conclusion are:

- Reduced Project Alternative 1 would not develop any industrial west of MacArthur Drive, but would maintain development in the Gateway Central and East Development Areas. Warehouses built in those areas are more prone to add truck trips to Chrisman Road and Durham Ferry Road. Thus, potential adverse safety effects to Jefferson School and Durham Ferry Road would not be lessened by this alternative.

Similarly, although Reduced Project Alternative 1 would result in a noticeable reduction in new trips, as shown in Table 7-2, the other significant transportation impacts identified by the Draft EIR for the proposed project would still occur under this Alternative, including increasing demand for public transit, University-generated VMT and industrial/office employee-generated VMT, and safety issues related to increasing freeway ramp queues and traffic across South Chrisman Road at-grade railroad crossings. The Alternative would likely still trigger some of the off-site intersection and roadway improvements identified by the LTA prepared for the proposed project and studied in this EIR.

Reduced Project Alternative 1 would be subject to the same mitigation measures as the proposed project, and due to the uncertainties about the ability for mitigation to reduce impacts to transit facilities, VMT, and substantially increasing hazards to vehicle safety, the impacts could remain significant and unavoidable.

Table 7-2
Reduced Project Alternative 1 Project Buildout Trip Generation

District	New Daily Trips			New AM Peak Hour Trips			New PM Peak Hour Trips		
	Autos	Trucks	Total	Autos	Trucks	Total	Autos	Trucks	Total
Gateway Central, and East	17,312	7,280	24,592	2,427	486	2,912	3,074	323	3,397
University Center	9,536	48	9,584	938	4	942	973	4	977
Gateway Center	6,360	256	6,615	594	16	610	558	10	568
New Trips	**33,208**	**7,584**	**40,791**	**3,959**	**506**	**4,464**	**4,605**	**337**	**4,942**

Source: Fehr & Peers, 2025.

Notwithstanding, while this Alternative would not fully avoid any of the proposed project's significant transportation impacts, the Alternative would reduce total daily trips by approximately 23 percent, which equates to a reduction of an estimated 12,115 daily trips. This could be considered to reduce the relative intensity of the significant transportation impact identified for the proposed project pertaining to substantially increasing hazards to vehicle safety.

Reduced Project Alternative 2 (56 Percent)

The Reduced Project Alternative 2 (56 Percent) would consist of buildout of approximately 659.66 acres of the 1,576.70-acre project site (see Figure 7-3). In comparison to the proposed project, Reduced Project Alternative 2 would result in a 56 percent reduction in industrial building square footage for a developed total of 10,891,518 sf of industrial building space (13,783,482 sf less than the proposed project). In general, this Alternative would achieve this reduction by eliminating the Pacific Gateway West and Central Development Areas. The University Center Development Area and VFW Post would be shifted south of the Delta Mendota Canal, such that this Alternative would be located entirely "between the canals" (Delta Mendota and California Aqueduct), with the exception of the Gateway Center Development Area. The new University location would result in a greater buffer between the University and the existing agricultural lands to the north due to the intervening Delta Mendota Canal. In addition, a new open space area would be located between the existing residences fronting South Chrisman Road adjacent to the site and the new University location.

Similar to the proposed project, this Alternative would include 93,000 sf of Industrial Park space and 160,000 sf of General Commercial space, inclusive of the VFW post, hotel, and other related uses, as well as Public Facilities uses, inclusive of the University and fire station. This Alternative would also include similar utility systems to support development, inclusive of an on-site wastewater treatment package plant, water treatment infrastructure, and an off-site stormwater retention basin.

Because the Reduced Project Alternative 2 would include development of similar uses as the proposed project, albeit, at a reduced scale, the project objectives would be met.

Aesthetics

Similar to the proposed project, Reduced Project Alternative 2 would include development on the project site with commercial, industrial, and public uses. However, the Alternative would be located on a reduced project site and would result in a 56 percent reduction in industrial building square footage as compared to the proposed project. Due to the 13,783,482-sf reduction in industrial uses, the Alternative would inherently include fewer buildings to obscure existing agricultural landscape views and views of the Diablo Range foothills, west of I-580, which could reduce the aesthetic effects as compared to the proposed project.

For example, Views 1 and 2 are from the eastbound lane of I-580 looking east toward the project site, through the proposed Pacific Gateway West and Central Development Areas. As discussed in the Draft EIR, I-580 is officially designated as a scenic highway by the State of California. As this Alternative would eliminate the Pacific Gateway West Development Area, and the portion of the Central Development Area visible from Views 1 and 2 would not include any development, the existing agricultural lands within these areas would continue to be visible from I-580, and thus, the Alternative would not substantially degrade the existing visual character or quality of public views of the site and its surroundings from Views 1 and 2.

Figure 7-3
Reduced Project Alternative 2 (56 Percent)

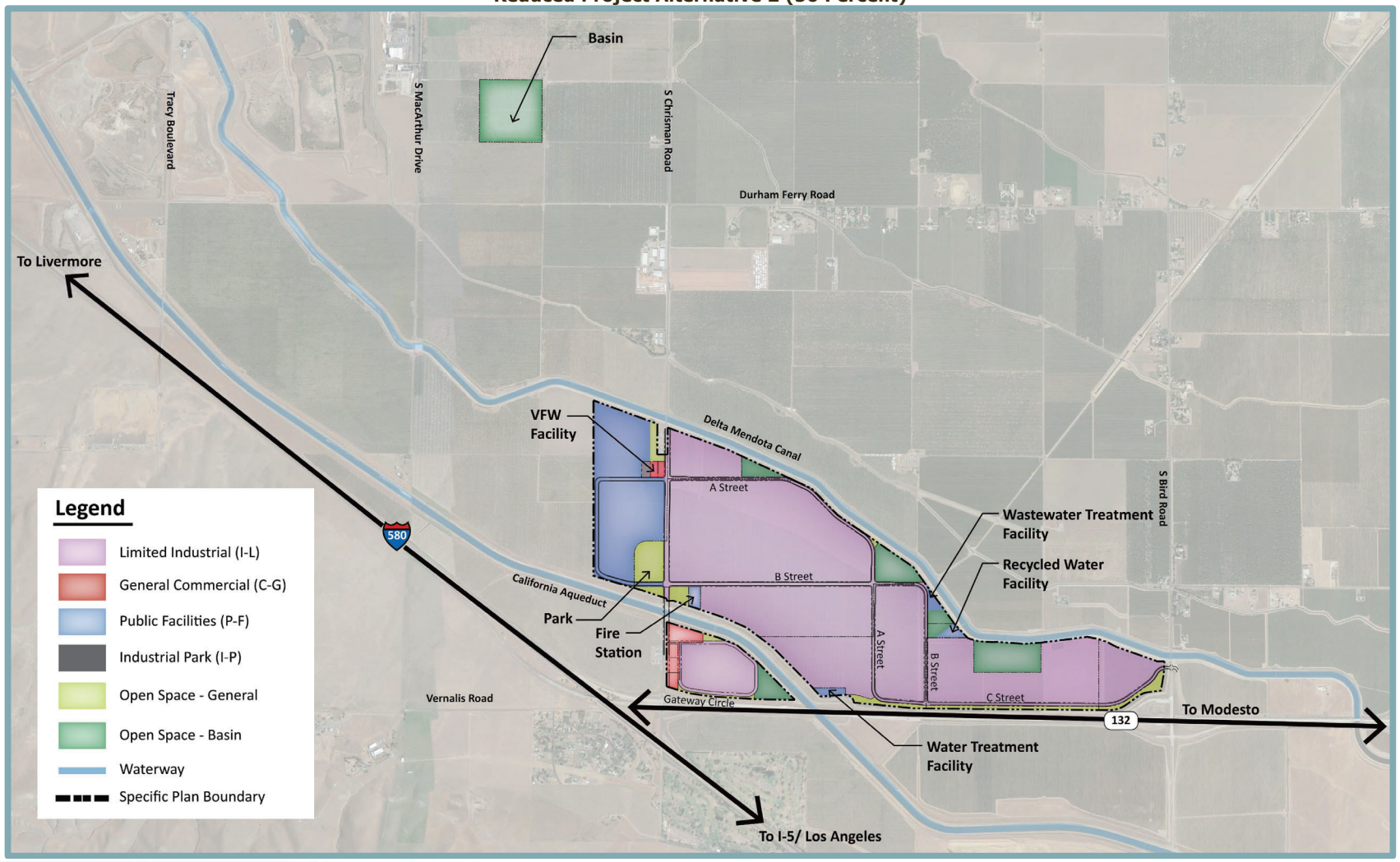


*Figure not OCR compatible.

Views 6 is from South Chrisman Road looking northwest towards the project site. The proposed project's significant aesthetic impact to this viewpoint is a result of the removal of orchards to develop the University (i.e., change from agricultural landscape to urban development). As this Alternative would shift the University to the south, it would not be visible from View 6, and thus, the Alternative would not substantially degrade the visual character of quality of the site and its surroundings from View 6.

While View 7 is also looking toward the University Center Development Area, the Draft EIR determined that the proposed project would significantly impact this viewpoint as a result of the proposed South Chrisman Road median landscaping that could obscure views of the Mount Diablo foothills, upon reaching maturity. Similar roadway improvements are anticipated for this Alternative, and thus, the same significance finding would apply to the Alternative.

Nonetheless, similar to the proposed project, development under this Alternative would be anticipated to substantially degrade the visual character or quality of public views of the site and its surroundings from Views 4, 5, and 7 through 11, resulting in a significant and unavoidable impact. Similarly, because such views would include the on-site scenic resources as seen from I-580, the Alternative would still result in a significant and unavoidable impact related to damaging scenic resources within a State scenic highway.

In addition, although the alternative development would introduce fewer sources of light or glare to the area than the proposed project, the sources would still be new compared to the existing conditions and Mitigation Measure 4.1-3 would still be required. Overall, impacts related to aesthetics would be fewer under Reduced Project Alternative 2 as compared to the proposed project, and the project-specific and cumulative significant and unavoidable impacts related to damaging scenic resources within a State scenic highway and substantially degrading the existing visual character or quality of public views of the site and its surroundings would still occur under the Alternative.

Agricultural Resources

Reduced Project Alternative 2 would include development of the site with commercial, industrial, and public uses, similar to the proposed project. The Draft EIR determined that the proposed project would impact approximately 1,454 acres of Prime Farmland. Due to the reduced acreage of Alternative 2, the Alternative would avoid converting approximately 900[2] acres of Prime Farmland that would otherwise be impacted by the proposed project. Nonetheless, because Prime Farmland is still located within the Reduced Project Alternative 2 footprint, the significant and unavoidable impacts related to the conversion of farmland to non-agricultural uses would not be eliminated under the Alternative.

Overall, due to the decreased disturbance area, impacts related to agricultural resources would be fewer under Reduced Project Alternative 2 as compared to the proposed project, and Mitigation Measures 4.2-1 and 4.2-2 would still be required. However, the significant and unavoidable impacts related to agricultural resources would still occur and feasible mitigation measures to reduce the identified significant and unavoidable impacts to a less-than-significant level are not available.

[2] The full amount of reduced acreage as compared to the proposed project is 917.04, but a small amount of this acreage is designated Semi-agricultural and Rural Commercial Land by the State DOC FMMP.

Air Quality, GHG Emissions, and Energy

Under Reduced Project Alternative 2, the project site would still be developed with commercial and industrial uses, as well as associated improvements. The Draft EIR (Impact 4.3-2) determined that the proposed project would have a significant impact related to construction criteria pollutant emissions, and while the Alternative would involve a reduced area of disturbance (917.04 acres less), and thus fewer construction emissions, emissions associated with project construction would still be anticipated to exceed the SJVAPCD's significance thresholds, thereby creating a significant impact related to such. Therefore, Mitigation Measures 4.3-2(a) through (c) would still be required under Reduced Project Alternative 2.

The Draft EIR (Impact 4.3-3) also determined that the proposed project would have a significant operational criteria pollutant emissions impact, and while Reduced Project Alternative 2 would reduce vehicle trips by 40 percent, thus substantially reducing operational emissions as shown in Table 7-3,[3] Ramboll has confirmed that this Alternative would generate operational emissions that would still exceed SJVAPCD's thresholds of significance. Thus, Mitigation Measures 4.3-3(a) through (c) would still be required for Reduced Project Alternative 2.

Similarly, the significant and unavoidable impact associated with conflicting with or obstructing implementation of an applicable air quality plan (Impact 4.3-1) would still occur under the Alternative.

Table 7-3
Reduced Project Alternative 2 Annual Operational Emissions (tons/yr)

	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mitigated Proposed Project Emissions	151	336	392	4	229	67
Reduction as Compared to Proposed Project	-60	-133	-155	-2	-91	-27
Reduced Project Alternative 2 Annual Operational Emissions	91	203	237	2	138	40
SJVAPCD Significance Thresholds	*10*	*10*	*100*	*27*	*15*	*15*
Exceeds Thresholds?	**YES**	**YES**	**YES**	**NO**	**YES**	**YES**

Source: Ramboll, 2025.

As discussed in Impact 4.3-4 of the Air Quality, GHG Emissions, and Energy chapter of the Draft EIR, Specific Plan Buildout would generate sufficient heavy-duty truck trips along South Chrisman Road to create a significant cancer risk effect to the maximally exposed residential receptor (i.e., existing residence located near the center of the project site along South Chrisman Road, just below the University Center development area) and a second residence located just north of the maximally exposed residential receptor. While heavy-truck trips would be reduced under this Alternative in the amount of 6,202 daily trips (11,171 versus 4,969), the cancer risk impact would still be anticipated to occur under the Reduced Project Alternative 2. Draft EIR Mitigation Measure 4.3-4 would require the installation of HEPA filters within the maximally exposed sensitive

[3] This estimate of emissions reductions associated with Alternative 2 is intended to allow meaningful evaluation, analysis, and comparison with the proposed project, pursuant to CEQA Guidelines Section 15126.6(d). An equal-level modeling effort was not performed to determine emissions associated with Alternative 2. Rather, the reductions in trips between the proposed project and Alternative 2 was used as a proxy for total emissions scaling to calculate an estimated reduction in emissions, as project-related emissions are largely driven by mobile-related impacts.

receptors within the project area, as recommended by various guidance documents as an approach to addressing operational impacts, including the California Department of Justice's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. With implementation of Mitigation Measure 4.3-4, cancer risks would be reduced to below the SJVAPCD significance threshold for the proposed project (Draft EIR, Table 4.3-23) and the same finding would apply to this Alternative. However, because installation of HEPA filters in the two existing impacted residences would require resident approval, neither San Joaquin County, nor the project applicant, can legally impose such improvements on private properties. Therefore, the Draft EIR determined that this impact associated with Specific Plan Buildout operations could remain significant and unavoidable, and such conclusion would be applicable to this Alternative.

The Draft EIR (Impact 4.3-8) determined that the proposed project would generate GHG emissions either directly or indirectly that may have a significant effect on the environment. While this Alternative would reduce industrial square footage by approximately 56 percent and vehicle trips by approximately 40 percent, thus reducing both mobile source and area source GHG emissions, the GHG emissions would still be considered substantial in recognition of the magnitude of GHG emissions estimated for the proposed project (see Table 4.3-25 of the Draft EIR).

Overall, impacts related to air quality, GHG emissions, and energy would be fewer under Reduced Project Alternative 2 as compared to the proposed project due to the decreased on-site industrial development and associated vehicle trips. The significant and unavoidable impacts related to air quality and GHG emissions would still occur under the Alternative.

Biological Resources

Similar to the proposed project, Reduced Project Alternative 2 would include ground-disturbing activities on the project site and, thus, would have the potential to impact Swainson's hawk, white-tailed kite, song sparrow (Modesto population), northern harrier, Crotch's bumble bee, and birds protected under the MBTA. Therefore, Mitigation Measures 4.4-2(a) and (b), and 4.4-3 through 4.4-6 would still be required. Given that Reduced Project Alternative 2 would reduce the total disturbance area by approximately 917 acres, as compared to the proposed project, the extent to which the above-listed special-status species could be impacted would be reduced in intensity.

Reduced Project Alternative 2 would be anticipated to have the same impacts to wetlands, based on a review of Figure 4.4-10 of the Biological Resources chapter of the Draft EIR. Thus, Mitigation Measures 4.4-7(a) and (b), which mitigate impacts associated with aquatic resources on-site, would still be required under Reduced Project Alternative 2 because the aquatic resources mapped for the proposed project site are still located within the Alternative's site boundaries.

Similar to the proposed project, this Alternative would be covered under the SJMSCP, and thus, would be subject to additional measures, such as the Incidental Take Minimization Measures for San Joaquin kit fox and burrowing owl. Due to the decreased disturbance area, the Alternative could result in a reduced potential to affect the aforementioned species.

Overall, impacts to biological resources would be fewer under Reduced Project Alternative 2 compared to the proposed project, given that the amount of habitat disturbed during construction would be reduced.

Cultural and Tribal Cultural Resources

Similar to the proposed project, Reduced Project Alternative 2 would include development of the project site with commercial, industrial, and public uses. However, as noted above, the Alternative would result in a decreased overall disturbance area (by approximately 917 acres) within the project site relative to the proposed project. Nonetheless, Mitigation Measure 4.5-2(a) through (c) would still be required, because the potential for the Alternative to result in disturbance or destruction of archaeological resources and human remains would still occur. Similarly, Mitigation Measure 4.5-3 related to a substantial change in the significance of a tribal cultural resource, would still be required. In addition, the alternative development would still include the proposed widening of the crossings over the California Aqueduct and Delta-Mendota Canal; therefore, Mitigation Measure 4.5-1(a) would still be required.

The Draft EIR determined that the proposed bridge widenings and roadway and intersection improvements associated with Specific Plan buildout and the off-site improvements could potentially impact resources eligible for listing under the NRHP or CRHR. Until site-specific evaluations of the buildings and structures abutting the off-site improvement study areas are conducted, the degree to which potential impacts to existing historic structures can be avoided cannot be determined. Therefore, in order to establish a conservative analysis, the Draft EIR concludes that the potential impact would remain significant and unavoidable. Because Reduced Project Alternative 2 would still require a number of off-site roadway improvements, the potential significant and unavoidable impact related to causing a change in the significance of a historical resource located adjacent to the off-site improvement study areas could still occur. Therefore, Mitigation Measure 4.5-1(b), which requires surveys and evaluation of such structures, would still be required under the Alternative.

Overall, because of the reduced disturbance area that would occur under Reduced Project Alternative 2, potential impacts related to cultural and tribal cultural resources could be fewer under the Alternative as compared to the proposed project.

Geology and Soils

As noted above, Reduced Project Alternative 2 would include a smaller overall area of disturbance compared to the proposed project. Consequently, the potential for grading and other ground-disturbing activities to encounter and destroy a unique paleontological resource or site would be decreased. Nonetheless, because construction and grading activities would still occur over approximately 659 acres, Mitigation Measure 4.6-6 (regarding paleontological resources) would still be required. In addition, Mitigation Measure 4.6-3(a) and (b), which requires preparation of final geotechnical engineering reports for the project site and off-site improvement areas, respectively, would still be required to ensure the industrial buildings would be provided adequate structural support. Overall, impacts related to geology and soils would be fewer under Reduced Project Alternative 2 as compared to the proposed project.

Hazards and Hazardous Materials

As discussed above, Reduced Project Alternative 2 would entail a similar buildout of the project as proposed. Although the overall disturbance area for the Alternative would be decreased as compared to the proposed project, the Alternative would still result in impacts related to the potential for hazardous material release during construction vehicle/equipment maintenance and related to RECs located within the off-site basin and near the storage building within the Pacific Gateway Central Development Area, which are still included in the alternative site boundaries. Thus, similar to the proposed project, Reduced Project Alternative 2 could create a significant

hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. As such, the mitigation measures identified in Chapter 4.7 would still be required. Overall, impacts related to hazards and hazardous materials under Reduced Project Alternative 2 would be similar to the impacts identified for the proposed project.

Hydrology and Water Quality

Given that the Reduced Project Alternative 2 would include a smaller overall area of disturbance compared to the proposed project, and reduction in industrial building square footage by 56 percent, the potential for the Alternative to result in construction or operational impacts related to water quality would be decreased. In addition, because a smaller portion of the site would be developed with impervious surfaces, the potential for changes in drainage patterns and increases in stormwater runoff rates would be reduced compared to the proposed project. Nonetheless, Mitigation Measures 4.8-1 and 4.8-2, as well as 4.8-4(a) and 4.8-4(b), would still be required to ensure that impacts to water quality during project construction and operation, as well as to on-site drainage patterns, would not occur. Overall, because the reduced surface area proposed under Reduced Project Alternative 2 would generate less stormwater runoff, impacts related to hydrology and water quality under the Alternative could be fewer compared to the proposed project.

Noise

Reduced Project Alternative 2 would include a smaller overall area of disturbance compared to the proposed project and, thus, the potential to result in construction impacts related to noise or vibration generation would be decreased. While the majority of existing sensitive receptors are located proximate to areas that would remain part of the Alternative, a few sensitive receptors would no longer be close to areas proposed for construction. Similar to the findings for the proposed project, Mitigation Measure 4.10-1(a) could reduce the temporary on-site construction noise impact to a less-than-significant level for Reduced Project Alternative 2. It is noted that the potential significant and unavoidable construction noise impact associated with the prospective off-site roadway improvement areas would still be anticipated to occur under this Alternative.

The Draft EIR (Impact 4.10-2) also found that the proposed project traffic noise increases would create a significant impact along several roadway segments where sensitive receptors are located. While a detailed traffic noise analysis would be required to determine conclusively whether a reduced number of roadway segments/sensitive receptors would be impacted by traffic noise level increases attributable to the Reduced Project Alternative 2, it is reasonable to assume that this may occur due to the fact that the Alternative would reduce the project's vehicle trips by approximately 40 percent. Nonetheless, Mitigation Measures 4.10-2(a) and (b) would still be required (installation of quiet pavement on impacted roadways), and in some cases, similar to the proposed project, traffic noise level reductions attributable to installation of quiet pavement may not reduce noise levels sufficient to reduce the increases below the applicable standard(s). Thus, the proposed project's significant and unavoidable operational traffic noise impact is expected to remain for this Alternative.

The Draft EIR (Impact 4.10-2) also determined that operational stationary noise sources (e.g., loading docks and on-site truck circulation) would exceed the County's nighttime noise standards at nearby residences. This operational noise impact would be reduced by Reduced Project Alternative 2 due to both the reduced scale of operations as well as the elimination of the Pacific

Gateway West and Central Development Areas, where two impacted residences are located (e.g., one residence located adjacent to the western boundary of the Pacific Gateway West Development Area and another residence located at the south end of MacArthur Drive).

Overall, development of Reduced Project Alternative 2 would result in fewer impacts related to Noise as compared to the proposed project, although the significant and unavoidable impacts related to temporary and permanent increases in ambient noise would still occur.

Transportation

The Draft EIR (Impact 4.12-1) determined that construction of the proposed project would have a significant impact related to disrupting traffic along the surrounding roadway network. The Reduced Project Alternative 2 decreases the construction footprint by approximately 917 acres and would reduce total buildout square footage by approximately 56 percent, which would reduce the amount of on-site construction activity. However, roadway improvements associated with this Alternative would still necessitate bridge replacement on South Chrisman Road over the Delta-Mendota Canal and California Aqueduct. Thus, similar to the proposed project, the Alternative could result in road closures that would require detours for all traffic and implementation of Mitigation Measure 4.12-1.

As previously discussed, Reduced Project Alternative 2 would reduce industrial development by 56 percent, or approximately 13,783,482 sf, which would reduce project-related trips by approximately 40 percent (see Table 7-4).

Reduced Project Alternative 2 would not alter the Draft EIR findings of significant impacts associated with truck traffic passing by Jefferson School and truck traffic increases along Durham Ferry Road (Impact 4.12-5). Reasons for this conclusion are:

- Reduced Project Alternative 2 would not develop any industrial west of Chrisman Road, with all industrial built in Gateway East (i.e., east of Chrisman Road) or Gateway Center. Gateway East has a distinct access advantage over the other gateway areas by having a connection to the SR 132/Bird Road interchange. However, Fehr & Peers has confirmed that the traffic data shows only a 2 percent drop in project truck trip percentages north on Chrisman Road and the same 2 percent using Durham Ferry Road.
    - Approximately 500 trucks per day would continue to pass by Jefferson School.
    - About 150 trucks per day would be expected to use Durham Ferry Road east of Chrisman Road. This is about four times as much truck traffic as the Initial Phase would add (which did not conclude there would be a significant adverse effect).

Similarly, although Reduced Project Alternative 2 would result in a noticeable reduction in new trips, as shown in Table 7-4, the other significant transportation impacts identified by the Draft EIR for the proposed project would still occur under this Alternative, including increasing demand for public transit, University-generated VMT and industrial/office employee-generated VMT, and safety issues related to increasing freeway ramp queues and traffic across South Chrisman Road at-grade railroad crossings. The Alternative would likely still trigger some of the off-site intersection and roadway improvements identified by the LTA prepared for the proposed project and studied in this EIR.

Table 7-4
Reduced Project Alternative 2 Project Buildout Trip Generation

District	New Daily Trips			New AM Peak Hour Trips			New PM Peak Hour Trips		
	Autos	Trucks	Total	Autos	Trucks	Total	Autos	Trucks	Total
Gateway East	11,092	4,665	15,757	1,555	311	1,866	1,970	207	2,177
University Center	9536	48	9,584	938	4	942	973	4	977
Gateway Center	6,360	256	6,615	594	16	610	558	10	568
New Trips	**26,988**	**4,969**	**31,956**	**3,087**	**331**	**3,418**	**3,501**	**221**	**3,722**

Source: Fehr & Peers, 2025.

Reduced Project Alternative 2 would be subject to the same mitigation measures as the proposed project, and due to the uncertainties about the ability for mitigation to reduce impacts to transit facilities, VMT, and substantially increasing hazards to vehicle safety, the impacts could remain significant and unavoidable. Notwithstanding, while this Alternative is not anticipated to fully avoid any of the proposed project's significant transportation impacts, the Alternative would reduce total daily trips by approximately 40 percent, which equates to a reduction of an estimated 20,950 daily trips. This could be considered to reduce the relative intensity of the significant transportation impact identified for the proposed project pertaining to substantially increasing hazards to vehicle safety.

7.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. The environmentally superior alternative is generally the alternative that would be expected to generate the least number of significant impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the County. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." In this case, the No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, the significant impacts resulting from the proposed project would not occur under the Alternative, as shown in Table 7-5 below.

The No Project (No Build) Alternative would not meet any of the project objectives. Because Reduced Project Alternatives 1 and 2 would include development of portions of the project site with the proposed uses, the project objectives would be met.

As discussed throughout this chapter and shown in Table 7-5, Reduced Project Alternatives 1 and 2 would result in fewer impacts than the proposed project in all of the CEQA topic areas for which the proposed project would have significant impacts. None of the significant and unavoidable impacts identified for the proposed project would be fully avoided by either Reduced Project Alternative, but many of them would be substantially lessened. For example, the proposed project's significant and unavoidable impact regarding impacts to Prime Farmland would be reduced by approximately 20 percent for Reduced Project Alternative 1 and 38 percent by Reduced Project Alternative 2. Another example relates to the reduction in trips associated with these alternatives – Reduced Project Alternative 1 would reduce total daily trips by approximately 23 percent, which equates to a reduction of an estimated 12,115 daily trips, and Reduced Project Alternative 2 would reduce daily trips by approximately 40 percent, which equates to a reduction of an estimated 20,950 daily trips. Reduced Project Alternative 2, in particular, could be considered to substantially lessen the relative intensity of the significant transportation impact identified for the proposed project pertaining to substantially increasing hazards to vehicle safety.

Because Reduced Project Alternative 2 would reduce identified impacts to a larger degree than Reduced Project Alternative 1 due to the greater reduction in site acreage and industrial development potential, Reduced Project Alternative 2 would be considered the Environmentally Superior Alternative.

Table 7-5
Comparison of Significant Environmental Impacts for Project Alternatives

Impact		Proposed Project	No Project (No Build) Alternative	Reduced Project Alternative 1	Reduced Project Alternative 2
4.1 Aesthetics					
4.1-1	**Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.**	**Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.1-2	**Have a substantial adverse effect on a scenic vista or, in a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point).**	**Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.1-3	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.1-4	**Long-term changes in scenic resources within a state scenic highway, visual character associated with development of the proposed project in combination with future buildout of San Joaquin County General Plan.**	**Cumulatively Considerable and Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.2 Agricultural Resources					
4.2-1	**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, or conflict with existing zoning for agricultural use, or a Williamson Act contract.**	**Significant and Unavoidable**	None	**Fewer***	**Fewer***

Table 7-5
Comparison of Significant Environmental Impacts for Project Alternatives

Impact	Proposed Project	No Project (No Build) Alternative	Reduced Project Alternative 1	Reduced Project Alternative 2
4.2-3 Impacts related to the cumulative loss of agricultural land.	**Cumulatively Considerable and Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.3 Air Quality, Greenhouse Gas Emissions, and Energy				
4.3-1 Conflict with or obstruct implementation of the applicable air quality plan.	**Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.3-2 Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project construction.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.3-3 Result in a net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard during project operation.	**Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.3-4 Expose sensitive receptors to substantial pollutant concentrations.	**Significant and Unavoidable**	Fewer	**Fewer***	**Fewer***
4.3-7 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard.	**Cumulatively Considerable and Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.3-8 Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.	**Cumulatively Considerable and Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.4 Biological Resources				
4.4-2 Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk and white-tailed kite.	Less-Than-Significant with Mitigation	Fewer	Fewer	Fewer

Table 7-5
Comparison of Significant Environmental Impacts for Project Alternatives

Impact		Proposed Project	No Project (No Build) Alternative	Reduced Project Alternative 1	Reduced Project Alternative 2
4.4-3	Have a substantial adverse effect, either directly or through habitat modifications, on song sparrow (Modesto population).	Less-Than-Significant with Mitigation	Fewer	Fewer	Fewer
4.4-4	Have a substantial adverse effect, either directly or through habitat modifications, on northern harrier.	Less-Than-Significant with Mitigation	Fewer	Fewer	Fewer
4.4-5	Have a substantial adverse effect, either directly or through habitat modifications, on Crotch's bumble bee.	Less-Than-Significant with Mitigation	Fewer	Fewer	Fewer
4.4-6	Have a substantial adverse effect, either directly or through habitat modifications, on nesting songbirds and other raptors protected under the MBTA and CFGC.	Less-Than-Significant with Mitigation	Fewer	Fewer	Fewer
4.4-7	Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Less-Than-Significant with Mitigation	None	Fewer	Similar
4.4-8	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.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.4-9	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan.	Less-Than-Significant with Mitigation	None	Fewer	Fewer

Table 7-5
Comparison of Significant Environmental Impacts for Project Alternatives

Impact		Proposed Project	No Project (No Build) Alternative	Reduced Project Alternative 1	Reduced Project Alternative 2
4.5 Cultural and Tribal Cultural Resources					
4.5-1	**Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5.**	**Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.5-2	Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.5-3	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.6 Geology and Soils					
4.6-3	Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code.	Less-Than-Significant with Mitigation	Greater	Similar	Similar
4.6-6	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.7 Hazards and Hazardous Materials					
4.7-1	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Less-Than-Significant with Mitigation	None	Similar	Similar

Table 7-5
Comparison of Significant Environmental Impacts for Project Alternatives

Impact		Proposed Project	No Project (No Build) Alternative	Reduced Project Alternative 1	Reduced Project Alternative 2
4.7-2	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	Less-Than-Significant with Mitigation	None	Similar	Similar
4.8 Hydrology and Water Quality					
4.8-1	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.8-2	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operation.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.8-4	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.10 Noise					
4.10-1	**Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**	**Significant and Unavoidable**	None	**Fewer***	**Fewer***

Table 7-5
Comparison of Significant Environmental Impacts for Project Alternatives

Impact	Proposed Project	No Project (No Build) Alternative	Reduced Project Alternative 1	Reduced Project Alternative 2
4.10-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	**Significant and Unavoidable**	Fewer	**Fewer***	**Fewer***
4.10-3 Generation of excessive groundborne vibration or groundborne noise levels.	Less-Than-Significant with Mitigation	None	Fewer	Fewer
4.10-5 Generation of a substantial permanent increase in ambient noise levels associated with development of the proposed project in combination with future development.	**Cumulatively Considerable and Significant and Unavoidable**	None	**Fewer***	**Fewer***
4.12 Transportation				
4.12-1 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system during construction activities.	Less-Than-Significant with Mitigation	None	Similar	Similar
4.12-2 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including roadway bicycle and pedestrian facilities, during operations.	Less-Than-Significant with Mitigation	None	Similar	Similar
4.12-3 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, during operations.	**Significant and Unavoidable**	None	**Similar***	**Similar***
4.12-4 Result in VMT which exceeds an applicable threshold of significance, except as provided in CEQA Guidelines Section 15064.3, subdivision (b).	**Significant and Unavoidable**	None	**Similar***	**Similar***

Table 7-5
Comparison of Significant Environmental Impacts for Project Alternatives

Impact	Proposed Project	No Project (No Build) Alternative	Reduced Project Alternative 1	Reduced Project Alternative 2
4.12-5 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	**Significant and Unavoidable**	Fewer	**Fewer***	**Fewer***
4.12-7 Conflict with a program, plan, ordinance, or policy, except LOS, addressing the circulation system, including transit, roadway bicycle, and pedestrian facilities, during operations under cumulative conditions.	Less Than Cumulatively Considerable with Mitigation	None	Similar	Similar
4.12-8 Result in cumulative conflicts or inconsistencies with CEQA Guidelines Section 15064.3, subdivision (b).	**Significant and Unavoidable**	None	**Similar***	**Similar***
4.12-9 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) under cumulative conditions.	**Cumulatively Considerable and Significant and Unavoidable**	None	**Fewer***	**Fewer***

Note: No Impact = "None;" Greater than the Proposed Project = "Greater," Less than Proposed Project = "Fewer;" and Similar to Proposed Project = "Similar"
Significant and Unavoidable impacts are presented in **bold** font.

* Significant and Unavoidable impact(s) determined for the Proposed Project would still be expected to occur under the Alternative.

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