DRAFT ENVIRONMENTAL IMPACT REPORT FOR THE

Roseville Industrial Park Project

State Clearinghouse No. 2021070186

Prepared for:

CITY OF ROSEVILLE CALIFORNIA

February 2023

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LIST OF ABBREVIATIONS

°C	degrees Celsius
°F	degrees Fahrenheit
2020 MTP/SCS	*2020 Metropolitan Transportation Plan/Sustainable Communities Strategy*
AB 939	California Integrated Waste Management Act of 1989
AB	Assembly Bill
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
af	acre-feet
AFV	alternative fuel vehicle
afy	acre-feet per year
APN	Assessor's Parcel Number
ARSP	Amoruso Ranch Specific Plan
ASTM	American Society for Testing and Materials
ATC	ATC Group Services LLC
B.C.E.	before common era
bgs	below ground surface
BMP	best management practice
Btu	British thermal units
C&D	construction and demolition
CA SDWA	California Safe Drinking Water Act
CAL FIRE	California Department of Forestry and Fire Protection
CAFE	Corporate Average Fuel Economy
Cal/OSHA	California Occupational Safety and Health Administration
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAP	climate action plan
CAR	Climate Action Reserve
CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CCCP	Curry Creek Community Plan
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations

cfs	cubic feet per second
CHP	California Highway Patrol
City	City of Roseville
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO_2	carbon dioxide
CO_2e	carbon dioxide-equivalent
COVID-19	Coronavirus Disease of 2019
CPUC	California Public Utilities Commission
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CVFPB	Central Valley Flood Protection Board
CVFPP	Central Valley Flood Protection Plan
CVPM&IWSP	Central Valley Project Municipal and Industrial Water Shortage Policy
CVSP	Creekview Specific Plan
CWA	Clean Water Act
CWC	California Water Code
dB	decibel
dBA	A-weighted decibel
DOC	California Department of Conservation
DOT	US Department of Transportation
DOF	California Department of Finance
Draft EIR	draft environmental impact report
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
EAP	Energy Action Plan
ECA	Essential Connectivity Area
EIS	Environmental Impact Statement
EMFAC2017	CARB's Emission Factor model
EO	Executive Order
EPA	US Environmental Protection Agency
EPAct	Energy Policy Act of 1992
EPCRA	Emergency Planning and Community Right-to-Know Act of 1986
ESA	Endangered Species Act
ESA	environmental site assessment
EV	electric vehicle
EVSE	electric vehicle supply equipment
FEMA	Federal Emergency Management Agency

FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FRAP	Fire and Resource Assessment Program
FTA	Federal Transit Administration
g/mile	gallons per mile
GBV	Ground-Borne Vibration
General Plan	City of Roseville 2035 General Plan
GHG	greenhouse gas
GPA	General Plan amendment
gpm	gallons per minute
HCP	Habitat Conservation Plan
HMBP	hazardous materials business plan
HOV	high occupancy vehicle
HVAC	heating, ventilation, and air conditioning
Hz	hertz
IEPR	Integrated Energy Policy Report
in/sec	inches per second
ITE	Institute of Transportation Engineers
kBtu/year	kilo-British thermal unit per year
LAFCO	Local Agency Formation Commission
LCFS	Low Carbon Fuel Standard
L_{dn}	Day-Night Level
L_{eq}	Equivalent Continuous Sound Level
LID	low impact design
L_{max}	Maximum Sound Level
LOS	level of service
LRA	local responsibility area
LRSP	local roadway safety plan
M1	Light Industrial
M2	General Industrial
MBTA	Migratory Bird Treaty Act
MCL	Maximum Contaminant Level
MFP	Middle Fork Project
mgd	million gallons per day
MLD	Most Likely Descendant

MMT	million metric tons
$MMTCO_2e$	metric tons of carbon dioxide equivalent
MOU	Memorandum of Understanding
mPa	micro-Pascals
mpg	miles per gallon
mph	miles per hour
MPO	metropolitan planning organization
MRF	Material Recovery Facility
MS4	municipal separate storm sewer system
$MTCO_2e$	metric tons of carbon dioxide equivalent
$MTCO_2e$/year	metric tons of carbon dioxide equivalent per year
MTP/SCS	*Metropolitan Transportation Plan/Sustainable Communities Strategy*
MW	megawatts
MWh/year	megawatt-hour per year
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
NCIC	North Central Information Center
NFIP	National Flood Insurance Program
NHTSA	National Highway Traffic Safety Administration
NOP	notice of preparation
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRHP	National Register of Historic Places
OCAP	Operations Criteria and Plan
OPR	California Governor's Office of Planning and Research
OS	Open Space
OSHA	Occupational Safety and Health Administration
Panattoni	Panattoni Development Company
PCAPCD	Placer County Air Pollution Control District
PCFCWCD	Placer County Flood Control and Water Conservation District
PCWA	Placer County Water Agency
PG&E	Pacific Gas and Electric Company
PGWWTP	Pleasant Grove Wastewater Treatment Plant
Porter-Cologne Act	Porter-Cologne Water Quality Control Act of 1970
ppd	pounds per day
PPV	peak particle velocity
PRC	Public Resource Code
project applicant	Panattoni Development Company
PRSP	Placer Ranch Specific Plan

PVSP	Placer Vineyards Specific Plan
RCP	Representative Concentration Pathway
REC	recognized environmental condition
RHNA	Regional Housing Needs Allocation
RHNP	Regional Housing Needs Plan
RMS	root-mean-square
Roseville Electric	City of Roseville Electric Department
RPS	Renewables Portfolio Standard
RUSP	Regional University Specific Plan
RV	recreational vehicle
RVSP	Riolo Vineyards Specific Plan
RWQCB	Regional Water Quality Control Board
SACOG	Sacramento Area Council of Governments
SAF Plan	State Alternative Fuels Plan
SAFE Rule	Safer Affordable Fuel-Efficient Vehicles Rule
SANDAG	San Diego Association of Governments
SAP	Sunset Area Plan
SAP	Sustainability Action Plan
SB	Senate Bill
SDWA	Safe Drinking Water Act
sf	square feet
SGMA	Sustainable Groundwater Management Act of 2014
SJWD	San Juan Water District
SMARA	Surface Mining and Reclamation Act
SPCC	Spill Prevention, Control, and Countermeasure
SPL	sound pressure level
SPRTA	South Placer Regional Transportation Authority
SPSP	Sutter Pointe Specific Plan
SPWA	South Placer Wastewater Authority
SR	State Route
SRA	State Responsibility Area
STAA	Surface Transportation Assistance Act
SVSP	Sierra Vista Specific Plan
SWMM	Stormwater Management Manual
SWMP	Stormwater Management Program
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
SWRCB-DDW	State Water Resources Control Board Division of Drinking Water
TDM	Transportation Demand Management

TISG	Transportation Impact Study Guide
TMDL	total maximum daily load
TPA	transit priority area
TRU	Transportation Refrigeration Unit
TSM	Transportation Systems Management
UAIC	United Auburn Indian Community of Auburn Rancheria
USACE	US Army Corps of Engineers
USBR	US Bureau of Reclamation
USC	US Code
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Planning Act
VdB	vibration decibels
VEC	vapor encroachment condition
VMT	vehicle miles traveled
WDR	Waste Discharge Requirement
WFA	Water Forum Agreement
WPGSA	West Placer Groundwater Sustainability Agency
WPWMA	Western Placer Waste Management Authority
WQO	Water Quality Objective
WRSP	West Roseville Specific Plan
WSA	water supply assessment
WSCP	Water Shortage Contingency Plan
WTP	Water Treatment Plant
ZEV	zero-emission vehicle

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EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This summary is provided in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15123. As stated in the State CEQA Guidelines Section 15123(a), "[a]n environmental impact report (EIR) shall contain a brief summary of the proposed actions and its consequences. The language of the summary should be as clear and simple as reasonably practical." As required by the Guidelines, this chapter includes (1) a summary description of the proposed Roseville Industrial Park Project, (2) a synopsis of environmental impacts and recommended mitigation measures (Table ES-1), (3) identification of the alternatives evaluated and of the environmentally superior alternative, and (4) a discussion of the areas of controversy associated with the project.

ES.2 SUMMARY DESCRIPTION OF THE PROJECT

Panattoni Development Company (Panattoni or project applicant) proposes to develop a property in the City of Roseville with a range of industrial uses, including light manufacturing, warehousing, and distribution uses (totaling up to 2,430,000 square feet [sf]). Up to 15 buildings would be constructed and would be connected by a bridge across Pleasant Grove Creek and Pleasant Creek Bypass Channel. The project also includes an electrical substation south of Pleasant Grove Creek.

ES.2.1 Project Location

The project site is located at 6382 Phillip Road and includes approximately 241 acres of undeveloped grazing land in the northwest corner of Roseville, in Placer County. The project site, which is currently owned by the City, is predominantly flat with some sparsely vegetated, low hills. Pleasant Grove Creek traverses the property in an east–west direction, bisecting the site into a north and south parcel. Due to previous farming activities at the project site, the original hydrology/drainage has been modified over 70+ years. The southern portion of the site was used more recently for flood control purposes (constructed channel).

Of the total 241 acres, 176.5 acres are considered developable with approximately 6.6 acres for Blue Oaks Boulevard and Phillip Road extensions/widening. The remaining 57.9 acres are composed of approximately 13.6 acres of the Pleasant Grove Creek Floodplain and Pleasant Grove Creek Bypass Channel, approximately 21.6 acres of undevelopable land northwest of the future Placer Parkway, and approximately 22.7 acres for the planned Placer Parkway alignment. (The future Placer Parkway, a planned regional facility, would connect Highway 65 in Placer County to Highway 99 in Sutter County, providing an alternate highway to Interstate 80.)

The project site's Assessor's Parcel Number (APN) is 017-101-008-000. The existing General Plan land use designation for the project site is Public/Quasi-Public, which primarily allows for municipal and governmental facilities. The project site is also zoned as Public/Quasi-Public (P/QP), which establishes areas for municipal, governmental, or public facilities.

The project site is within an area of City-owned property known as Reason Farms. The Al Johnson Wildlife Area is located to the northwest of the site and is part of an area planned to accommodate the City's stormwater Regional Retention facility and potential recreation uses. Agricultural uses are located to the west along the southern portion of the site. To the east, immediately adjacent to the project site, is the Creekview Specific Plan area (adopted by the City in 2011), which is planned to accommodate approximately 2,000 residential units. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area (adopted by the City in 2004), which is 65 percent built out, and includes 10,479 residential units, parks, open space, and commercial uses.

ES.2.2 Project Background

The project site is part of the City-owned property known as Reason Farms, which totals approximately 1,700 acres. The City purchased the property in 2003 for a retention basin project. The project was originally known as the Reason Farms Retention Basin Facility and was later renamed to the Pleasant Grove Retention Facility. The City is the project proponent for the facility, which is already designed and approved but not yet constructed. The EIR (SCH# 2002072084) for the retention facility was certified in 2003. The project site is located in an area that is no longer needed for the retention basin project (which, as noted above, would be located within the 1,500-acre Al Johnson Wildlife Area [formerly part of Reason Farms] to the northwest of the project site). The City has identified this property for development for over a decade.

A feasibility analysis of the site was done in 2006 by the City of Roseville for a potential job center, which assumed 18 buildings totaling 1,080,000 sf.

On November 20, 2019, the City Council declared the property as surplus because there are no identified future City needs for the parcel, and the property is underutilized. As required by the Surplus Land Act, letters offering to sell or lease the property were sent to local public and affordable housing developers; park, recreation, and open space agencies; and school districts. None of these agencies expressed interest in leasing or purchasing the property. The City has complied with the Surplus Land Act and may dispose of the property pursuant to its own real property disposition procedures.

On March 3, 2021, the City Council determined that the disposition of the property was in the City's best interest and executed an Option and Purchase and Sale Agreement to Panattoni (project applicant).

ES.2.3 Project Objectives

The project applicant has developed the following objectives for the project:

- construct a high-quality industrial park capable of serving modern warehouse, distribution, and light manufacturing users;
- develop a state-of-the-art employment center designed and operated to achieve the highest and best use of the property;
- create substantial, permanent employment opportunities for residents of Roseville and surrounding areas;
- support City of Roseville's desire to create a job-housing balance, and provide employment generating uses in western Roseville;
- utilize, wherever feasible, alternative energy sources, including solar panels when possible;
- locate the project as near as possible to existing utility infrastructure with anticipated capacity;
- locate the project to be accessible from existing roads and minimize the need for construction of major new roadway improvements;
- phase project construction to be responsive to market demands for light industrial space; and
- minimize environmental impacts to surrounding areas, including residential communities and other sensitive land uses.

ES.2.4 Characteristics of the Project

Roseville Industrial Park is envisioned to be an industrial district comprised of two distinct sections: the south parcel and the north parcel (see Table ES-2). The project would support a range of industrial uses, including light manufacturing, warehousing, and distribution.

Table ES-2 Proposed Buildings in Roseville Industrial Park

Building	Approximate Dimensions (feet)	Height (feet)	Floor Area (square feet)
South Parcel			
A	300 X 450	42.5	135,456
B	500 X 300	42.5	150,456
C	500 X 300	42.5	150,456
D	850 X 300	42.5	255,564
E	300 X 900	42.5	270,564
F	500 X 600	44.8	300,456
G	500 X 600	44.8	300,456
H	500 X 600	44.8	300,456
I	450 X 300	42.5	135,456
Subtotal			1,999,320
North Parcel			
J	200 X 400	38.5	80,456
K	200 X 400	38.5	80,456
L	200 X 400	38.5	80,456
M	200 X 400	38.5	80,456
N	200 X 500	38.5	100,456
Subtotal			422,280
Total			2,421,600

Source: Information provided by Panattoni in 2021.

The buildings are proposed as site cast concrete with embellishments of corrugated metal, glass, aluminum window systems, and steel canopies. The maximum building height would be 44.8 feet.

Landscape setbacks would be provided around the perimeter of the site as a buffer along the streets, Pleasant Grove Creek, and the neighboring residential development. Landscaping is proposed to include primarily low water-use trees, shrubs, and ground cover; no turf is proposed.

Roseville Electric has determined that there are 5 megavolt-amperes (MVA) of power available for the project; however, at final buildout, the project is anticipated to need 20 megawatts (MW) of power. The initial 5 MVA of power require the extension of two 12 kilovolt (kV) underground lines. Therefore, the project includes construction of an electrical substation to provide the additional 15 MW of power needed.

The main entry to the project site would be from Blue Oaks Boulevard. There would be three driveways along Phillip Road and an internal vehicular circulation system that would provide access to a surface parking lot. The buildings are organized around a main driveway designed for large truck circulation, while pedestrian and vehicular paths circle the site perimeter.

The project would include 3,016 total parking stalls, with 2,480 parking stalls on the south parcel and 536 parking stalls on the north parcel, which is more parking than is required per City code.

Utility service is not currently available at the project site. Thus, the project will require the extension of nearby water, wastewater, recycled water, stormwater, and electrical infrastructure to serve the future development of the site.

Off-site roadway improvements would include the extension of Blue Oaks Boulevard along the southern frontage of the project. Improvements would also be made to Phillip Road along the western frontage of the project.

These improvements are described in more detail in Chapter 2, "Project Description."

PROJECT CONSTRUCTION

Depending on market demand, the project is anticipated to be developed in four phases (see Table ES-3). Phase 1 is anticipated to start construction in late fall 2023 and be complete in 2024. Occupancy for Phase 1 is projected to occur in early 2025. The timing of future phases will be determined based on market readiness and tenant demand.

Table ES-3 Proposed Phasing Plan

Phase	Buildings	Timing
1	A, B, C	Anticipated Construction: late fall 2023 through 2024 Occupancy: early 2025
2	D, E	To be determined based on market readiness and tenant demand
3	F, G, H, I	To be determined based on market readiness and tenant demand
4	J, K, L, M, N	To be determined based on market readiness and tenant demand

Source: Information provided by Panattoni in 2021.

PROJECT OPERATION

Though actual tenants are not known yet, it is assumed that 80 percent of uses will be warehousing and distribution, 10 percent will be light manufacturing, and 10 percent will be equipment and materials storage yards. All on-site equipment (e.g., forklifts, yard trucks) would be electric. At full buildout, it is assumed that there would be 1 employee per 1,250 sf or 1,600 employees in the south parcel and 338 employees in the north parcel, for a total of 1,938 employees.

ES.3 ENVIRONMENTAL IMPACTS AND RECOMMENDED MITIGATION MEASURES

Table ES-1, presented at the end of this chapter, provides a summary of the environmental impacts for the proposed Roseville Industrial Park Project. The table provides the level of significance of the impact before mitigation, recommended mitigation measures, and the level of significance of the impact after implementation of the mitigation measures.

The proposed Roseville Industrial Park Project would result in the following significant and unavoidable impacts; that is, no feasible mitigation is available to reduce the project's impacts to a less-than-significant level.

- Transportation and Circulation: Vehicle Miles Traveled Per Service Population (project and cumulative); Conflict with Adopted Policies, Plans, or Programs Regarding Pedestrian Facilities (project); and Conflict with Adopted Policies, Plans, or Programs Regarding Transit Facilities (project)
- Air Quality: Construction Emissions (cumulative); Long-term Operational Emissions (cumulative); and Toxic Air Contaminants (cumulative)
- Greenhouse Gas Emissions and Climate Change: Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment (project and cumulative); and Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases (project and cumulative)
- Noise and Vibration: Exposure of Existing Sensitive Receptors to Excessive Traffic Noise Levels (project); and Stationary and Transportation (cumulative)
- Aesthetics: Visual Character and Quality (cumulative); and Light and Glare (cumulative)

ES.4 ALTERNATIVES TO THE PROPOSED PROJECT

The following provides brief descriptions of the alternatives evaluated in this Draft EIR.

- **Alternative 1: No Project Alternative** assumes no development occurs on the project site. The project site would remain in its current condition (undeveloped grazing land).
- **Alternative 2: Innovation Mixed-Use Alternative** would decrease the amount of light industrial floor area proposed and would replace that floor area with uses that are less truck-intensive, including innovation/research and development (R&D) and office uses. In addition, this alternative would place the office and R&D uses on the eastern side of the project site, which would provide additional distance and shielding between the existing residential uses to the east of the site and the proposed light industrial uses (including associated loading docks and truck staging areas).
- **Alternative 3: Reduced Footprint and Floor Area Alternative** would eliminate proposed development on the north parcel, which eliminates the need for the bridge across Pleasant Grove Creek and the Pleasant Grove Creek Bypass Channel. This alternative also results in a reduction of light industrial floor area, compared to the proposed project.

For a more thorough discussion of project alternatives, see Chapter 6, "Alternatives." Table ES-4 presents a comparison of the environmental effects of each alternative relative to the proposed project.

Table ES-4 Summary Environmental Impacts of the Alternatives Relative to the Proposed Roseville Industrial Park Project

Environmental Topic	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Innovation Mixed-Use Alternative	Alternative 3: Reduced Footprint and Floor Area Alternative
Land Use and Agricultural Resources	LTS	Less	Similar	Similar
Population, Housing, and Employment	LTS	Less	Similar	Similar
Transportation and Circulation	SU	Less	Less	Similar
Air Quality	LTS/M	Less	Less	Less
Greenhouse Gas Emissions and Climate Change	SU	Less	Less	Less
Noise and Vibration	SU	Less	Less	Less
Biological Resources	LTS/M	Less	Similar	Less
Cultural Resources	LTS/M	Less	Similar	Less
Hazardous Materials, Wildfire, and other Hazards	LTS/M	Less	Similar	Similar
Public Services	LTS	Less	Similar	Similar
Utilities and Service Systems	LTS	Less	Similar	Similar
Hydrology and Water Quality	LTS	Less	Similar	Similar
Aesthetics	LTS	Less	Similar	Less
Energy	LTS	Less	Similar	Similar
Tribal Cultural Resources	LTS/M	Less	Similar	Less

Notes: LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable.

Source: Data compiled by Ascent Environmental in 2022.

ES.4.1 Environmentally Superior Alternative

CEQA requires identification of an environmentally superior alternative in an EIR but gives no definition for the term (State CEQA Guidelines Section 15126.6(e)). For the purposes of this EIR, the environmentally superior alternative is the alternative that would result in the fewest potentially significant impacts while achieving most of the basic project objectives to the greatest extent.

Because the No Project Alternative would avoid all adverse impacts resulting from construction and operation of the Roseville Industrial Park Project analyzed in Chapter 3, it is the environmentally superior alternative. However, the No Project Alternative would not meet the objectives of the project, as described in Chapter 6.

When the environmentally superior alternative is the No Project Alternative, the State CEQA Guidelines (Section 15126[d][2]) require selection of an environmentally superior alternative from among the other action alternatives evaluated. As described in Chapter 6, neither Alternative 2 nor Alternative 3 would avoid the significant impacts associated with the proposed project. This is due primarily to the distance of the project site from major transportation corridors (i.e., State Route 65 and Interstate 80); any development in this location that could meet most of the project's objectives would involve long trip lengths, which generates elevated VMT and GHG emissions.

As shown in Table ES-4, although Alternative 3 would reduce project-related impacts for more environmental issue areas than Alternative 2, Alternative 2 would outperform Alternative 3 in terms of reducing the significant and unavoidable impacts associated with the project, especially impacts related to VMT, GHG, and noise. This is because Alternative 2 has approximately half the amount of light industrial, warehousing, and manufacturing development compared to Alternative 3 and would therefore generate substantially fewer truck trips—a major contributor to VMT, GHG, and noise impacts. Because it would best reduce the significant impacts associated with the project, Alternative 2 is considered the environmentally superior alternative.

ES.5 AREAS OF CONTROVERSY

In accordance with Public Resources Code (PRC) Section 21092 and California Code of Regulations (CCR) Section 15082, the City issued a notice of preparation (NOP) for the proposed Roseville Industrial Park Project on July 12, 2021, to inform agencies and the general public that an EIR was being prepared and to invite comments on the scope and content of the document. The NOP and responses to the NOP are included in Appendix A of this Draft EIR. Based on the comments received during the NOP comment period, the major areas of controversy associated with the project include:

- potential contribution to regional air pollution and global climate change;
- potential health risk impacts to nearby residences and schools associated with project construction and operation;
- potential impacts to special-status species, including potential take of individuals and loss of habitat;
- potential safety impacts at the State Route 65/Blue Oaks interchange;
- number of trips generated by the project (by phase and at buildout);
- potential impacts to surface and groundwater quality resulting from wastewater discharges;
- need for permits, as applicable, including: construction stormwater general permit, industrial stormwater general permit, Clean Water Act Section 404 and 401 permits, and waste discharge requirements;
- potential impacts to cultural resources, including resources that may be considered tribal cultural resources; and
- need to consult with California Native American tribes in accordance with Assembly Bill 52.

Areas of controversy that fall within the scope of CEQA are addressed in this Draft EIR. Issues that fall outside the scope of CEQA are not evaluated in this Draft EIR; however, the City will continue to respond to these issues through the project planning process.

All of the substantive environmental issues raised in the NOP comment letters have been addressed or otherwise considered during preparation of this Draft EIR.

ES.6 ISSUES TO BE RESOLVED

The City will consider whether or not to certify the EIR and approve the proposed Roseville Industrial Park Project. Other actions and planning entitlements requested by the project applicant from the City are listed in Section 2.7, "Potential Permits and Approvals Required."

Other federal, state, and local agencies may also need to grant permits or approvals for the project; these are also listed in Section 2.7, "Potential Permits and Approvals Required."

Table ES-1 Summary of Impacts and Mitigation Measures

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Land Use and Agricultural Resources			
Impact 3.1-1: Conflict with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect The proposed project would require a GPA and rezoning of the project site to allow for a range of industrial uses and open space. With the approval of the GPA, the project would be consistent with the City of Roseville General Plan, and with approval of rezoning within the project site, the project would be consistent with the City of Roseville Zoning Ordinance. In addition, the project would not conflict with other land use plans in the project area. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.1-2: Result in the Conversion of Farmland The project site has been used historically for agricultural purposes and is designated by the DOC's FMMP as Farmland of Local Importance; it is therefore not considered to be "Farmland" pursuant to CEQA. The conversion of Farmland of Local Importance is not considered a significant impact under Appendix G of the State CEQA Guidelines. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Population, Employment, and Housing			
Impact 3.2-1: Potential to Induce Substantial Unplanned Population Growth The project involves the development of an industrial park with a range of uses, including light manufacturing, warehousing, and distribution. Construction and operation of the project would generate temporary and permanent jobs that could induce population growth. Existing construction personnel in the region would be sufficient to meet demand associated with the project (up to 125 workers); therefore, this temporary increase in employment is not expected to generate substantial new population growth in the area. Operation of the project would generate jobs for 1,938 workers, which is approximately 30 percent of the total 6,496 workers employed in the manufacturing, transportation, and warehousing industries within Roseville. Given the existing number of workers within Roseville, the future buildout of adjacent specific plan areas, and current unemployment rates, the project's potential to contribute directly to unplanned population growth during operation would be minimal. The project would require the extension of existing and development of new infrastructure; however, off-site infrastructure improvements would serve the project's utility requirements, and would not substantially create opportunities for other development in a way that could induce substantial population growth. For	LTS	No mitigation is required.	LTS

NI = No impact LTS = Less than significant PS = Potentially significant S = Significant SU = Significant and unavoidable

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
these reasons, the project would have a less-than-significant impact related to unplanned population growth.			
Transportation and Circulation			
Impact 3.3-1: Vehicle Miles Traveled Per Service Population The project would generate additional VMT associated with industrial park land uses, which would include trucks and passenger vehicles. As shown in Table 3.3-4, the project would have an average VMT per service population under existing plus project conditions of 65.4 miles, which is well above the Citywide average VMT per service population of 32.5 miles. Because the project would exceed the City's VMT per service population threshold, which is a 15 percent reduction from the Citywide average, this impact would be significant.	S	**Mitigation Measure 3.3-1: Implement Transportation Demand Management Strategies to Reduce Project VMT** Prior to issuance of building permits for tenant improvements, the project applicant shall submit a Transportation Demand Management (TDM) Plan for review and approval by the Engineering Division of the City's Development Services Department that includes the following strategy for reducing project VMT that shall be implemented prior to and during project operation. This strategy was obtained from the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA 2021), which was adopted by the California Air Pollution Control Officer Association (CAPCOA) Board of Directors in December 2021. ▶ Project applicant shall implement a Commute Trip Reduction (CTR) program (Individual effectiveness = 0 percent to 4 percent).	SU
Impact 3.3-2: Conflict with Adopted Policies, Plans, or Programs Regarding Pedestrian Facilities Continuous pedestrian facilities are lacking on Blue Oaks Boulevard and Westbrook Boulevard near the project site. This would be inconsistent with General Plan policies CIRC6.1, CIRC6.3, and CIRC6.5, which call for establishing and maintaining a safe and continuous pedestrian network that encourages walking. Therefore, this impact would be potentially significant.	PS	**Mitigation Measure 3.3-2: Construct Pedestrian Facilities in the Project Vicinity** To provide continuous sidewalks in the project vicinity, the applicant shall install temporary sidewalks, if not already constructed prior to issuance of certificate of occupancy. Prior to issuance of occupancy permits, the project applicant shall take necessary action resulting in the following pedestrian facilities being constructed in the project vicinity (if not already in place at that time): ▶ an approximate 800-foot length of sidewalk along the north side of Blue Oaks Boulevard immediately east of the project site to connect with the existing sidewalk starting at Cloud Dance Drive; ▶ an approximate 420-foot length of sidewalk along the north side of Blue Oaks Boulevard immediately west of Lower Banks Drive; and ▶ an approximate 520-foot length of sidewalk along the west side of Westbrook Boulevard south of Blue Oaks Boulevard to provide a continuous sidewalk. These sidewalks have been planned and their potential environmental impacts have been evaluated as part of the Creekview and West Roseville Specific Plan EIRs (City of Roseville 2004, 2011b). Therefore, no further environmental review of these planned sidewalks is needed at this time. It is further noted that Mitigation Measure 3.3-2 serves a dual purpose for also helping to reduce the significance of project VMT impacts (see Impact 3.3-1).	SU

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.3-3: Conflict with Adopted Policies, Plans, or Programs Regarding Bicycle Facilities A continuous set of on-street and/or off-street bicycle facilities are present to connect the project site with neighborhoods to the south and east, as well as more remote destinations to the east along Blue Oaks Boulevard. The project would be consistent with applicable policies, plans, and programs contained in the City's General Plan and Pedestrian Master Plan. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.3-4: Conflict with Adopted Policies, Plans, or Programs Regarding Transit Facilities The project would add new employees to a site that is not currently served by public transit. The project would construct a bus turnout along its southern frontage (on the north side of Blue Oaks Boulevard) to accommodate future fixed-route bus service. Additionally, the Roseville City Council approved a contract in fall 2022 to enable Roseville Transit to operate a pilot micro-transit service in the City. Additionally, the Roseville Transit Dial-A-Ride provides curb-to-curb public bus service within the City limits, which includes the project site. However, because transit service is not currently provided along Blue Oaks Boulevard and there are no assurances that adequate transit service would be available to serve the project, the project would not be consistent with General Plan policies related to transit. Until public transit is provided to the project site, this impact would be potentially significant.	PS	**Mitigation Measure 3.3-4: Contribute Fair Share Funding for a Transit Master Plan and/or a Comprehensive Operational Analysis for West Roseville** Prior to the issuance of a grading permit, the project applicant shall contribute fair share funding to enable the City to lead the preparation of a Transit Master Plan and/or a Comprehensive Operational Analysis (COA) for West Roseville. This plan is an essential planning tool that will enable the City to properly plan for expanded transit service to West Roseville. The plan should address topics such as transit service coverage, transit service levels (e.g., frequency, service span, etc.), transit infrastructure needs, identification of key destinations, capital and operations & maintenance costs, ridership estimates, transit service performance standards, and an implementation timeline.	SU
Impact 3.3-5: Increased Hazards due to Geometric Design Features, Incompatible Uses, or Inadequate Emergency Access The project would not result in inadequate emergency access or increase hazards due to geometric design features, incompatible uses, or inadequate emergency access. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Air Quality			
Impact 3.4-1: Construction Emissions of Criteria Air Pollutants and Ozone Precursors Construction of the project would result in emissions of ROG, NO_X, and particulate matter from the use of heavy-duty construction equipment, travel on unpaved surfaces, and earth movement for site preparation/grading activities. Construction activities would result in maximum daily emissions that would not exceed PCAPCD's thresholds of significance in any year except for during Phase 3 when NO_X emissions would exceed PCAPCD's daily thresholds of 82 lb/day. This impact would be significant.	S	**Mitigation Measure 3.4-1: Reduce Construction-Related Emissions of Criteria Air Pollutants and Ozone Precursors** To reduce NO_X emissions to below PCAPCD thresholds, the maximum daily emissions occurring in Phase 3 would need to be reduced by at least 24 percent. Prior to issuance of grading permits for Phase 3 of the project, the applicant and their construction contractors shall submit to the City a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used during any portion of Phase 3 construction.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. ▶ The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. ▶ This information shall be submitted at least 4 business days prior to the use of such off-road equipment. ▶ The inventory shall be updated and submitted monthly throughout the duration of construction, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. In addition to the equipment inventory requirement, the project representative shall provide a plan for approval by the City demonstrating that the off-road vehicles (50 horsepower or more) to be used during construction, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average emissions of no more than 82 pounds of NO_X per day. This plan shall be submitted to the City in conjunction with the equipment inventory. Acceptable options for reducing emissions may include use of late model engines (Tier 4), low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.	
Impact 3.4-2: Long-term Operational Emissions of Criteria Air Pollutants and Ozone Precursors Implementation of the project would result in long-term operational emissions from the use of on-site equipment (e.g., diesel generators), building-related energy, and area-wide sources (e.g., landscaping equipment) as well as from mobile sources associated with employee commute and operational truck travel. Based on modeling conducted, operational emissions would exceed PCAPCD's thresholds of 55 lb/day for both NO_X and ROG, but not for PM_{10}; thus, the project would result in a cumulatively considerable net increase in criteria air pollutants and could result in adverse health impacts. This impact would be significant.	S	**Mitigation Measure 3.4-2a: Reduce On-site Criteria Air Pollutants and Ozone Precursors** Project operations would exceed PCAPCD's threshold of significance for ROG and NO_X by 67 lb/day and 127 lb/day, respectively. The applicant shall reduce ROG and NO_X emissions with on-site mitigation measures to the extent possible and then shall offset remaining emissions by participating in PCAPCD's off-site mitigation program. The following mitigation measures shall be implemented by the applicant to reduce emissions from operational activities. These mitigation measures would apply starting in Phase 3. ▶ All diesel trucks entering the Roseville Industrial Park shall meet or exceed 2010 engine emission standards specified in California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025 or be powered by natural gas, electricity, or other diesel alternative(s). Facility operators shall maintain a log of all trucks entering the facility to document that the truck usage meets these emission standards. This log shall be available for inspection by City staff at any time. ▶ Prior to the issuance of a Building Permit for any project phase, the applicant shall show on the submitted building elevations that, at a minimum, 10 percent	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		of all truck loading and unloading docks shall be equipped with one 110/208-volt power outlet for every two dock doors. Diesel trucks idling for more than the State-required time of 5 minutes shall be required to connect to the 110/208-volt power to run any auxiliary equipment. A minimum 2-foot x 3-foot sign that indicates "Diesel Engine Idling limited to a maximum of 5 minutes" shall be included with the submittal of building plans. ▶ Prior to Design Review approval for any project phase, the Site Plan shall show that the applicant has provided preferential parking spaces for employees that carpool/vanpool/rideshare. Such stalls shall be clearly demarcated with signage. ▶ A minimum of 10 percent of the parking spaces shall be electric vehicle-charging stations for automobiles and/or light-duty vehicles. In addition, the remaining on-site parking facilities shall be designed and constructed so that parking spaces are capable of supporting future electric vehicle supply equipment (EVSE) charging locations that can support on-site heavy-duty electric or hybrid trucks. However, because the actual future tenants are unknown at this time, the level to which each individual on-site mitigation measure can be implemented is unknown and therefore emissions reductions from these onsite measures were not quantified. **Mitigation Measure 3.4-2b: Reduce Criteria Air Pollutants and Ozone Precursors through Off-site Measures** The proposed project would exceed the operational air quality thresholds as established by PCAPCD (a maximum of 55 lb/day of ROG and NO_X). The estimated total amounts of excess emissions are 65 lb/day for ROG and 117 lb/day for NO_X (based on subtracting the modelled emissions from the threshold). Per PCAPCD recommendations and to mitigate the project's further contribution to the long-term emission of pollutants, the applicant shall implement one of the following off-site mitigation measures prior to the operation of Phase 3: ▶ Establish mitigation off-site within the same region (i.e., east or west Placer County) by participating in an off-site mitigation program, coordinated through PCAPCD. Examples include but are not limited to: participation in a "Biomass" program that provides emissions benefits; retrofitting, repowering, or replacing heavy duty engines from mobile sources (e.g., busses, construction equipment, on road haulers); or other programs that the project proponent may propose to reduce emissions. ▶ Participate in PCAPCD's Off-site Mitigation Program by paying the equivalent amount of money, which is equal to the project's contribution of pollutants	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		(ROG and NO_X), which exceeds the project-level threshold of 55 lbs/day for both ROG and NO_X multiplied by the current cost to mitigate one ton of ozone precursor emissions of $20,873 (updated July 2021). Based on the emission estimates presented in Table 3.4-6, daily NO_X thresholds would be exceeded by 117 lb/day and ROG by 65 lb/day, for a total of 182 lb/day or 33 tons/year of ozone precursors that need to be mitigated. The total area for the project is 2,421,600 square feet (sf) of building. Thus, as the phases of the project are developed over time, the cost of mitigation for each future tenant would be based on the size of the building that each tenant occupies and operates, equivalent to $0.30/square foot. ▶ In lieu of paying the mitigation fee established above, at the time of Phase 3 development application review, and prior to recordation of the final tentative map plan for any future building to be constructed, the applicant may choose to re-assess the mitigation fee that can be determined based on project-specific operations and more specific details pertaining to the level of on-site mitigation measures incorporated into the project, from the list provided above in Mitigation Measure 3.4-2a. To satisfy this mitigation requirement, the applicant shall hire a qualified professional to quantify on-site and off-site operational criteria air pollutants and ozone precursors and shall provide substantial evidence to the City for approval. Based on this refined analysis, if operational emissions still exceed PCAPCD thresholds of significance, the mitigation fee shall be recalculated based on the cost to mitigate ozone precursors at that time.	
Impact 3.4-3: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan Implementation of the project would result in an inconsistency with the City's 2035 General Plan because the project would require a General Plan Amendment. Additionally, the operational emissions from the project would exceed PCAPCD's threshold of significance, prior to mitigation, which would conflict with the objective of SMAQMD's AQAP (i.e., Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan). However, with incorporation of available on-site mitigation measures and the commitment to offset additional emissions with PCAPCD's off-site mitigation program, project-generated emissions would be reduced to a less-than-significant level. Nonetheless, because the project would conflict with the adopted General Plan, and associated land use projections used for the purpose of AQAP emissions forecasting, this impact would be significant.	S	**Mitigation Measure 3.4-3: Implement Mitigation Measures 3.4-2a and 3.4-2b** The project applicant shall implement Mitigation Measures 3.4-2a and 3.4-2b, above, which require the implementation of available on-site mitigation measures and the commitment to offset additional emissions with PCAPCD's off-site mitigation program, respectively.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.4-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations An HRA was conducted to assess potential health risk exposure from construction and operation of the project. The HRA analyzed two scenarios; Scenario 1 assumes that a sensitive receptor would be exposed to diesel PM from both construction and operations for 30 years starting in 2023 through 2063; Scenario 2 assumes that a sensitive receptor would be exposed to diesel PM due to full operations for 30 years starting in 2030 through 2060. In both scenarios, the cancer risk was found to be less than 10 in a million, which is below PCAPCD's thresholds of significance. The Health Hazard Index (HHI), which indicates chronic non-cancer risk, was also found to be less than one. Therefore, diesel PM emissions from the project would not result in exposure of existing and future receptors to substantial TAC concentrations. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.4-5 Create Objectionable Odors Affecting a Substantial Number of People The project would introduce new odor sources into the area such as temporary diesel exhaust emissions from the construction equipment and movement of trucks during construction. However, these odor sources would be temporary, intermittent, and dissipate rapidly from the source. Operation activities would include truck idling and diesel generators, both would also be intermittent in nature, and diesel particulate matter dissipates rapidly from the source. In addition, with implementation of Mitigation Measures 3.4-2a and 3.4-2b, project operation would not result in the generation of odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to a substantial number of people. Thus, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Greenhouse Gas Emissions and Climate Change			
Impact 3.5-1: Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment The project is estimated to generate a total of 3,934 $MTCO_2e$ and maximum annual emissions of 1,159 $MTCO_2e$ from construction activities and 25,059 $MTCO_2e$/year during full buildout in 2030. Annual maximum construction emissions of 1,159 $MTCO_2e$ would not exceed PCAPCD's bright line threshold of 10,000 $MTCO_2e$/year; however, operational emissions of 25,059 $MTCO_2e$/year would exceed PCAPCD's Bright-Line Threshold of 10,000 $MTCO_2e$/year and would result in a considerable contribution to cumulative emissions related to global climate change. This impact would be significant.	S	**Mitigation Measure 3.5-1a: On-site GHG Reduction Measures** The project applicant shall reduce operational GHG emissions with on-site mitigation measures. Specific measures shall be designed to consider any potential physical site constraints (e.g., solar is more effective when not obstructed by trees). The following measures shall be implemented on-site, to reduce operational GHG emissions and apply to all buildings of all phases of development. <u>Transportation</u> ▶ Implement Mitigation Measure 3.4-2a in Section 3.4, "Air Quality," which requires that 10 percent of onsite loading docks be equipment with 110/208-volt power outlets, capable of charging transportation refrigeration units (TRUs), as well as prohibition of diesel engine idling.	SU

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ Implement Mitigation Measure 3.4-2a in Section 3.4, "Air Quality," which requires the provision of electric vehicle-charging stations for automobiles and/or light-duty vehicles, as well as parking spaces that are capable (i.e., EV-ready) of supporting future electric vehicle supply equipment (EVSE) charging locations that can support on-site heavy-duty electric or hybrid trucks. <u>Building Energy</u> ▶ All buildings shall eliminate the use of natural gas, through the installation of on-site solar or other available renewable energy sources such that all natural gas demand is supplemented by renewable sources. Based on the modeling conducted, the project would require a total of 39,472,080 kilo-British thermal unit per year (kBtu/year) of natural gas. To meet this demand, approximately 11,567 megawatt-hour per year (MWh/year) electrical energy would be required, and this could be met by 9-megawatt (MW) capacity of solar panel system, which would require approximately 12 acres of space. Accordingly, all appliances (water heating, building cooling/heating systems) shall be electric-powered. To demonstrate compliance, electric infrastructure, energy systems, and appliances shall be depicted on the building plans submitted to the City, prior to issuance of building permits. Refer to Appendix D for detailed calculations related to mitigation measures. ▶ High-efficiency air-conditioning with smart thermostats shall be installed in all buildings. ▶ Use of Energy Star® exit lighting or exit signage shall be installed in all buildings. ▶ Low-flow faucets shall be installed that comply with CALGreen non-residential measures. Below are the recommended flowrates, ▪ For kitchen faucets, maximum flow rate not to exceed 1.8 gallons per minute at 60 pounds per square inch [psi]. ▪ For bathroom faucets, maximum flow rate not to exceed 0.5 gallon per minute at 60 psi. ▪ For toilets, maximum flush volume not to exceed 1.28 gallons per flush. ▪ For urinals, maximum flush volume not to exceed 0.5 gallon per flush. **Mitigation Measure 3.5-1b: Off-site GHG Reduction Measures** Implementation of Mitigation Measure 3.5-1a would result in the reduction of GHG emissions of up to 2,709 $MTCO_2e$/year (see Table 3.5-6). To compensate for emissions in excess of 10,000 $MTCO_2e$ for a single year, an additional reduction of 12,350 $MTCO_2e$ of emissions would be required. To achieve this reduction, the applicant shall compensate by purchasing off-site GHG reduction credits for the	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		remaining mass emissions associated with operations to PCAPCD's adopted threshold of 10,000 $MTCO_2e$ (for one year) after implementation of on-site GHG reductions associated with Mitigation Measure 3.5-1a. The level of GHG offsets needed to achieve the threshold may be re-calculated prior to approval of final construction drawings, so long as GHG estimates are prepared by a qualified GHG specialist retained by the City and based on substantial evidence. Further, to comply with this measure, any GHG offset purchased shall comply with the following parameters. The GHG reductions achieved through an offset or through the purchase of a carbon credit must meet the following criteria: ▶ Real: They represent reductions actually achieved (not based on maximum permit levels). ▶ Additional/surplus: They are not already planned or required by regulation or policy (i.e., not double counted). ▶ Quantifiable: They are readily accounted for through process information and other reliable data. ▶ Enforceable: They are acquired through legally binding commitments/agreements. ▶ Validated: They are verified through the accurate means by a reliable third party. ▶ Permanent: They will remain as GHG reductions in perpetuity. The purchase of GHG offsets shall prioritize implementation of offsets generated within or as close to Placer County as possible but may also include offsets from the rest of California and from other states with offset validity laws at least as strict as California's, in order of preference. All carbon offsets must be purchased from programs verified by a major third-party registry; examples include, but are not limited to, Climate Action Reserve (CAR), American Carbon Registry, and Verra (formally the Verified Carbon Standard). The purchase and retirement of the GHG offset must be demonstrated to the City, prior to issuance of any building permits.	
Impact 3.5-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases The project would generate emissions that would exceed PCAPCD thresholds, and therefore, would be cumulatively considerable. This would result in an inconsistency with the state's GHG reduction targets. Mitigation measures would reduce emissions to the extent feasible but would not reduce emissions below the applicable thresholds for the life of the project. This impact would be significant.	S	**Mitigation Measure 3.5-2: Implement Mitigation Measures 3.5-1a and 3.5-1b** The project applicant shall implement Mitigation Measures 3.5-1a and 3.5-1b.	SU

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Noise and Vibration			
Impact 3.6-1: Construction-Generated Noise Short-term construction-generated noise levels associated with the project would expose nearby noise-sensitive receptors to noise levels that would not exceed applicable local standards. These activities would be temporary in nature and would also be exempt from the local noise standards according to the City of Roseville's Municipal Code. Thus, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.6-2: Exposure of Existing Sensitive Receptors to Excessive Traffic Noise Levels Project operation would result in an increase in traffic volumes along project-affected roadways, resulting in long-term permanent increases in traffic noise. Traffic noise modeling was conducted for the existing and the existing plus project conditions. Based on modeling conducted and applicable City of Roseville allowable noise increase standards, a significant increase in noise would occur on all project-affected roadways. Therefore, this impact would be significant.	S	**Mitigation Measure 3.6-2: Reduce Operational Traffic Noise Levels** To reduce significant noise increases along project-affected roadways, the following measure shall be implemented by the applicant. Before finalizing roadway design for roadway expansion or new roadway construction, a design-level acoustical study shall be prepared by the applicant to identify specific roadway design considerations, which shall be incorporated into final road design and approved by the City. The acoustical study shall include Philip Road, from which the main entry of the project site joins the Blue Oaks Boulevard Road, and Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway. The study shall also determine the required level of noise reduction, based on site-specific noise monitoring, as identified in the City of Roseville Municipal Code. Implementation of the project would result in a substantial increase in noise on these segments identified in Table 3.6-9.	SU
Impact 3.6-3: Long-Term Operational Non-Transportation Noise Levels The proposed project would include non-transportation stationary sources such as HVAC units, noise associated with the use of trucks and loaders/forklifts at loading docks, and noise from backup generators. Based on modeling conducted and reference noise levels for these noise sources, off-site noise-sensitive receptors would experience project-generated operational non-transportation noise levels that exceed the City's daytime and nighttime noise levels standards. This impact would be significant.	S	**Mitigation Measure 3.6-3: Reduce Stationary Noise Exposure** The applicant shall hire a qualified acoustical specialist to prepare a noise minimization plan before approval of construction drawings that will identify design strategies and noise attenuation features to reduce noise generated by the proposed project to below daytime noise (i.e., 57 dB L_{eq} and 77 dB L_{max}) and nighttime noise (i.e., 52 dB L_{eq} and 72 dB L_{max}) standards required by the Municipal Code for residential land uses in the vicinity of the project. The noise minimization plan shall include, but not be limited to, a combination of the following measures (or other measures demonstrated to be equally effective) to reduce the effect of noise levels generated by on-site operational noise sources to levels that are below the City's noise standards. ▶ Design the buildings such that the structure serves as a barrier protecting off-site receptors to noise generated by on-site operational equipment including forklifts, diesel generators, pickup trucks, yard trucks, and delivery trucks including Transportation Refrigeration Units (TRUs). The typical sound level reduction a	LTS

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		building could provide ranges from 12 dB with windows open to 27 dB with windows closed (EPA 1978: 11) and additional reduction is achievable if masonry exterior walls are used in the building's construction (Caltrans 2002: 7-37). ▶ Enclose the area where operational equipment would operate with one or more walls. Generally, a barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. ▶ Design the proposed wall between the project and adjacent residential uses, such that it serves as a sound barrier between all adjacent sensitive receptors and the facility. The wall must be constructed of solid material (e.g., brick, concrete). Scenic quality factors shall be taken into account during design and the barriers shall be designed to blend into the landscape on the project site, to the extent feasible. Generally, a barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction. ▶ If necessary to meet the noise standards (after implementing the above siting and enclosure measures), install acoustic enclosures for backup generators, which would reduce the noise levels up to 10 db. Measures identified in the noise minimization plan shall be incorporated into the project design and identified on the site plan. The City shall verify that these measures are included in the site plan before approval of the final site plan.	
Biological Resources			
Impact 3.7-1: Result in Disturbance or Loss of Special-Status Plant Species Project activities within the valley oak riparian woodland habitat on the project site, including ground disturbance, vegetation removal, and construction of a bridge across Pleasant Grove Creek may result in disturbance to or loss of special-status plants if they are present. Because the loss of special-status plants could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this would be a potentially significant impact.	PS	**Mitigation 3.7-1: Conduct Special-Status Plant Surveys and Implement Avoidance Measures and Mitigation** ▶ Prior to implementation of project activities within valley oak riparian woodland habitat on the project site and during the blooming period for the special-status plant species with potential to occur on the project site (i.e., approximately May to October), a qualified botanist shall conduct protocol-level surveys for special-status plants within the project site following survey methods from CDFW's *Protocols for Surveying and Evaluating Impacts on Special-Status Native Plant Populations and Natural Communities* (CDFW 2018 or most recent version). The qualified botanist shall: (1) be knowledgeable about plant taxonomy, (2) be familiar with plants of the Sacramento Valley region, including special-status plants and sensitive natural communities, (3) have experience conducting floristic botanical field surveys as described in CDFW 2018, (4) be familiar with	LTS

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		the *California Manual of Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/), and (5) be familiar with federal and state statutes and regulations related to plants and plant collecting. ▶ If special-status plants are not found, the botanist shall document the findings in a report to the project applicant and the City of Roseville, and no further mitigation shall be required. ▶ If special-status plant species are found, the plant shall be avoided completely, if feasible (i.e., project objectives can still be met). This may include establishing a no-disturbance buffer around the plants and demarcation of this buffer by a qualified biologist or botanist using flagging or high-visibility construction fencing. The size of the buffer shall be determined by the qualified biologist or botanist and shall be large enough to avoid direct or indirect impacts on the plant. ▶ If special-status plants are found during special-status plant surveys and cannot be avoided, the project applicant shall, in consultation with CDFW or USFWS as appropriate depending on the particular species, develop and implement a site-specific mitigation strategy to offset the loss of occupied habitat and individual plants. Mitigation measures shall include, at a minimum, preserving and enhancing existing populations, establishing populations through seed collection or transplantation from the site that is to be affected, and/or restoring or creating habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. Potential mitigation sites could include suitable locations within or outside of the project site, with a preference for on-site mitigation. Habitat and individual plants lost shall be mitigated at a minimum 1:1 ratio, considering acreage as well as function and value. Success criteria for preserved and compensatory populations shall include: ▪ The extent of occupied area and plant density (number of plants per unit area) in compensatory populations shall be equal to or greater than the affected occupied habitat. ▪ Compensatory and preserved populations shall be self-producing. Populations shall be considered self-producing when: • plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		• reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity. • If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations. ▶ Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources.	
Impact 3.7-2: Result in Disturbance to or Loss of Special-Status Wildlife Species and Habitat Project activities would include ground disturbance, vegetation removal, and construction of a bridge over Pleasant Grove Creek, which could result in disturbance, injury, or mortality of several special-status wildlife species if present, reduced breeding productivity of these species, and loss of species habitat. This would be a potentially significant impact.	PS	**Mitigation Measure 3.7-2a: Conduct Preconstruction Surveys for Western Pond Turtle, Implement Avoidance Measures, and Relocate Individuals** ▶ Prior to implementation of project activities within valley oak riparian woodland habitat on the project site, a qualified biologist familiar with the life history of western pond turtle and experienced in performing surveys for western pond turtle shall conduct a focused survey of habitat suitable for the species within the project site. If aquatic habitat potentially suitable for the species is present within a project site (e.g., streams, ponds, drainages), upland habitat within approximately 1,600 feet of this aquatic habitat shall also be surveyed. The qualified biologist shall inspect the project site for western pond turtles as well as burrow habitat suitable for the species. ▶ If western pond turtles are not detected during the focused survey, the qualified biologist shall submit a report summarizing the results of the survey to the project applicant and the City of Roseville, and further mitigation will not be required. ▶ If western pond turtles are detected, a no-disturbance buffer of at least 100 feet shall be established around any identified nest sites or overwintering sites. A qualified biologist with an appropriate CDFW Scientific Collecting Permit that	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		allows handling of reptiles shall be present during initial ground disturbance activities and shall inspect the project site before initiation of project activities. If western pond turtles are detected, the qualified biologist shall move the turtles downstream and out of harm's way. ▶ Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources. **Mitigation Measure 3.7-2b: Conduct Take Avoidance Survey for Burrowing Owl, Implement Avoidance Measures, and Compensate for Loss of Occupied Burrows** ▶ A qualified biologist shall conduct a focused survey for burrowing owls in areas of habitat suitable for the species on and within 1,640 feet (500 meters) of the project site no less than 14 days prior to initiating ground disturbance activities using survey methods described in Appendix D of the CDFW Staff Report (CDFW 2012). ▶ If no occupied burrows are found, the qualified biologist shall submit a report documenting the survey methods and results to the project applicant and the City of Roseville, and no further mitigation shall be required. ▶ If an active burrow is found within 1,640 feet of pending construction activities that would occur during the nonbreeding season (September 1 through January 31), the project applicant shall establish and maintain a minimum protection buffer of 164 feet (50 meters) around the occupied burrow throughout construction. The actual buffer size shall be determined by the qualified biologist based on the time of year and level of disturbance in accordance with guidance provided in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). The protection buffer may be adjusted if, in consultation with CDFW, a qualified biologist determines that an alternative buffer shall not disturb burrowing owl use of the burrow because of particular site features or other buffering measures. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion plan shall be developed, as described in Appendix E of the CDFW Staff Report. Burrowing owls shall not be excluded from occupied burrows until the	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		project burrowing owl exclusion plan is approved by CDFW. The exclusion plan shall include a compensatory habitat mitigation plan (see below). ▶ If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and shall be provided with a protective buffer at a minimum of 164 feet unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer may be adjusted depending on the time of year and level of disturbance as outlined in the CDFW Staff Report. The size of the buffer may be reduced if a broad-scale, long-term, monitoring program acceptable to CDFW is implemented so that burrowing owls are not adversely affected. Once the fledglings are capable of independent survival, the owls can be evicted, and the burrow can be destroyed per the terms of a CDFW-approved burrowing owl exclusion plan developed in accordance with Appendix E of CDFW Staff Report. ▶ If burrowing owls are evicted from burrows and the burrows are destroyed by implementation of project activities, the project applicant shall mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW Staff Report, which states that permanent impacts on nesting, occupied and satellite burrows, and burrowing owl habitat (i.e., grassland habitat with suitable burrows) shall be mitigated such that habitat acreage and number of burrows are replaced through permanent conservation of comparable or better habitat with similar vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. The project applicant shall retain a qualified biologist to develop a burrowing owl mitigation and management plan that incorporates the following goals and standards: ▪ Mitigation lands shall be selected based on comparison of the habitat lost to the compensatory habitat, including type and structure of habitat, disturbance levels, potential for conflicts with humans, pets, and other wildlife, density of burrowing owls, and relative importance of the habitat to the species throughout its range. ▪ If feasible, mitigation lands shall be provided adjacent or proximate to the project site so that displaced owls can relocate with reduced risk of injury or mortality. Feasibility of providing mitigation adjacent or proximate to the project site depends on availability of sufficient habitat to support displaced owls that may be preserved in perpetuity.	

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		▪ If habitat suitable for burrowing owl is not available for conservation adjacent or proximate to the project site, mitigation lands can be secured off-site and shall aim to consolidate and enlarge conservation areas outside of planned development areas and within foraging distance of other conservation lands. Mitigation may be also accomplished through purchase of mitigation credits at a CDFW-approved mitigation bank, if available. Alternative mitigation sites and acreages may also be determined in consultation with CDFW. ▪ If burrowing owl habitat mitigation is completed through permittee-responsible conservation lands, the mitigation plan shall include mitigation objectives, site selection factors, site management roles and responsibilities, vegetation management goals, financial assurances and funding mechanisms, performance standards and success criteria, monitoring and reporting protocols, and adaptive management measures. Success shall be based on the number of adult burrowing owls and pairs using the site and if the numbers are maintained over time. Measures of success, as suggested in the CDFW Staff Report, shall include site tenacity, number of adult owls present and reproducing, colonization by burrowing owls from elsewhere, changes in distribution, and trends in stressors. ▶ Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources. **Mitigation Measure 3.7-2c: Conduct Focused Surveys for Special-Status Birds, Nesting Raptors, and Other Native Nesting Birds and Implement Protective Buffers** ▶ To minimize the potential for loss of special-status bird species, raptors, and other native birds, project construction activities (e.g., tree removal, vegetation clearing, ground disturbance, staging) shall be conducted during the nonbreeding season (approximately September 1-January 31, as determined by a qualified biologist), if feasible. If project construction activities are conducted during the nonbreeding season, no further mitigation shall be required.	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ Within 14 days before the onset of project construction activities during the breeding season (approximately February 1 through August 31, as determined by a qualified biologist), a qualified biologist familiar with birds of California and with experience conducting nesting bird surveys shall conduct focused surveys for special-status birds, other nesting raptors, and other native birds. Surveys shall be conducted within 0.25 mile of the project site for Swainson's hawk; within 500 feet of the project site for other special-status birds and common raptors; and within 50 feet of the project site for non-raptor common native bird nests. ▶ Because the nests of riparian-nesting birds (i.e., song sparrow ("Modesto" population), tricolored blackbird, and western yellow-billed cuckoo) are small and difficult to find, occupancy of habitat suitable for these species (i.e., riparian woodland) shall be determined by a qualified biologist familiar with the life history of these species and with experience identifying the calls of these species. If special-status riparian-nesting birds are observed calling, exhibiting territorial displays, carrying nest materials, carrying prey, or other signs of breeding behavior, the habitat shall be considered occupied. ▶ If no nests are found, the qualified biologist shall submit a report documenting the survey methods and results to the project applicant and the City of Roseville, and no further mitigation shall be required. ▶ Impacts on nesting birds shall be avoided by establishing appropriate buffers around active nest sites identified during focused surveys to prevent disturbance to the nest. Project construction activity shall not commence within the buffer areas until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer will not likely result in nest abandonment. An avoidance buffer of a minimum of 0.25 mile shall be implemented for Swainson's hawk in consultation with CDFW. An avoidance buffer of a minimum of 500 feet shall be implemented for western yellow-billed cuckoo in consultation with USFWS and CDFW and for tricolored blackbird in consultation with CDFW. For other species, a qualified biologist shall determine the size of the buffer for non-raptor nests after a site- and nest-specific analysis. Buffers typically will be 500 feet for other special-status birds and common raptors. Buffer size for non-raptor common bird species shall be determined by a qualified biologist. Factors to be considered for determining buffer size will include presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and proposed project construction activities. Generally, buffer size for	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		these species will be at least 20 feet. The size of the buffer may be adjusted if a qualified biologist, determines that such an adjustment would not be likely to adversely affect the nest. Any buffer reduction for a special-status species shall require consultation with CDFW. Periodic monitoring of the nest by a qualified biologist during project construction activities shall be required if the activity has potential to adversely affect the nest, the buffer has been reduced, or if birds within active nests are showing behavioral signs of agitation (e.g., standing up from a brooding position, flying off the nest) during project construction activities, as determined by the qualified biologist. ▶ If egret or night heron rookeries are found within trees on the project site, an avoidance buffer shall be implemented, the size of which will be determined by a qualified biologist. Buffer size for large rookeries will likely be larger than for single nests due to the number of birds and nests within the rookery. Rookery trees identified on the project site shall be retained permanently. ▶ Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources. **Mitigation Measure 3.7-2d: Implement Protection Measures for Special-Status Fish** The project applicant shall implement the following protection measures before and during project construction, including construction of the bridge over Pleasant Grove Creek: ▶ In-channel construction activities within Pleasant Grove creek shall take place outside of the salmonid migration season (November 1 through December 31). ▶ In-channel construction activities within Pleasant Grove Creek shall be limited to daylight hours during weekdays, leaving a nighttime and weekend period of passage for special-status fish species. ▶ Silt curtains shall be implemented for all in-channel construction activities. ▶ Water quality shall be evaluated during and after all in-channel construction activities. The performance criteria shall be no degradation of downstream water quality compared to upstream water quality. Water quality shall be evaluated by	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		a qualified environmental monitor using appropriate qualitative or quantitative measurements, including turbidity and temperature. Remedial measures shall be implemented if downstream water quality is degraded. Remedial measures shall include the following: ▪ modification or suspension of in-water construction activities as appropriate; ▪ installation of additional sediment control devices; and ▪ additional monitoring to evaluate the water quality after measures are implemented. ▶ Silt fencing shall be installed as appropriate along the edges of the Pleasant Grove Creek riparian corridor, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary to prevent excess fill from entering the water. All silt fences shall be maintained and checked for efficacy as necessary, but not less frequently than once per week. ▶ Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources. **Mitigation Measure 3.7-2e: Conduct Focused Surveys for Ringtail Dens and Implement Avoidance Measures** ▶ To minimize the potential for loss of ringtail and active ringtail dens, tree removal within the valley oak riparian woodland habitat on the project site shall be conducted outside of the ringtail breeding season (not well defined, but likely approximately March 1 to July 31), if feasible. ▶ Within seven days before initiation of tree removal within the valley oak riparian woodland habitat during the ringtail breeding season, a qualified biologist with familiarity with ringtail shall conduct a focused survey for potential ringtail dens (e.g., hollow trees, snags, rock crevices) within the trees planned for removal. The qualified biologist shall identify sightings of individual ringtails, as well as potential dens.	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ If individuals or potential or occupied dens are not found, the qualified biologist shall submit a report summarizing the results of the survey to the project applicant and the City of Roseville, and further mitigation shall not be required. ▶ If ringtails are identified or if potential dens are located in the trees planned for removal, an appropriate method, based on current professional standards, shall be used by the qualified wildlife biologist to confirm whether a ringtail is occupying the den. This may include use of remote field cameras, track plates, or hair snares. Other devices, such as a fiber optic scope, may be utilized to determine occupancy. ▪ If no ringtail occupies the potential den, the tree may be removed. ▪ If a den is found to be occupied by a ringtail, the tree may not be removed, and a no-disturbance buffer shall be established around the occupied den. The no-disturbance buffer shall include the den tree plus a suitable buffer as determined by the biologist in coordination with CDFW. Project activities in the no-disturbance buffer shall be avoided until the den is unoccupied as determined by the qualified wildlife biologist in coordination with CDFW. **Mitigation Measure 3.7-2f: Conduct Focused Bat Surveys and Implement Avoidance Measures** ▶ Prior to tree removal activities, a qualified biologist with familiarity with bats and bat ecology and experienced in conducting bat surveys shall conduct surveys for bat roosts in large trees on the project site. ▶ If no evidence of bat roosts is found, the qualified biologist shall submit a report summarizing the results of the survey to the project applicant and the City of Roseville, and no further study will be required. ▶ If evidence of bat roosts is observed, the species and number of bats using the roost shall be determined. Bat detectors shall be used if deemed necessary to supplement survey efforts by the qualified biologist. ▶ A no-disturbance buffer of 250 feet shall be established around active pallid bat or western red bat roosts, and project construction activities shall not occur within this buffer until after the roosts are unoccupied as determined by a qualified biologist. ▶ If roosts of pallid bat or western red bat are determined to be present and must be removed, the bats shall be excluded from the roosting site before the tree is removed. A program addressing compensation, exclusion methods, and roost removal procedures shall be developed in consultation with CDFW before	

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		implementation. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). The loss of each roost (if any) shall be replaced in consultation with CDFW and may require construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. If determined necessary during consultation with CDFW, replacement roosts shall be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site by a qualified biologist, the roost tree may be removed.	
Impact 3.7-3: Result in Degradation or Loss of Riparian Habitat or Other Sensitive Natural Communities Project implementation may include ground disturbance, vegetation removal, and direct removal of riparian habitat adjacent to Pleasant Grove Creek and the Pleasant Grove Creek First North Tributary, which could result in the degradation or loss of riparian habitat. This would be a potentially significant impact.	PS	**Mitigation Measure 3.7-3: Provide Stream Setbacks, Best Management Practices, and Compensate for Unavoidable Loss of Riparian Habitat** The project applicant shall implement the following protection measures prior to implementation of project activities (e.g., construction, staging) within 50 feet of valley oak riparian woodland habitat on the project site, including construction of the bridge over Pleasant Grove Creek: ▶ Setbacks shall be established around all valley oak riparian woodland habitat on the project site and shall be flagged or fenced with brightly visible construction flagging and/or fencing under the direction of the qualified biologist and no project activities (e.g., vegetation removal, ground disturbance, staging) shall occur within these areas. Setback distances shall be determined by a qualified biologist in consultation with the appropriate agency (e.g., CDFW), but will generally be a minimum of 50 feet. Foot traffic by personnel shall also be limited in these areas to prevent the introduction of invasive or weedy species or inadvertent crushing of plants and soil compaction. Periodic inspections during construction shall be conducted by a qualified biologist to maintain the integrity of exclusion fencing/flagging throughout the period of construction involving ground disturbance. ▶ If project implementation cannot avoid and thus may adversely affect the bed, bank, channel, or associated riparian habitat subject to CDFW jurisdiction under California Fish and Game Code Section 1602, the following measures shall apply. ▪ A Streambed Alteration Notification shall be submitted to CDFW, pursuant to Section 1602 of the California Fish and Game Code. If proposed project activities are determined to be subject to CDFW jurisdiction, the project applicant shall abide by the measures to protect fish and wildlife resources required by any executed agreement prior to any vegetation removal or	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		activity that may affect the resource. Measures to protect fish and wildlife resources shall include, at a minimum, a combination of the following mitigation. • The project applicant shall compensate for the loss of riparian habitat and habitat function and value of this habitat by: - restoring riparian habitat function and value within the project site; - restoring degraded riparian habitat outside of the project site; - purchasing riparian habitat credits at a CDFW-approved mitigation bank; or - preserving existing riparian habitat of equal or better value to the affected riparian habitat through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function (at least 1:1). ▪ The project applicant shall prepare and implement a Compensatory Mitigation Plan that will include the following: • For preserving existing riparian habitat outside of the project site in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project applicant will provide evidence in the plan that the necessary mitigation has been implemented or that the project applicant has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity. • For restoring or enhancing riparian habitat within the project site or outside of the project site, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat. • Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project applicant (e.g.,	

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above. ▶ Fencing and signage shall be installed between the development footprint and the riparian habitat associated with Pleasant Grove Creek and the Pleasant Grove Creek First North Tributary to discourage trespassing into stream and riparian habitat. Fencing design shall be at the discretion of the project applicant and may include permeable, symbolic fencing (e.g., post and cable). ▶ Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek would be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources.	
Impact 3.7-4: Result in Degradation or Loss of State or Federally Protected Wetlands Project implementation would include ground disturbance, vegetation removal, and direct removal of riparian habitat adjacent to Pleasant Grove Creek, which could result in inadvertent discharge of silt into Pleasant Grove Creek, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary. Discharge of silt into these features may result in adverse effects on water quality in the creek, which would be a potentially significant impact.	PS	**Mitigation Measure 3.7-4a: Implement Mitigation Measures 3.7-2d and 3.7-3** The project applicant shall implement Mitigation Measures 3.7-2d and 3.7-3. **Mitigation Measure 3.7-4b: Identify State or Federally Protected Wetlands, Implement Avoidance Measures, and Obtain Permits for Unavoidable Impacts on Wetlands** The following measures shall be implemented prior to initiation of bridge construction activities: ▶ The project applicant shall retain a qualified biologist, hydrologist, or wetland ecologist to prepare a formal delineation of the boundaries of state or federally protected wetlands and other waters within the project site according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the Arid West regional supplement (USACE 2008). The qualified biologist shall also delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (SWRCB 2019). This delineation report shall be submitted to USACE, and a preliminary jurisdictional determination shall be requested. ▶ Where state or federally protected wetlands can be avoided, the boundary of the delineated ordinary high-water mark shall be demarcated with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		a roadway). Project activities (e.g., ground disturbance, vegetation removal, staging) shall be prohibited within the established boundary. A qualified biologist shall periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided. ▶ Authorization for fill of waters of the United States associated with bridge construction (e.g., constructing bridge support structures) shall be secured from USACE through the Section 404 permitting process. Any state or federally protected wetlands that would be affected by the project shall be replaced or restored on a no-net-loss basis in accordance with the applicable USACE mitigation guidelines in place at the time of construction. In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, Section 401 Water Quality Certification from the Central Valley RWQCB shall be obtained. For any activity that may result in discharges of dredged or fill material to waters of the state that may not be covered by the 401 Water Quality Certification, Panattoni shall secure a permit from the Central Valley RWQCB and provide compensatory mitigation for permanent loss of any waters of the state in accordance with *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (California Water Boards 2019), such that the project would not result in a net loss of overall abundance, diversity, and condition of aquatic resources within the affected watershed based on a watershed assessment using an assessment method approved by the permitting authority (e.g., Central Valley RWQCB or California Water Resources Control Board). ▶ The project applicant shall comply with waste discharge requirements as described in Section 3.12, "Hydrology and Water Quality." ▶ The project applicant shall notify CDFW before commencing activity that may divert the natural flow or otherwise alter the bed, bank, or riparian corridor of any stream protected pursuant to Section 1602 of the Fish and Game Code. If project activities trigger the need for a Streambed Alteration Agreement, the proponent shall obtain an agreement from CDFW before the activity commences. The applicant shall conduct project construction activities in accordance with the agreement, including implementing reasonable measures in the agreement necessary to protect the fish and wildlife resources, when working within the bed or bank of waterways or in riparian habitats associated with those waterways. These measures may include but not be limited to demarcation of the construction area, biological monitoring, environmental awareness training for	

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		construction crews, and compensatory measures (e.g., restoration, long-term habitat management). Compensatory mitigation for impacts to state or federally protected wetlands, described in the prior bullet, may count towards compensation for loss of fish and wildlife resources protected pursuant to CDFW's jurisdiction pursuant to Section 1602 of the Fish and Game Code.	
Impact 3.7-5: Interfere with Wildlife Movement Corridors or Impede the Use of Wildlife Nurseries Project implementation could result in permanent and temporary impacts on wildlife movement from construction of a bridge across Pleasant Grove Creek, including in-channel work and discharge of silt into Pleasant Grove Creek, and/or removal of egret or heron rookery trees, which would be a potentially significant impact.	PS	**Mitigation Measure 3.7-5a: Implement Mitigation Measures 3.7-2c, 3.7-2d, and 3.7-3** The project applicant shall implement Mitigation Measures 3.7-2c, 3.7-2d and 3.7-3. **Mitigation Measure 3.7-5b: Utilize Wildlife-Friendly Building and Fencing Designs** In addition to lighting standards described in Chapter 2, "Project Description," the project applicant shall implement the following measures: ▶ Buildings and other permanent structures shall be designed to minimize impacts on wildlife, including disruption to wildlife movement, bird strikes, and wildlife entanglement. ▪ Building design shall utilize guidelines regarding building height, materials, external lighting, and landscaping provided in the American Bird Conservancy's "Bird Friendly Building Design" (American Bird Conservancy 2015). ▪ Fencing associated with new development shall utilize wildlife-friendly fencing design to minimize the risk of entanglement or impalement of wildlife. The fencing design shall meet, but not be limited to the following standards: ▪ Minimize the chance of wildlife entanglement by avoiding barbed wire, loose or broken wires, or any material that could impale, snag, or entrap a leaping animal (e.g., wrought iron fencing with spikes). ▪ Allow wildlife to jump over easily without injury. Typically, fences should be no more than 40 inches high on flat ground to allow adult deer to jump over. The determination of appropriate fence height will consider slope, as steep slopes are more difficult for wildlife to pass. ▪ Allow smaller wildlife to pass under easily without injury or entrapment.	LTS

Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.7-6: Conflict with Local Policies and Ordinances The Chapter 19.66 of the City of Roseville Municipal Code, "Tree Preservation," contains requirements for projects that would remove protected trees. Implementation of the project would result in the direct removal or disturbance of trees that may be considered protected under the City of Roseville Municipal Code. This impact would be potentially significant.	PS	**Mitigation 3.7-6: Remove and Replace Protected Trees Consistent with the Chapter 19.66 of the City of Roseville Municipal Code, "Tree Preservation"** ▶ Prior to the start of construction activities (i.e., ground disturbance, tree removal, staging), the project applicant shall submit an application for a Tree Permit to the City of Roseville as part of the land use permit and/or subdivision application for the discretionary project. The application shall include the arborist report and a site plan map with information as deemed necessary by the City Planning Manager. The site plan map shall include physical characteristics of the project (e.g., property lines, existing and proposed buildings and structures, existing and proposed grades), tree locations, and the location of the protected zone of each protected tree. ▶ The number, location, species, health, and sizes of all protected trees to be removed, relocated, or replaced shall be identified. This information shall also be provided on a map/design drawing to be included in the project plans. ▶ Protected trees that would be retained on a project site would be subject to tree preservation measures as outlined in the code, including protective fencing, signing, and modified ground disturbance activities (e.g., trenching with hand tools). ▶ Protected trees that would be removed would be subject to mitigation. The project applicant shall mitigate for loss of protected trees using one of the following four methods, as approved by the City Planning Manager: replacement of trees, relocation of trees, revegetation, or in-lieu mitigation fees. ▶ The City Planning Manager may allow removal of a protected tree which has been certified by an arborist to be a dead tree without any replacement or mitigation requirements.	LTS
Cultural Resources			
Impact 3.8-1: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources Results of the records search and pedestrian survey did not result in the identification of archaeological resources within the project site. However, project-related ground-disturbing activities, including off-site roadway and utility improvements, could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5 or PRC Section 21083.2(g). This would be a potentially significant impact.	PS	**Mitigation Measure 3.8-1a: Develop and Implement a Worker Environmental Awareness Program** Prior to the start of any ground disturbing construction activities, a qualified archaeologist shall develop a construction worker awareness brochure for all construction personnel. The brochure will be developed in coordination with representatives from Native American tribes culturally affiliated with the project area. The topics to be addressed in the Worker Environmental Awareness Program will include, at a minimum: ▶ types of archaeological and Tribal cultural resources expected in the project area;	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ what to do if a worker encounters a possible resource; ▶ what to do if a worker encounters bones or possible bones; and ▶ penalties for removing or intentionally disturbing archaeological and Tribal cultural resources, such as those identified in the Archeological Resources Protection Act. **Mitigation Measure 3.8-1b: Halt Ground Disturbance Upon Discovery of Subsurface Archaeological Features** In the event that any subsurface archaeological features or deposits, including locally darkened soil ("midden") and concentrations of charcoal, flaked stone, glass, metal, or ceramic, are discovered during construction, all ground-disturbing activity within 100 feet of the find shall be halted and a qualified professional archaeologist shall be retained to assess the significance of the find. If the qualified archaeologist determines the archaeological material to be Native American in nature, the applicant shall contact the appropriate Native American tribe for their input on the preferred treatment of the find. If the find is determined to be significant (i.e., because it is determined to constitute a unique archaeological resource), the archaeologist shall develop, and the applicant shall implement, appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.	
Impact 3.8-2: Disturb Human Remains Based on documentary research, no evidence suggests that any prehistoric or historic-period marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, ground-disturbing construction activities could uncover previously unknown human remains. Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097 would make this impact less than significant.	LTS	No mitigation is required.	LTS
Hazardous Materials, Wildfire, and Other Hazards			
Impact 3.9-1: Storage, Use, Disposal, Transport, or Upset of Hazardous Materials Construction of the proposed project would involve the storage, use, and transport of hazardous materials at the project site. Handling of hazardous materials would be in compliance with local, state, and federal regulations. Operation of the project may also require storage, use, and transport of hazardous materials associated with industrial uses on-site. Although the types and amounts of hazardous	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
materials needed for operation of the project are not yet known, businesses that would store or use hazardous materials would be required to comply with laws and regulations intended to reduce potential impacts to workers and the environment associated with routine transport or accidental release of hazardous materials. This impact would be less than significant.			
Impact 3.9-2: Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan The City of Roseville maintains an Emergency Operations Plan (City of Roseville 2011) that serves as the official emergency plan for the city. As part of project operation, adequate emergency access routes to and from the development area would be established and emergency response would not be impaired. However, construction activities associated with the project could result in temporary lane closures, increased traffic, and other roadway conditions that could interfere with or slow down emergency vehicle access and services. Therefore, this impact would be potentially significant.	PS	**Mitigation Measure 3.9-2: Provide Adequate Emergency Access in Case of Temporary Lane Closures During Construction** If temporary lane closures are required during project construction, the applicant shall notify the City of Roseville Police and Fire Departments. The applicant shall provide for temporary traffic controls as appropriate during construction activities to facilitate traffic flow and to permit the movement of emergency vehicles. Temporary traffic controls could include measures such as signage, physical barriers and channelizing devices, reduced speed limit, detours, and flaggers.	LTS
Impact 3.9-3: Exacerbate Wildfire Risk as a Result of Installation of Infrastructure Construction within the project site would include construction of buildings and associated infrastructure to support industrial, warehousing, and distribution uses. The project would also require installation and maintenance of infrastructure including an electrical substation, extension of nearby electrical infrastructure, and improvements along Blue Oaks Boulevard and Phillip Road. Infrastructure would be installed in compliance with state and local regulations; however, there would still be the potential for wildfire ignition during construction. This impact would be potentially significant.	PS	**Mitigation Measure 3.9-3a: Prepare and Implement a Fire Risk Management Plan** A fire risk management plan shall be prepared prior to the start of construction by the contractor. The plan shall outline the potential for fires occurring as a result of project construction, and outline measures necessary to prevent fires. The plans shall be prepared in consultation with the City of Roseville Fire Department; City approval of the plans will be required prior to initiating construction activities. Additionally, fire-suppression materials and equipment shall be kept adjacent to all areas of work and in staging areas and shall be clearly marked. Detailed information for responding to fires shall be provided in the project's fire risk management plan. **Mitigation Measure 3.9-3b: Implement Fire Prevention Measures during Construction** During all construction activities, the contractor shall implement the following measures: ▶ Maintain all areas clear of vegetation and other flammable materials for at least a 50-foot-radius of any welding or grinding operations, or the use of an open flame; ▶ Spray nearby vegetation with water, if not already cleared, using a water truck or other suitable equipment, prior to any welding or grinding operations or the use of an open flame; ▶ All equipment, gasoline-powered hand tools, and construction and maintenance vehicles shall be equipped with spark arresters;	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
		▶ Equip all construction and maintenance vehicles entering the project site, including welding trucks or rigs, with minimal fire suppression equipment (e.g., ax, bucket, 5-pound fire extinguisher, shovels); ▶ Maintain at least one half-full water truck or water tanker at each work site during all periods of work and for 1 hour after all work has ceased for the day; and ▶ Use a dedicated fire watch during all welding activities within existing operational stations.	
Public Services			
Impact 3.10-1: Result in the Need for New or Expanded Fire Service Facilities Because the project would adhere to all applicable standards and fire codes and would not adversely affect existing fire response and performance, implementation of the project would not necessitate the construction of new or expanded fire service facilities within the City of Roseville. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.10-2: Result in the Need for New or Expanded Police Facilities Project development could result in an increased demand for law enforcement services; however, the project would generate sales tax and property tax revenue used to fund general fund departments such as the Police Department and the project would not result in an increased need for new or expanded police facilities. Therefore, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Utilities and Service Systems			
Impact 3.11-1: New or Expanded Utility Infrastructure or Determination of Inadequate Capacity The project would develop a currently vacant site into a range of industrial uses, including light manufacturing, warehousing, and distribution uses, which would require extending the surrounding utility infrastructure onto the project site. All utility infrastructure extensions and hookups would occur within the disturbance area of the project site or within existing roadways (i.e., Blue Oaks Boulevard, Phillip Road, and Westbrook Boulevard), the environmental effects of which have been analyzed in this EIR including Section 3.12, "Hydrology and Water Quality." The project's projected demand for water, along with the project's projected wastewater output are within the existing and future capacity of the utility providers that serve the project site. For these reasons, the impact would be less than significant.	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.11-2: Adequacy of Water Supplies The projected water supplies in normal years would exceed water demands for the city, including the proposed project. In single dry and multiple dry years, there would be a deficit in projected water supplies. However, projected water demands do not assume any water conservation. With implementation of water conservation measures, the City is expected to have adequate water supplies to serve the project in all water year types. In addition, in the drier and driest years, the City has an agreement with PCWA to release an additional 20,000 afy of water down the American River, which would further increase the City's water supplies. The impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.11-3: Landfill Capacity and Compliance with Solid Waste Regulations The project's anticipated solid waste production of 7.9 tons per day would comprise 0.7 percent of the Western Regional Sanitary Landfill's remaining daily capacity. Given the project's small contribution to the Western Regional Sanitary Landfill's remaining capacity, it is not anticipated that the project would generate solid waste in excess of the capacity of local infrastructure. Additionally, the project would comply with all applicable federal, state, and local management and reduction statutes related to solid waste, including the state Integrated Waste Management Act and the solid waste policies of the City of Roseville General Plan. For these reasons, the project would have a less-than-significant impact on generating 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.	LTS	No mitigation is required.	LTS
Hydrology and Water Quality			
Impact 3.12-1: Violate Water Quality Standards or Waste Discharge Requirements, Otherwise Degrade Water Quality, or Interfere with Implementation of a Water Quality Control Plan Project construction activities such as grading, excavation, trenching, and spoil pile storage could result in erosion and sedimentation, and discharge of other nonpoint source pollutants. In addition, operation of the proposed industrial park has the potential to generate polluted runoff associated with storage of chemicals and vehicle/equipment leaks. To avoid or minimize the potential for adverse construction- and operation-related effects on water quality, the project applicant would be required to develop and implement a SWPPP and BMPs and comply with the City's Urban Stormwater Quality Management and Discharge Control Ordinance, West Placer Storm Water Quality Design Manual, PCFCWCD's	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Stormwater Management Manual, and Section 16.20.040 of the Roseville Municipal Code that include measures to control, prevent, remove, or reduce pollution. Therefore, short- and long-term impacts on surface and groundwater quality would be less than significant.			
Impact 3.12-2: Substantially Decrease Groundwater Supplies, Interfere with Groundwater Recharge, or Interfere with Implementation of a Sustainable Groundwater Management Plan The proposed project would not directly use groundwater as a water supply source and no wells are proposed as part of the project. However, the project would receive its water supply from the City of Roseville Environmental Utilities, which relies on surface water and groundwater supplies. The project site is undeveloped land and implementation of the project would add approximately 175 acres of impervious surface to the site; however, this would account for less than 0.1 percent of the surface area of the North American River subbasin. Therefore, the project would not substantially decrease groundwater levels nor interfere with groundwater recharge. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.12-3: Substantially Alter the Existing Drainage Pattern of the Site Resulting in Substantial Flooding, Additional Sources of Polluted Runoff, or Exceedance of Existing Stormwater Infrastructure Capacity Development of the undeveloped project site and the addition of impervious surfaces would alter the existing drainage rate and pattern of the site. This would result in increased runoff and potentially an increase in flooding. In addition, portions of the project site are designated as 100-year floodplain and 500-year floodplain for Pleasant Grove Creek. A bridge would be also constructed across Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel to connect the north and south parcels, which would result in a permanent structure within the floodway that could affect drainage. However, the project would be required to comply with City Improvement Standards, the City's Stormwater Quality Design Manual, and PCFCWCD's Stormwater Management Manual that require stormwater drainage facilities be designed with adequate capacity for stormwater flows from the project site. Additionally, the project applicant would contribute funding toward construction of the Pleasant Grove Retention Basin Project, which is a planned, regional stormwater retention facility that has been designed to accommodate the City's stormwater needs, including stormwater from the project site. The project would also be required to obtain a Letter of Map Revision from FEMA and the bridge would be designed and maintained such that it would not	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
impede floodflows within Pleasant Grove Creek or Pleasant Grove Creek Bypass Channel. With implementation of these measures, this impact would be less than significant.			
Aesthetics			
Impact 3.13-1: Substantially Degrade the Existing Visual Character or Quality of the Site or its Surroundings Development of the project site would convert approximately 180 acres of currently undeveloped grazing land to industrial uses. The proposed industrial park would be an active, industrial site, with increased truck traffic entering and exiting the project site throughout the day. The introduction of industrial uses and infrastructure in an area that is currently undeveloped would change the existing visual character of the area. However, the proposed industrial facilities would be designed to be visually consistent with surrounding specific plan area development and other industrial development in Roseville, and proposed landscaping would soften the industrial character of the project site. Further, the project would comply with General Plan policies related to community design and the City's Community Design Guidelines, which would ensure that the project would not substantially degrade the visual character of the project area. For these reasons, this impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.13-2: Conflict with Applicable Zoning and Other Regulations Governing Scenic Quality The project would require a General Plan Amendment (GPA) and rezone to allow for industrial use and a designation of the creek area as open space. However, the existing land use designation—Public/Quasi-Public—does not include designations governing scenic quality. Additionally, the new designations—Light Industrial (LI) and General Industrial (IND)—do not include designations governing scenic quality. The new designation—Open Space (OS) along Pleasant Grove Creek—would allow for uses that are compatible with General Plan policies related to open space and scenic quality. Therefore, with the proposed GPA and rezone, the project would not conflict with a regulation governing scenic quality. This impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.13-3: Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area Project implementation would result in an incremental increase in the amount of light and glare on the project site, which would affect nighttime views in the area.	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
However, the project would adhere to the City's Community Design Guidelines, which require that lighting sources have cut off lenses and are located to avoid light spillage and glare on adjacent properties and in private spaces. Because the project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, this impact would be less than significant.			
Energy			
Impact 3.14-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy, During Project Construction or Operation Implementation of the project would increase fuel (gasoline and diesel) and electricity consumption. Construction-related energy consumption would be temporary and would not require additional capacity or increased peak or base period demands for electricity or other forms of energy. The project would primarily be an industrial facility with mostly warehousing and some light manufacturing uses. Implementation of mitigation measures included in Section 3.5, "Greenhouse Gas Emissions and Climate Change," would result in increases in energy (building and transportation) efficiency and would increase the percent of renewable energy use over what is currently required by local or state laws. Thus, energy consumption associated with development of the project would not result in wasteful, inefficient, or unnecessary consumption of energy; this impact would be less than significant.	LTS	No mitigation is required.	LTS
Impact 3.14-2: Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency On-site renewable energy generation from the implementation of project, would result in an increase in renewable energy use, which would directly support the goals and strategies in the state's Energy Efficiency Action Plan and the City of Roseville General Plan. Construction and operation of project buildings in compliance with the California Energy Code would improve energy efficiency compared to buildings built to earlier iterations of the code. Further, applicable mitigation measures would reduce on-site building-related fossil fuel use by requiring all building energy demand to be met through renewable sources. Therefore, construction and operation of the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the impact would be less than significant.	LTS	No mitigation is required.	LTS

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Impacts	Significance before Mitigation	Mitigation Measures	Significance after Mitigation
Impact 3.14-3: Require or Result in the Relocation or Construction of New or Expanded Utilities and Service Systems Facilities, the Construction of Which Could Cause Significant Environmental Effects Project implementation would require the construction of new or expanded electrical and natural gas infrastructure. In particular, the project includes the construction of an electrical substation to meet the project's electrical demands. Additionally, the project would require extension of electrical and natural gas lines to serve the project site; these would be extended from existing, nearby connections. The impacts of construction of these facilities have been analyzed throughout this EIR and mitigation measures have been identified, where necessary, that would reduce or avoid most impacts to a less-than-significant level. Therefore, the impact would be less than significant.	LTS	No mitigation is required.	LTS
Tribal Cultural Resources			
Impact 3.15-1: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource Although consultation and the NCIC and NAHC record searches did not result in the identification of any Tribal cultural resources, UAIC expressed concern that resources could be discovered during ground-disturbing activities. Therefore, impacts to Tribal cultural resources would be potentially significant.	PS	**Mitigation Measure 3.15-1a: Implement Mitigation Measure 3.8-1a** The project applicant shall implement Mitigation Measure 3.8-1a. **Mitigation Measure 3.15-1b: Unanticipated Discovery of Tribal Cultural Resources** If any suspected Tribal cultural resources, including midden soil, artifacts, chipped stone, exotic rock (nonnative), or unusual amounts of baked clay, shell, or bone, are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. Appropriate tribal representative(s) shall be immediately notified and shall determine if the find is a Tribal cultural resource (pursuant to PRC Section 21074). The tribal representative will make recommendations for further evaluation and treatment, as necessary. Preservation in place is the preferred alternative under CEQA and the Tribes' protocols, and every effort shall be made to preserve the resources in place, including through project redesign. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project vicinity where they will not be subject to future impacts. The Tribe does not consider curation of Tribal cultural resources to be appropriate or respectful and request that materials not be permanently curated, unless approved by the Tribe. Treatment that preserves or restores the cultural character and integrity of a Tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.	LTS

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1 INTRODUCTION

This draft environmental impact report (Draft EIR) evaluates the environmental impacts of the proposed Roseville Industrial Park Project. This Draft EIR has been prepared under the direction of the City of Roseville in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000-21177) and the State CEQA Guidelines (California Code of Regulations [CCR], Title 14, Division 6, Chapter 3, Sections 15000-15387). The City is the lead agency for consideration of this EIR and potential project approval.

1.1 PURPOSE AND INTENDED USES OF THE DRAFT EIR

CEQA requires that public agencies consider the potentially significant adverse environmental effects of projects over which they have discretionary approval authority before taking action on those projects (PRC Section 21000 *et seq*.). CEQA also requires that each public agency avoid or mitigate, wherever feasible, the significant adverse environmental effects of projects it approves or implements. If a project would result in significant and unavoidable environmental impacts (i.e., significant effects that cannot be feasibly mitigated to less-than-significant levels), the project can still be approved, but the lead agency's decision-maker, in this case the City of Roseville City Council, must prepare findings and issue a "statement of overriding considerations" explaining in writing the specific economic, social, or other considerations that they believe, based on substantial evidence, make those significant effects acceptable (PRC Section 21002, CCR Section 15093).

According to CCR Section 15064(f)(1), preparation of an EIR is required whenever a project may result in a significant adverse environmental impact. An EIR is an informational document used to inform public agency decision makers and the general public of the significant environmental effects of a project, identify possible ways to mitigate or avoid the significant effects, and describe a range of reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project while substantially lessening or avoiding any of the significant environmental impacts. Public agencies are required to consider the information presented in the EIR when determining whether to approve a project.

In accordance with CCR Section 15161, this document is a project EIR that examines the environmental impacts of a specific project. This type of EIR focuses on the changes in the environment that would result from a specific project. In accordance with CCR Section 15161, a project EIR must examine the environmental effects of all phases of the project, including construction and operation.

Because it has the principal authority over approval or denial of the project, the City is the lead agency, as defined by CEQA, for this EIR. Other public agencies with jurisdiction over the project are listed below in Section 1.3, "Agency Roles and Responsibilities."

1.2 SCOPE OF ENVIRONMENTAL ANALYSIS

Pursuant to CEQA and the State CEQA Guidelines, a lead agency shall focus an EIR's discussion on significant environmental effects and may limit discussion on other effects to brief explanations about why they are not significant (PRC Section 21002.1, CCR Section 15128). A determination of which impacts would be potentially significant was made based on a review of the project; review of applicable planning documents and CEQA documentation; field work; comments received as part of the public scoping process (Appendix A); and additional research and analysis of relevant project data during preparation of this Draft EIR.

The City has determined that the project has the potential to result in significant environmental impacts on the following resources, which are addressed in detail in this Draft EIR:

- Land Use and Agricultural Resources
- Population, Employment, and Housing
- Transportation and Circulation
- Air Quality
- Greenhouse Gas Emissions and Climate Change
- Noise and Vibration
- Biological Resources
- Cultural Resources
- Hazardous Materials, Wildfire, and Other Hazards
- Public Services
- Utilities and Service Systems
- Hydrology and Water Quality
- Aesthetics
- Energy
- Tribal Cultural Resources

1.2.1 Effects Found Not to be Significant

CEQA allows a lead agency to limit the detail of discussion of the environmental effects that are not considered potentially significant (PRC Section 21100, CCR Sections 15126.2[a] and 15128). CEQA requires that the discussion of any significant effect on the environment be limited to substantial, or potentially substantial, adverse changes in physical conditions that exist within the affected area, as defined in PRC Section 21060.5 (statutory definition of "environment").

Based on a review of the information presented in the notice of preparation (NOP) prepared for the project and comments received as part of the public scoping process (Appendix A), as well as additional research and analysis of relevant project data during preparation of this Draft EIR, the following were identified as resources that would not experience any significant environmental impacts from the project. Accordingly, these resources are not addressed further in this Draft EIR but are identified below with a brief explanation as to why significant impacts to each resource are not anticipated, as required by CEQA.

- Forestry Resources
- Geology and Soils
- Mineral Resources
- Recreation

FORESTRY RESOURCES

The project site does not include forest land or timberlands and is not zoned for such uses. Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use, nor would it conflict with existing zoning for, or cause rezoning of, forest land, timberland, or timberland zoned Timberland Production. The project would not result in significant impacts related to forestry resources, and this issue is not discussed further.

GEOLOGY AND SOILS

A preliminary geotechnical investigation and report was completed for the project site by Gularte & Associates (2021) to review site geology and groundwater conditions, perform exploratory borings and laboratory testing, and identify earthwork and foundation recommendations for project design. All design recommendations will be followed by the applicant and further location-specific geotechnical analyses will be conducted during project design.

The project site is not located in an Alquist-Priolo Earthquake Fault Zone and the nearest faults (the Spenceville Fault and the Deadman Fault) are located over 15 miles away (Gularte & Associates 2021: 5-6). Because surface ground rupture along faults is generally limited to a linear zone a few feet wide, ground rupture because of a fault across the project site is unlikely.

If a seismic event occurs at a nearby fault, seismic-induced settlement could affect the project site. The extent of damage would depend on soil characteristics, groundwater depth, and duration and intensity of the earthquake. Potential ground shaking at the project site could expose people or structures to potentially substantial adverse impacts. As required by law, project buildings would be designed to conform to the standards contained within California Building Code (CBC) Title 24, which identifies specific design requirements to reduce damage from strong seismic ground shaking and seismic-related ground failure (including liquefaction). The potential for seismic impacts would be minimized by applying all standard engineering and construction techniques in compliance with the requirements of the CBC. Therefore, potential hazards associated with strong seismic ground shaking and seismic-related ground failure (including liquefaction) would be minimized.

The topography of the project area is relatively flat, with elevations ranging from 75 to 100 feet above mean sea level (Gularte & Associates 2021: 4). Consequently, the project site would not be subject to landslides. Further, the project would not be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project.

The project site's subsurface is composed predominately of dense fine-grained soil, with some differences across the site (Gularte & Associates 2021: 6,7). Native soil in the southern portion of the site is composed of medium dense to dense coarse grain alluvial deposits to depths ranging between approximately the upper 6 to 13 feet below ground surface (bgs). These alluvial silty sands are underlain with very stiff to hard silt and silty clay with minor beds of very dense silty sand to approximately 50 feet bgs. In general, the northern portion of the site is composed of interbedded stiff to hard silt, sandy silt, and silty clay with minor beds of very dense silty sand.

Compliance with the Construction General Permit would ensure that best management practices are implemented during construction to reduce any potential for increased erosion, sedimentation, and siltation to surface waters caused by project-related construction activities involving ground disturbance, such as grading and installation of underground utility infrastructure.

The geotechnical analysis required as part of the CBC would incorporate appropriate standard engineering practices and specifications in building design to minimize risks related to expansive soils, which can result in structural failure if buildings are constructed in areas with expansive soils.

The project would not involve the construction of septic tanks or alternative wastewater disposal systems.

For the reasons above, the project would not result in significant impacts related to geology and soils, and this issue is not discussed further.

MINERAL RESOURCES

The City of Roseville does not overlie any known deposits of economically valuable mineral resources (City of Roseville 2020: 4.7-1), and the City does not have a Surface Mining and Reclamation Act permit. No mining activities are currently underway nor does the City anticipate that any mining activities will take place in the future. Due to the lack of known mineral deposits within the project site, project implementation would not result in a loss of availability of locally important mineral resources or a known mineral resource that would be of value to the region and the residents of the state. Thus, no significant impacts to mineral resources would occur, and this issue is not discussed further.

RECREATION

Generally, residential uses increase demand for and use of parks and recreation facilities. The project is not expected to result in substantial, direct population growth, and indirect impacts related to population growth are addressed in Section 5.1, "Growth-Inducing Impacts." The project includes development of an industrial park on undeveloped grazing land in the northwest corner of Roseville. At full buildout, the project would employ up to 1,938 workers in the industrial sector. It is anticipated that the majority of these employees would be hired from the local population base. Therefore, the project would not increase the use of existing recreational facilities—the closest being Astill Family Park, approximately 1.8 miles southeast of the project site, in the West Roseville Specific Plan area—such that substantial physical deterioration of these facilities would occur or be accelerated. The project would not involve any

changes to permitted uses of existing recreational facilities, nor would it require the construction of new recreational facilities or the expansion of existing ones that might have an adverse physical effect on the environment. Thus, no significant impacts to recreation would occur, and this issue is not discussed further. The project's potential to affect availability, service level, and/or capacity of other public services, including fire protection services, police protection services, and public schools, is addressed in Section 3.10, "Public Services."

1.3 AGENCY ROLES AND RESPONSIBILITIES

This Draft EIR will be used by the City and CEQA responsible and trustee agencies to ensure that they have met their requirements under CEQA before deciding whether to approve or permit project elements over which they have jurisdiction. It may also be used by other state and local agencies, which may have an interest in resources that could be affected by the project, or that have jurisdiction over portions of the project. In addition, federal agencies may use information included in the EIR to assist in their environmental evaluation in connection with permits they would need to issue.

As the lead agency pursuant to CEQA, the City is responsible for considering the adequacy of the EIR and determining if the project should be approved.

Under CEQA, a responsible agency is a public agency, other than the lead agency, that has responsibility to carry out or approve a project (PRC Section 21069). A trustee agency is a state agency that has jurisdiction by law over natural resources that are held in trust for the people of the State of California (PRC Section 21070).

The following agencies may serve as responsible and trustee agencies for the project:

1.3.1 State

- California Department of Fish and Wildlife, Region 2
- Central Valley Regional Water Quality Control Board

1.3.2 Local

- Placer County Air Pollution Control District

While not a state or local agency, the federal agencies listed below may use environmental information in this EIR to inform their permitting actions.

1.3.3 Federal

- Federal Emergency Management Agency
- US Army Corps of Engineers
- US Environmental Protection Agency

1.4 CEQA PUBLIC REVIEW PROCESS

1.4.1 Notice of Preparation

In accordance with PRC Section 21092 and CCR Section 15082, the City issued an NOP on July 12, 2021 to inform agencies and the general public that an EIR was being prepared and to invite comments on the scope and content of the document (Appendix A). The NOP was submitted to the State Clearinghouse, which then distributed the NOP to potential responsible and trustee agencies; posted on the City's website

(https://www.roseville.ca.us/government/departments/development_services/planning); and posted with the Placer County Clerk. In addition, the NOP was distributed directly to public agencies (including potential responsible and trustee agencies), interested Native American Tribes, and individuals requesting to be notified. The NOP was circulated for a 30-day review period, with comments accepted through August 11, 2021.

In accordance with CCR Section 15082(c), a noticed scoping meeting for the EIR occurred on July 28, 2021, at 5:00 p.m. at 311 Vernon Street, Roseville, CA.

The purpose of an NOP is to provide sufficient information about a project and its potential environmental impacts to allow agencies and interested parties the opportunity to provide a meaningful response related to the scope and content of the EIR, including mitigation measures that should be considered and alternatives that should be addressed (CCR Section 15082[b]). Comments submitted in response to the NOP are used by the lead agency to identify broad topics to be addressed in the EIR. Comments on environmental issues received during the NOP public comment period are considered and addressed in this Draft EIR. Appendix A contains the NOP and comment letters submitted during the NOP public comment period.

1.4.2 Public Review of this Draft EIR

This Draft EIR is being circulated for public review and comment for a period of 45 days, from February 2, 2023 to March 20, 2023.

During the public comment period, written comments from the public as well as organizations and agencies on the Draft EIR's accuracy and completeness may be submitted to the City. Written comments (including via email) must be received by 5:00 p.m. on March 20, 2023. Written comments should be addressed to:

City of Roseville Development Services – Planning
Shelby Maples, Associate Planner
311 Vernon Street, Roseville, CA 95678
Telephone: (916) 746-1347; Fax: (916) 774-5129; Email: smaples@roseville.ca.us

Agencies that will need to use the EIR when considering permits or other approvals for the project should provide the name, phone number, and email address of a contact person. Comments provided by email should include "Roseville Industrial Park Project Draft EIR Comment" in the subject line, and the name and physical address of the commenter in the body of the email.

The Draft EIR is available for review during normal business hours at the City of Roseville Development Services – Planning (311 Vernon Street, Roseville). The Draft EIR is also available online at: https://www.roseville.ca.us/government/departments/development_services/planning.

1.4.3 Final EIR

Following public review of the Draft EIR, a Final EIR will be prepared that will include both written and oral comments on the Draft EIR received during the public review period, responses to those comments, and any revisions to the Draft EIR. The Draft EIR and Final EIR will comprise the EIR for the project.

Before taking action on the project, the City is required to certify that the EIR has been completed in compliance with CEQA, that the City's decision-making body reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City.

1.5 ORGANIZATION OF THE DRAFT EIR

This Draft EIR is organized as follows:

The "Executive Summary" introduces the proposed project; provides a summary of the environmental review process, effects found not to be significant, and key environmental issues; and lists significant impacts and mitigation measures to reduce significant impacts to less-than-significant levels.

Chapter 1, "Introduction," describes the purpose of the EIR, the scope of the environmental analysis, agency roles and responsibilities, the CEQA public review process, organization of this Draft EIR, and standard terminology.

Chapter 2, "Project Description," describes the location, background, and objectives for the proposed project, and describes the project elements in detail.

Chapter 3, "Environmental Impacts and Mitigation Measures," evaluates the expected environmental impacts generated by the proposed project, arranged by subject area (e.g., Land Use Planning and Agricultural Resources; Population, Employment, and Housing, etc.). Within each subsection of Chapter 3, the regulatory setting, environmental setting, methodology, and thresholds of significance are described. The anticipated changes to the existing conditions after development of the project are then evaluated for each subject area. For any significant or potentially significant impact that would result from project implementation, mitigation measures are presented along with the remaining level of significance. Environmental impacts are numbered sequentially within each section (e.g., Impact 3.1-1, Impact 3.1-2, etc.). Any required mitigation measures are numbered to correspond to the impact numbering; therefore, the mitigation measure for Impact 3.1-2 would be Mitigation Measure 3.1-2.

Chapter 4, "Cumulative Impacts," provides information regarding the potential cumulative impacts that would result from implementation of the proposed project together with other past, present, and probable future projects.

Chapter 5, "Other CEQA Sections," provides a discussion of potential growth-inducing impacts, significant and unavoidable impacts, and significant and irreversible environmental changes.

Chapter 6, "Alternatives," evaluates alternatives to the proposed project, including alternatives considered but eliminated from further consideration. The environmentally superior alternative is identified.

Chapter 7, "Report Preparers," identifies the individuals who contributed to preparation of this Draft EIR.

Chapter 8, "References," identifies the references used in preparation of this Draft EIR.

1.6 STANDARD TERMINOLOGY

This Draft EIR uses the following standard terminology:

- "No impact" means no change from existing conditions (no mitigation is needed).
- "Less-than-significant impact" means no substantial adverse change in the physical environment (no mitigation is needed).
- "Potentially significant impact" means an impact that might cause a substantial adverse change in the environment (mitigation is recommended because potentially significant impacts are treated as significant).
- "Significant impact" means an impact that would cause a substantial adverse change in the physical environment (mitigation is recommended).
- "Significant and unavoidable impact" means an impact that would cause a substantial adverse change in the physical environment and that cannot be avoided, even with the implementation of all feasible mitigation.

2 PROJECT DESCRIPTION

Panattoni Development Company (Panattoni or project applicant) proposes to develop a property in the City of Roseville with a range of industrial uses, including light manufacturing, warehousing, and distribution uses (totaling up to 2,430,000 square feet [sf]). Up to 15 buildings would be constructed, ranging in size from approximately 80,000 sf to approximately 300,500 sf and connected by a bridge across Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel. The project also includes an electrical substation south of Pleasant Grove Creek. This chapter includes a detailed description of the proposed project, including project objectives, location, description of proposed development, and anticipated construction activities.

2.1 PROJECT LOCATION

The project site is located at 6382 Phillip Road and includes approximately 241 acres of undeveloped grazing land in the northwest corner of Roseville, in Placer County. The project site (see Figures 2-1 and 2-2), which is currently owned by the City, is predominantly flat with some sparsely vegetated, low hills. Pleasant Grove Creek traverses the property in an east–west direction, bisecting the site into a north and south parcel. Due to previous farming activities at the project site, the original hydrology/drainage has been modified over 70+ years. The southern portion of the site was used more recently for flood control purposes (constructed channel).

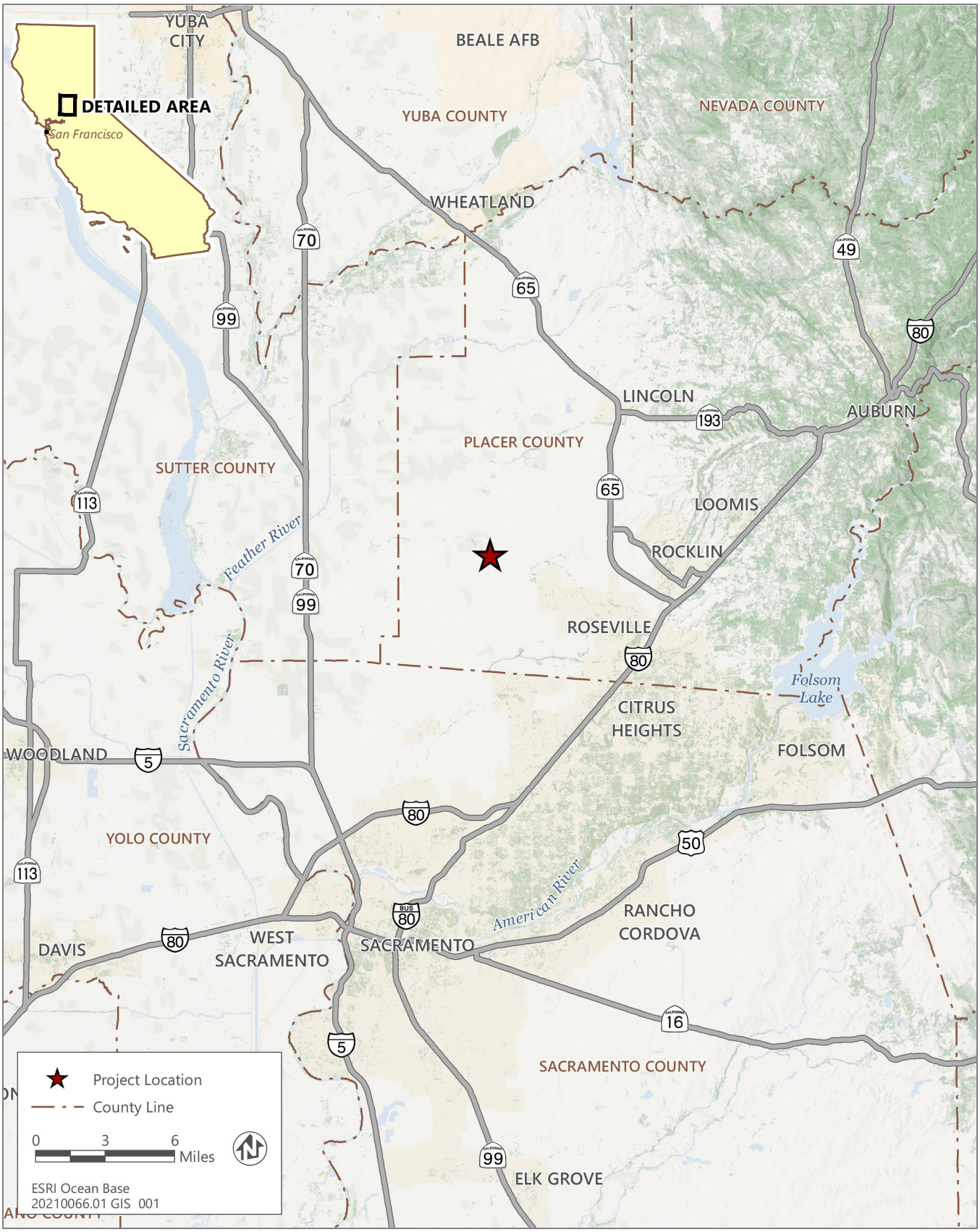
Of the total 241 acres, 176.5 acres are considered developable with approximately 6.6 acres for Blue Oaks Boulevard and Phillip Road extensions/widening. The remaining 57.9 acres are composed of approximately 13.6 acres of the Pleasant Grove Creek Floodplain and Pleasant Grove Creek Bypass Channel, approximately 21.6 acres of undevelopable land northwest of the future Placer Parkway, and approximately 22.7 acres for the planned Placer Parkway alignment. (The future Placer Parkway, a planned regional facility, would connect Highway 65 in Placer County to Highway 99 in Sutter County, providing an alternate highway to Interstate 80.)

The project site's Assessor's Parcel Number (APN) is 017-101-008-000. The existing General Plan land use designation for the project site is Public/Quasi-Public, which primarily allows for municipal and governmental facilities. The project site is also zoned as Public/Quasi-Public (P/QP), which establishes areas for municipal, governmental, or public facilities.

The project site is within an area of City-owned property known as Reason Farms. The Al Johnson Wildlife Area is located to the northwest of the site and is part of an area planned to accommodate the City's stormwater Regional Retention facility and potential recreation uses. Agricultural uses are located to the west along the southern portion of the site. To the east, immediately adjacent to the project site, is the Creekview Specific Plan area (adopted by the City in 2011), which is planned to accommodate 2,011 residential units at buildout. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area (adopted by the City in 2004), which is 60 percent built out, and will include 9,496 residential units, parks, open space, and commercial and industrial uses.

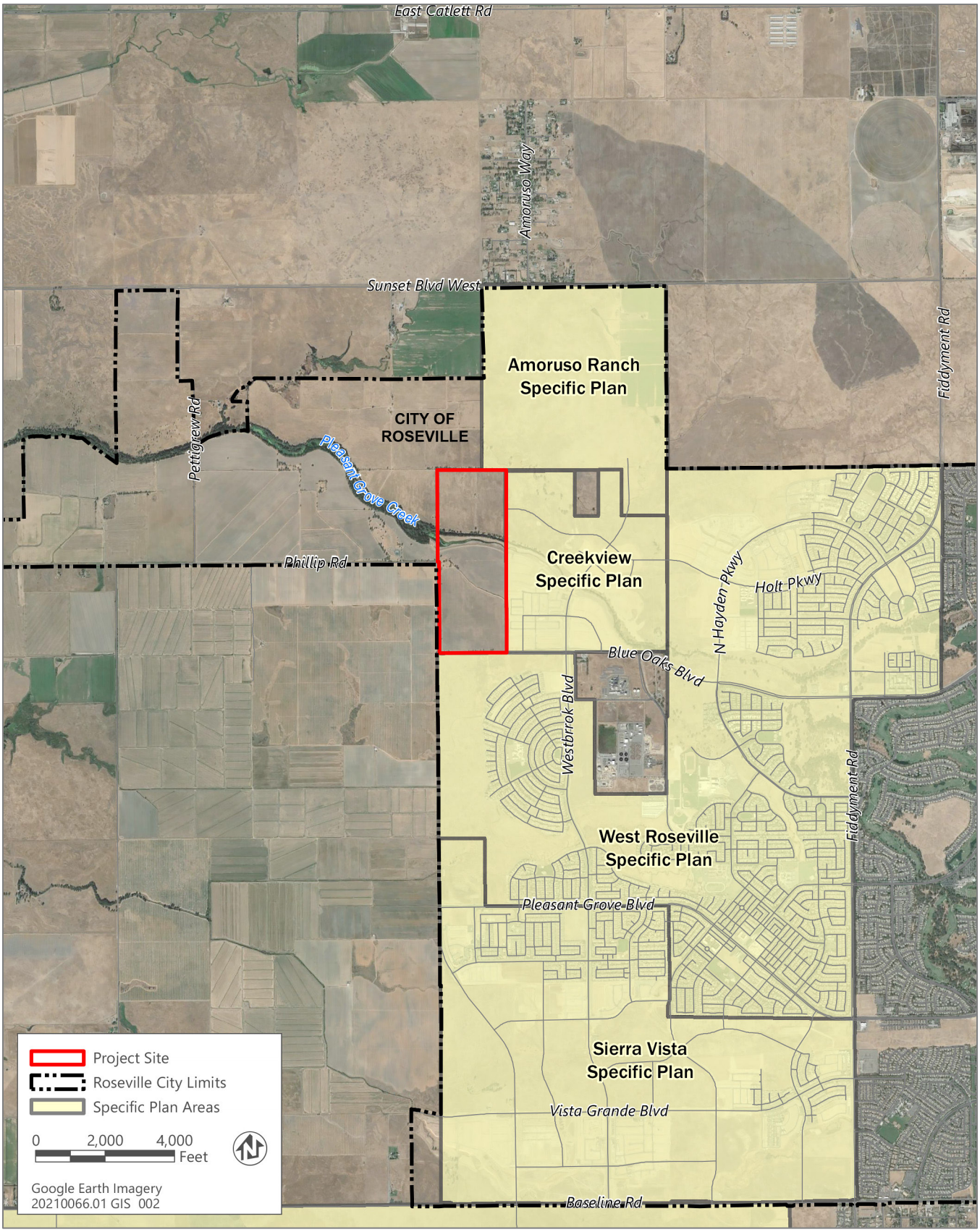
2.2 PROJECT BACKGROUND

The project site is part of the City-owned property known as Reason Farms, which totals approximately 1,700 acres. The City purchased the property in 2003 for a retention basin project. The project was originally known as the Reason Farms Retention Basin Facility and was later renamed to the Pleasant Grove Retention Facility. The City is the project proponent for the facility, which is already designed and approved but not yet constructed. The EIR (SCH# 2002072084) for the retention facility was certified in 2003. The project site is located in an area that is no longer needed for the retention basin project (which, as noted above, would be located within the 1,500-acre Al Johnson Wildlife Area [formerly part of Reason Farms] to the northwest of the project site). The City has identified this property for development for over a decade.



Source: Adapted by Ascent in 2021.

Figure 2-1 Regional Location



Source: Adapted by Ascent in 2021.

Figure 2-2 Project Location

A feasibility analysis of the site was done in 2006 by the City of Roseville for a potential job center, which assumed 18 buildings totaling 1,080,000 sf.

On November 20, 2019, the City Council declared the property as surplus because there are no identified future City needs for the parcel, and the property is underutilized. As required by the Surplus Land Act, letters offering to sell or lease the property were sent to local public and affordable housing developers; park, recreation, and open space agencies; and school districts. None of these agencies expressed interest in leasing or purchasing the property. The City has complied with the Surplus Land Act and may dispose of the property pursuant to its own real property disposition procedures.

On March 3, 2021, the City Council determined that the disposition of the property was in the City's best interest and executed an Option and Purchase and Sale Agreement to Panattoni (project applicant).

2.3 PROJECT OBJECTIVES

The project applicant has developed the following objectives for the project:

- construct a high-quality industrial park capable of serving modern warehouse, distribution, and light manufacturing users;
- develop a state-of-the-art employment center designed and operated to achieve the highest and best use of the property;
- create substantial, permanent employment opportunities for residents of Roseville and surrounding areas;
- support City of Roseville's desire to create a job-housing balance, and provide employment generating uses in western Roseville;
- utilize, wherever feasible, alternative energy sources, including solar panels when possible;
- locate the project as near as possible to existing utility infrastructure with anticipated capacity;
- locate the project to be accessible from existing roads and minimize the need for construction of major new roadway improvements;
- phase project construction to be responsive to market demands for light industrial space; and
- minimize environmental impacts to surrounding areas, including residential communities and other sensitive land uses.

2.4 DESCRIPTION OF THE PROPOSED PROJECT

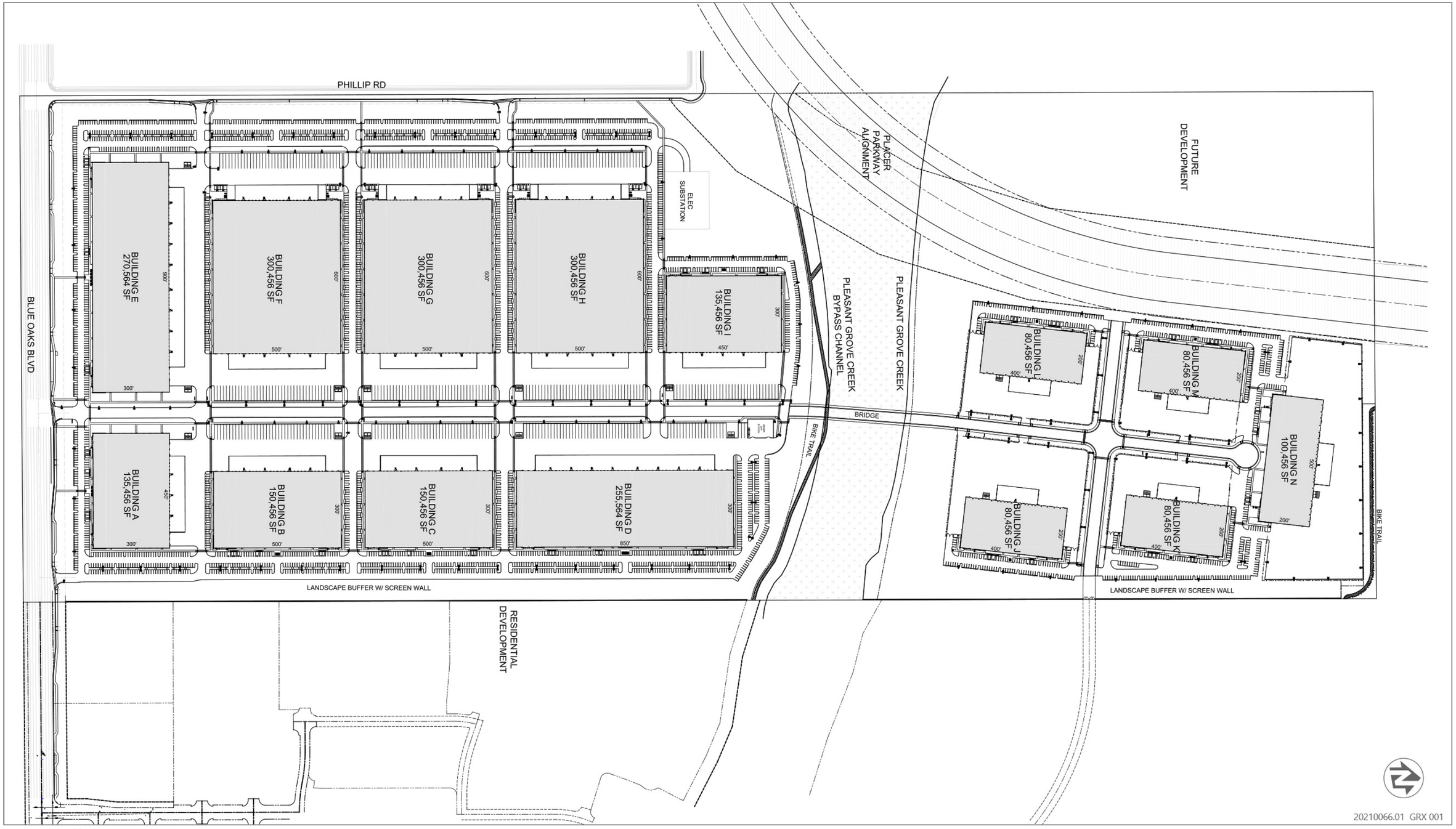
2.4.1 Land Use Plan and Proposed Uses

Roseville Industrial Park is envisioned to be an industrial district comprised of two distinct sections: the south parcel and the north parcel (see Figure 2-3 and Table 2-1). The project would support a range of industrial uses, including light manufacturing, warehousing, and distribution.

The south parcel is proposed as a 128.6-acre development of large warehouse buildings designed for warehousing, distribution, and light manufacturing. Nine buildings would comprise approximately 2,000,000 sf in three planned phases at a floor area ratio of 0.36.

The north parcel includes a proposed 47.9-acre development of industrial buildings designed for warehousing, light manufacturing, and materials and storage yards. Five buildings would comprise approximately 422,000 sf in two planned phases at a floor area ratio of 0.2.

The buildings are proposed as site cast concrete with embellishments of corrugated metal, glass, aluminum window systems, and steel canopies. The maximum building height would be 44.8 feet.



Source: Adapted by Ascent in 2021.

Figure 2-3 Site Plan

Table 2-1 Proposed Buildings in Roseville Industrial Park

Building	Approximate Dimensions (feet)	Height (feet)	Floor Area (square feet)
South Parcel			
A	300 X 450	42.5	135,456
B	500 X 300	42.5	150,456
C	500 X 300	42.5	150,456
D	850 X 300	42.5	255,564
E	300 X 900	42.5	270,564
F	500 X 600	44.8	300,456
G	500 X 600	44.8	300,456
H	500 X 600	44.8	300,456
I	450 X 300	42.5	135,456
Subtotal			1,999,320
North Parcel			
J	200 X 400	38.5	80,456
K	200 X 400	38.5	80,456
L	200 X 400	38.5	80,456
M	200 X 400	38.5	80,456
N	200 X 500	38.5	100,456
Subtotal			422,280
Total			2,421,600

Source: Information provided by Panattoni in 2021.

A concrete masonry wall would be installed along the project's eastern perimeter (up to Pleasant Grove Creek and then continuing north of the creek to the site's northern perimeter) to visually shield the project from the Creekview Specific Plan area, which is currently under development. This wall would be 8 feet tall.

LANDSCAPING

Landscape setbacks would be provided around the perimeter of the site as a buffer along the streets, Pleasant Grove Creek, and the neighboring residential development. Landscaping is proposed to include primarily low water-use trees, shrubs, and ground cover; no turf is proposed.

LIGHTING

A lighting plan has been prepared for the project and conforms with the City's Community Design Guidelines, and specifically for Office and Industrial Development (City of Roseville 2008). Lighting sources would have cut off lenses and would be located to avoid light spillage and glare on adjacent properties and in private spaces.

2.4.2 Proposed Land Use Designation and Zoning

A General Plan Amendment (GPA) would be required to allow for industrial use of the majority of the site as well as designation of the creek area as open space. The proposed GPA would change the land use designation from Public/Quasi-Public, which primarily allows for municipal and governmental facilities, to Light Industrial (LI), General Industrial (IND), and Open Space (OS) along Pleasant Grove Creek. Light Industrial allows for uses such as research

and development, warehousing, intensive commercial uses (e.g., auto body repair, landscaping material sales, retail, and wholesale lumberyards), and associated administrative offices. General Industrial allows for manufacturing, wholesale distribution, large storage areas, and other industrial uses. The Open Space designation adjacent to Pleasant Grove Creek would allow for natural lands, passive recreation and minor recreation facilities, walking and bike trails, and resource interpretive facilities.

Additionally, the project includes rezoning the site from Public/Quasi-Public to industrial uses (M1/SA and M2/SA). M1 zoning with a special area overlay (explained below) would be applied to the eastern portion of the project site (buildings A, B, C, D, J, K, and N), east of the main driveway, and M2 zoning with a special area overlay would be applied to the western portion of the project site (buildings E, F, G, H, I, L, and M). M1 zoning allows for light manufacturing, printing and publishing, research, enclosed recycling, and light wholesale and distribution. M2 zoning allows all industrial uses allowed under M1 zoning and equipment and materials storage, general industrial, hazardous materials handling, unenclosed recycling, and heavy wholesale and distribution. The special area overlay will limit or add additional requirements (such as a Conditional Use Permit) for certain uses, such as auto repair or hazardous materials handling. In addition, the area surrounding Pleasant Grove Creek would be rezoned as Open Space, which allows for agriculture, resource protection and restoration, and resource related recreation.

The special area overlay district, defined in Chapter 19.18 of the City's Zoning Ordinance, is an overlay district that allows modification of the underlying general district regulations (including both permitted Use Types and Development Standards) by reference to regulations adopted either in a Specific Plan that applies to the property, or in the ordinance rezoning the property. By applying this overlay, the permitted Use Types, Development Standards, and Design Guidelines can be tailored to reflect the desired uses, development intensity, and design quality of the property.

2.4.3 Electrical Substation

Roseville Electric has determined that there are 5 megavolt-amperes (MVA) of power available for the project; however, at final buildout, the project is anticipated to need 20 megawatts (MW) of power. The initial 5 MVA of power require the extension of two, existing 12 kilovolt (kV) underground lines. Additionally, the project includes construction of an electrical substation to provide the additional 15 MW of power needed (see Figure 2-3). The substation property would be 225 feet by 175 feet. Roseville Electric would construct a substation on this property. The substation will consist of two 46 MVA transformers (Roseville Electric's standard size 60/12 kV transformer), multiple 40-foot-tall steel structures, steel poles up to 65 feet tall, five 60 kV circuit breakers, a 12 kV metal-clad switchgear with up to twelve 12 kV breakers, and a 14-foot-high masonry wall for security.

2.4.4 Circulation and Parking

The main entry to the project site would be from Blue Oaks Boulevard, as shown in Figure 2-3. There would be three driveways along Phillip Road and an internal vehicular circulation system that would provide access to a surface parking lot as shown in Figure 2-3. The buildings are organized around a main driveway designed for large truck circulation, while pedestrian and vehicular paths circle the site perimeter.

Section 19.26.030 of the Municipal Code requires that general industrial development provide one parking stall per 1,000 sf. Per this requirement, the project would need to provide 2,000 parking stalls on the south parcel and 423 parking stalls on the north parcel, or a total of 2,423 parking stalls. The project would include 3,016 total parking stalls, with 2,480 parking stalls on the south parcel and 536 parking stalls on the north parcel, which is more parking than is required per City code. The project is being designed to accommodate different types of warehousing and light manufacturing tenants because actual tenants have not been identified yet. It is assumed that each tenant will have different employee counts and may therefore have parking needs beyond the City's minimum standards. Thus, the project includes more parking than required by the City code to account for this flexibility in design.

BRIDGE ACROSS PLEASANT GROVE CREEK AND PLEASANT GROVE CREEK BYPASS CHANNEL

A bridge would be constructed across Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel to connect the north and south parcels (Figure 2-3). The bridge would be 59 feet wide and would provide two travel lanes, a shoulder, and a sidewalk in each direction (Figures 2-4 and 2-5). The 200-year water surface elevation is approximately 78.50 (NGVD 88 Datum) and the 100-year water surface elevation is approximately 77.75 (NGVD 88 Datum). The bridge deck would be approximately 2 feet thick. With a clearance of 3 feet from the 200-year water surface elevation to the bottom of the bridge deck, thus meeting Central Valley Flood Protection Board (CVFPB) requirements, the minimum top of the bridge would be at an elevation of 83.5 feet. Bridge construction would include installation of 24-inch diameter bridge supports within the Pleasant Grove Creek channel and the Pleasant Grove Creek Bypass Channel. Permitting would be required for construction of the bridge as the abutments and a pier would be located within the Pleasant Grove Creek and adjacent Pleasant Grove Creek Bypass Channel. As noted above, the bridge would be needed to connect the north and south parcels; therefore, bridge construction would not occur until development of the north parcel occurs.

As part of the extension of utility infrastructure (described below in Section 2.4.5, "Utilities"), some utility infrastructure (water and recycled water) would be attached to the bridge. The City of Roseville requires an open cut trench for installation of sewer lines under creeks. Permitting would be required for installation of the sewer line to serve the north parcel.

BICYCLE TRAIL

A bicycle trail would be installed along the south side of Pleasant Grove Creek (Figure 2-3). This would be a 10-feet-wide, paved, Class I trail that would continue the trail within the Creekview subdivision to the east of the project site. The bicycle trail on the south side of the Bypass Channel would extend under the bridge and would terminate at the east edge of the future Placer Parkway alignment. The project would also include construction of a 10-foot wide, paved, Class I trail at the northern end of the north side of the project. The off-site improvements on Blue Oaks Boulevard would also include a bicycle lane.

Additionally, the project would provide bike racks for visitors and secure long-term bike parking on-site for employees, at a minimum per the California Green Building Code.

In the future, the City may develop a bicycle trail on the north side of Pleasant Grove Creek, along the south side of the north parcel, but this is not part of the proposed project.

FUTURE PLACER PARKWAY

Although Placer Parkway is not part of the proposed project, because a segment of the planned Placer Parkway corridor is located on the site, a brief discussion of Placer Parkway is included here for informational purposes.

Placer Parkway is a planned east-west regional thoroughfare approved by South Placer Regional Transportation Authority in 2009. The on-site segment of the Placer Parkway corridor is 365-feet wide (Figure 2-3). Placer Parkway is designed as a high-speed, limited access, four-lane regional expressway between State Route (SR) 65 in Placer County and SR 99 in Sutter County. This expressway would provide primary access from SR 65 to the Placer Ranch Specific Plan (PRSP) and Sunset Area Plan (SAP) areas with planned interchanges at SR 65, Foothills Boulevard, and Fiddyment Road.

The first phase of Placer Parkway, from SR 65 to Foothills Boulevard North, was approved by Placer County in 2015 (SCH# 2015052032). Placer Parkway would be constructed regardless of whether the Roseville Industrial Park Project is approved. Although a segment of the planned Placer Parkway corridor is located on the project site, the corridor would not connect to the project site. Because an EIR was certified for Placer Parkway and the project was approved, this EIR evaluates impacts of Placer Parkway in a cumulative context only and not as a project-specific element.

2.4.5 Utilities

Utility service is not currently available at the project site. Thus, the project will require the extension of nearby water, wastewater, recycled water, stormwater, and electrical infrastructure to serve the future development of the site.

WATER

Water service would be provided by the City of Roseville Environmental Utilities. Water infrastructure would serve the southern parcel via the extension of an existing 12-inch water main within Blue Oaks Boulevard. The 12-inch water main would continue along Blue Oaks Boulevard as well as run north along Phillip Road to serve the southern portion of the project site. The adjacent Creekview subdivision also has an existing 12-inch water main within Grasscreek Drive that the proposed project would connect into along the east side of the southern portion of the project site.

A 12-inch water main would be placed on the proposed bridge that traverses Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel, to provide service to the northern portion of the project site. The adjacent subdivision has a future 12-inch water main within Benchmark Drive that the proposed project would connect into along the east side of the northern portion of the project site.

The project is anticipated to require 518 acre-feet per year (afy) of potable water and 43 afy of recycled water at buildout in 2035 (Table 2-2).

Table 2-2 Projected Water Demand for the Proposed Project in Acre-Feet per Year

	2025	2030	2035	2040	2045
Potable and Raw Water Demand	173	345	518	518	518
Recycled Water Demand	14	29	43	43	43
Total Water Demand	**187**	**374**	**561**	**561**	**561**

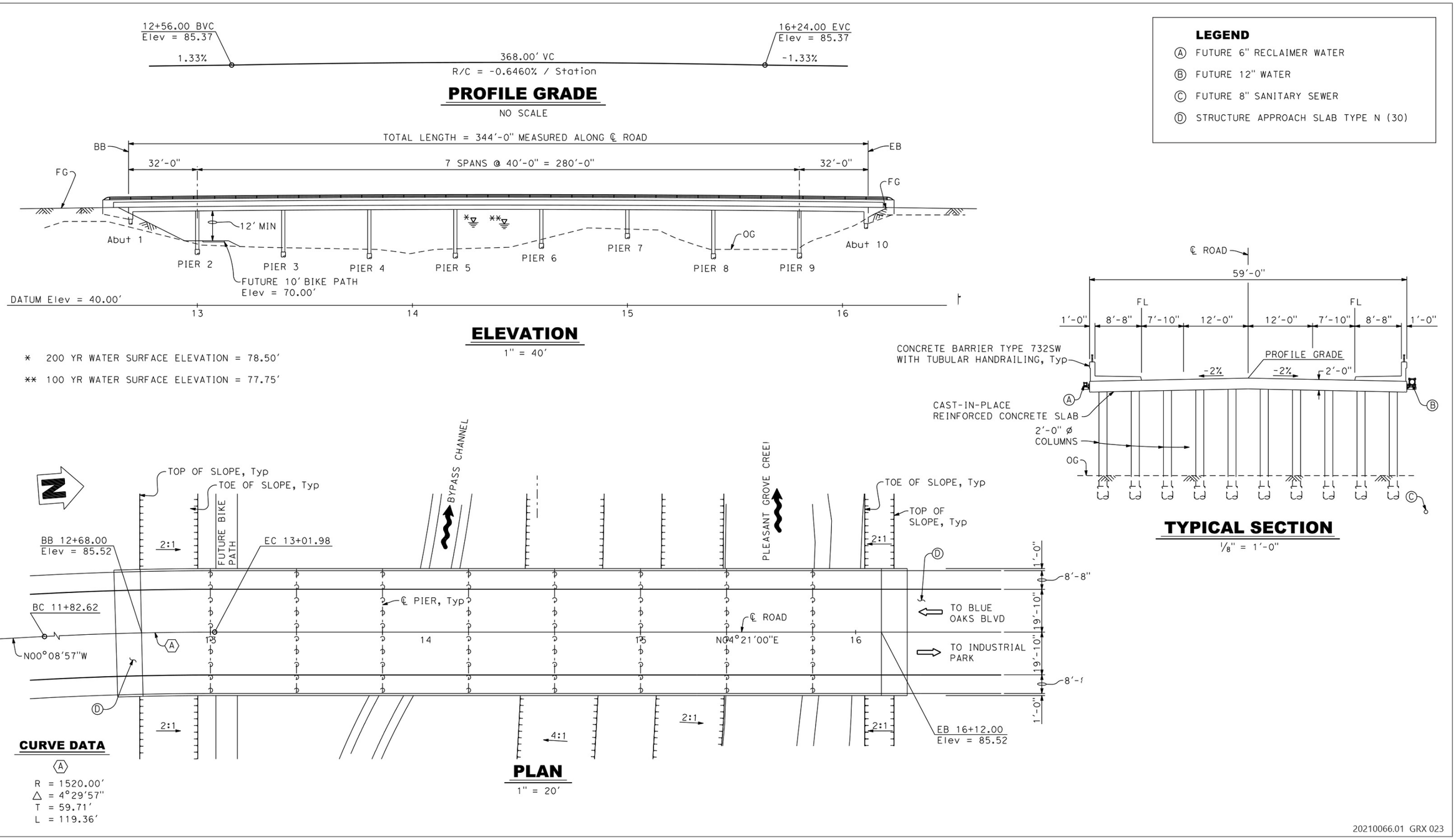
Source: City of Roseville 2022.

The landscape irrigation demands for the proposed project are ultimately expected to be served by the City's recycled water system; however, these demands would be served from the project's potable water system in the interim until the necessary recycled water system infrastructure is constructed by the City. Expansion of the City's recycled water system and storage tanks was described and evaluated in the West Roseville Specific Plan EIR (2004, State Clearinghouse No. 2002082057). The City is working on updating the Recycled Water Systems Evaluation Study prior to developing the expansion project.

WASTEWATER

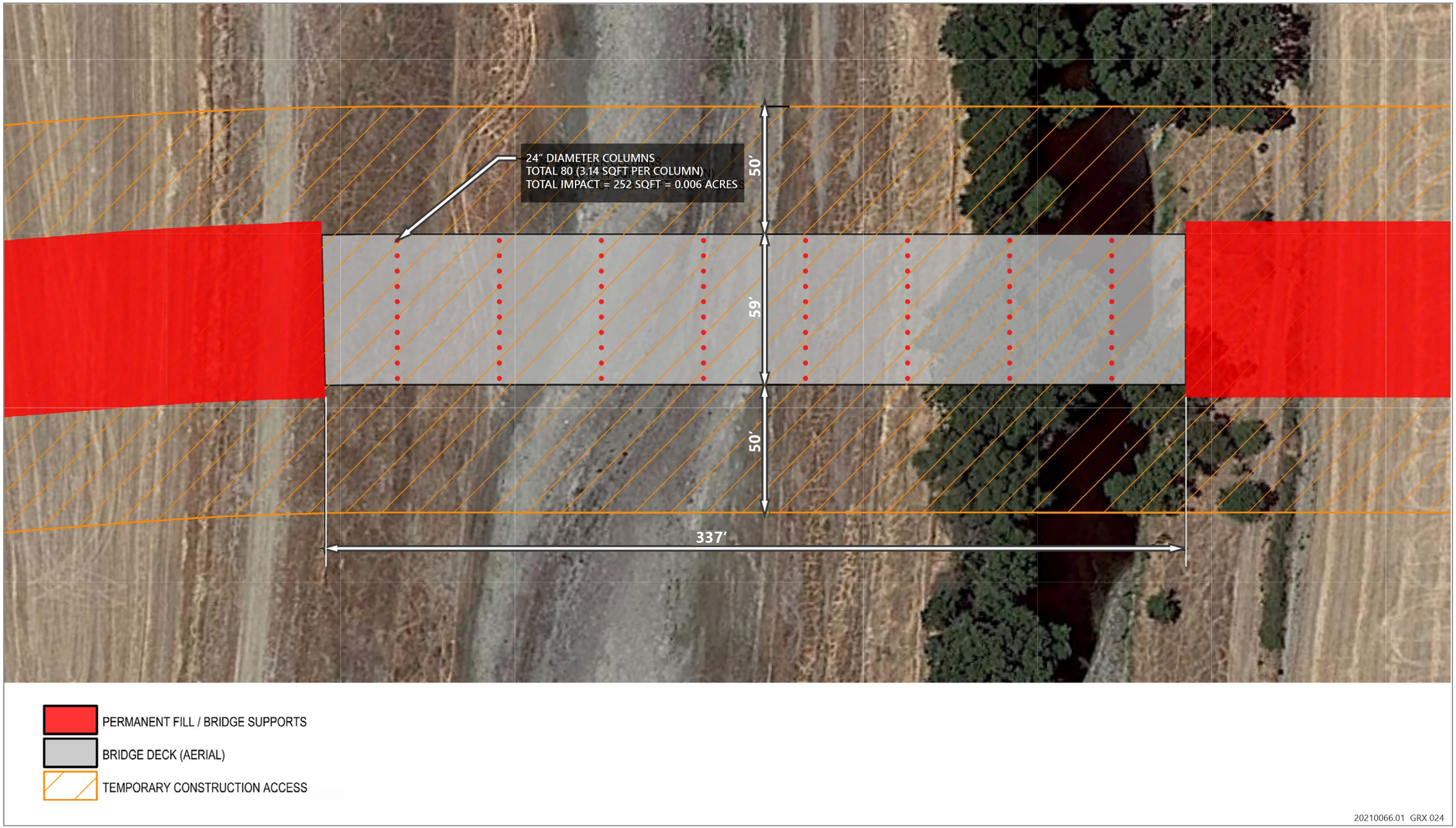
Wastewater service would be provided by the City of Roseville Environmental Utilities. Wastewater flows from the northern portion of the site would be conveyed by gravity pipelines (open trench under Pleasant Grove Creek) to a lift station located south of the Pleasant Grove Creek Bypass Channel. Area topography and the distance required for conveyance of wastewater flows to the Pleasant Grove Wastewater Treatment Plant prevent the use of gravity flow.

Dual force mains would be constructed from the lift station along Blue Oaks Boulevard and Westbrook Boulevard to pump flows to a new sewer manhole on the west side of Westbrook Boulevard. A gravity pipe would then convey flows to a new sewer manhole in Westbrook Boulevard to connect to the existing 21-inch sewer pipe. The project is projected to generate 0.15 million gallons per day (mgd) average dry weather flow of wastewater at buildout.



Source: Provided by Panattoni in 2022.

Figure 2-4 Proposed Bridge Design



Source: Provided by Panattoni in 2022.

Figure 2-5 Proposed Bridge Aerial View

STORMWATER

The project site is located within the Pleasant Grove Creek watershed, which is located within the larger Natomas Cross Canal watershed of northwestern Placer County and southeastern Sutter County. The Pleasant Grove Creek watershed drains to the Pleasant Grove Canal, to the Natomas Cross Canal, and then to the Sacramento River. Pleasant Grove Creek crosses through the middle of the project site. The creek is covered by Zone AE (100-year floodplain) on the currently effective Flood Insurance Rate Map (FIRM) panel 06061C0920H, dated November 23, 2020. The Zone AE is also designated as a Regulatory Floodway within the project area. A small area of the northeast corner of the project site lies within a Federal Emergency Management Agency (FEMA) Zone A (100-year floodplain without base flood elevations) of a small creek. A conceptual FEMA floodplain map is shown in Figure 3.12-1 in Section 3.12, "Hydrology and Water Quality." Because the project would place fill within the floodplain to remove building areas outside of the floodplain, the project would be required to obtain a Letter of Map Revision from FEMA prior to starting construction to address areas within the 100-year and 500-year floodplains. FEMA will confirm whether the proposed project and proposed hydrology changes would meet minimum National Flood Insurance Program (NFIP) standards. Then FEMA will officially revise the current NFIP map to show changes to floodplains, regulatory floodways, and flood elevations. This process is explained in more detail in Section 3.12, "Hydrology and Water Quality."

Stormwater flows from the project site will be directed to low impact design (LID) features such as bioretention facilities, disconnected downspouts, and detention basins to improve the water quality before entering the proposed storm drain network. This storm drain system will have a network of underground storm drainage pipes ranging in size from 4 inches to 36 inches in diameter. The drainage system would then outfall to Pleasant Grove Creek.

The addition of proposed buildings and paved parking lots would add impervious surfaces to the project site. Runoff would generally drain towards the creek. Roof and paving runoff would be disconnected (i.e., runoff would drain overland to bioretention facilities for water quality treatment and hydromodification). After treatment, an on-site storm drain system would convey runoff to the creek.

The project also includes off-site improvements to Phillip Road/Blue Oaks Boulevard. Similar to on-site drainage, off-site runoff would also be routed overland to bioretention facilities for water quality treatment and hydromodification control. After treatment, on the west side of the project site, runoff from Phillip Road would be collected by a proposed storm drain system and drain to the creek.

On the south parcel, runoff Blue Oaks Boulevard would also be routed overland to bioretention facilities for water quality treatment and hydromodification. After treatment, a proposed storm drain system in the right-of-way will drain runoff primarily from west to the east and will be routed to a proposed storm drain system that will cross the project site to the creek bypass channel at the east. An easement will be provided to the City where these storm drains cross the project site.

The on-site drainage system would be designed in accordance with the latest version of the City of Roseville Design Standards and the Placer County Flood Control and Water Conservation District's "Stormwater Management Model." The on-site storm drains would be designed for the 10-year storm event, and the overland releases would be designed for the 100-year storm event.

Urban Runoff Water Quality Best Management Practices

Post construction stormwater management is intended to treat the urban runoff generated on a developed site in perpetuity. Best management practices (BMPs) are intended to reduce and/or eliminate the pollutants from the urban stormwater runoff and prevent the contamination of receiving waters. The BMPs to be used at the project site will be designed in conformance with the City Improvement Standards, the City's Stormwater Quality Design Manual, the Placer County Flood Control and Water Conservation District's Stormwater Management Manual, and the City's Overarching Management Plan, to design and address post-construction stormwater treatment.

Post-construction stormwater treatment is composed of three general elements: source control, runoff reduction, and treatment of runoff. All three elements will be used at the project site. The basic practice of source control is to

minimize the potential for constituents to enter runoff at the source. LID BMPs will be the primary means to reduce runoff. Virtually all runoff at the project site will be routed to bioretention facilities, which will serve as treatment control BMPs. Vegetation and a special soil mix will help process and remove pollutants before discharge from the project site. Storage space within the bioretention facilities will help to mitigate potential hydromodification, such as erosion and sedimentation, impacts to downstream streams.

City of Roseville Pleasant Grove Retention Basin

In addition to detention of peak flood flows within the Pleasant Grove Creek watershed, the project applicant will contribute toward construction of the Pleasant Grove Retention Basin Project through payment of the Pleasant Grove Watershed Mitigation Fee, which will cover the retention requirements of the project. Payment of this fee would be required as part of the Development Agreement as well as the conditions of project approval. This planned, regional stormwater retention facility would be located within the Pleasant Grove watershed, at the City's Reason Farms site located immediately west of the project site and has been designed to accommodate the City's stormwater needs, including stormwater from the project site.

The Pleasant Grove Retention Basin Project is an existing project in the City's Capitol Improvement Program. As of June 30, 2021, the City has spent $12.8 million purchasing land, conducting environmental work, and preparing studies regarding expected operations and maintenance costs and preferred options (Kemen, pers. comm., 2023). Most recently, the City has worked with Placer County and County developers on a Memorandum of Understanding to make the basin a regional facility that will mitigate for some County projects as well as City projects (with the County contributing fair share costs). The City plans to construct the Pleasant Grove Retention Basin Project in the next five years (Kemen, pers. comm., 2023).

ELECTRICITY AND NATURAL GAS

Initial electrical service will be provided by Roseville Electric via the extension of 12 kV underground lines, as noted above in Section 2.4.3, "Electrical Substation," and at final buildout would require installation of an on-site electrical substation that would be constructed as part of the project. To provide the initial 5 MVA of capacity to the site, two, existing 12 kV underground lines will be extended from near the intersection of Blue Oaks Boulevard and Citra Drive to the project site. Once the substation is required (designed electrical demand exceeds 5 MVA), a 65-foot-tall double-circuit, single pole construction, overhead 60 kV line extension will be installed from near the existing Roseville Energy Park 60 kV switchyard (located at 5120 Phillip Road) to the project site.

The project would also include the undergrounding of an existing PG&E overhead line that runs east to west across the south parcel, south of Pleasant Grove Creek. The project would not require natural gas service.

SOLID WASTE

Solid waste collection services would be provided by the City of Roseville. Solid waste from the project site delivered to the Western Regional Sanitary Landfill, which is operated by the Western Placer Waste Management Authority. The proposed project is expected to result in 1,938 new employees. Assuming a solid waste generation rate of 8.2 pounds per day (ppd) per employee consistent with the City of Roseville General Plan 2035 EIR (City of Roseville 2020), the project would generate approximately 15,310 ppd or 7.9 tons per day of solid waste.

2.4.6 Off-site Improvements

Off-site roadway improvements would include the extension of Blue Oaks Boulevard along the southern frontage of the project, improvements to Phillips Road along the western frontage of the project, and extension of utilities infrastructure. These are described below.

The extension of Blue Oaks Boulevard would occur as needed to serve each phase of the proposed development. It is anticipated that Phase 1 would involve construction of Blue Oaks Boulevard from its current location to the project's

central circulation spine. Phase 2 would involve continued construction of Blue Oaks Boulevard from the project's central circulation spine to the Phillip Road intersection and the southern section of Phillip Road to the southernmost driveway entrance off Phillip Road. Phase 3 would involve completion of Phillip Road.

Blue Oaks Boulevard would be constructed in phases, as described above. The first phase will consist of two drive lanes with bike lanes on each side, a middle turn lane, and curb, gutter and detached sidewalk along the north side of the road. The ultimate cross section of Blue Oaks Boulevard will consist of six travel lanes, with bike lanes on each side, a median, curb and gutter, and detached sidewalk on both sides of the road. Extending and widening Blue Oaks Boulevard to six lanes from Fiddyment Road to Santucci Boulevard was identified as a capital improvement project in the City's 2035 General Plan Update EIR (City of Roseville 2020).

Improvements would also be made to Phillip Road along the western frontage of the project. Phillip Road would be constructed as an Industrial Street containing two drive lanes with bike lanes on each side of the roadway and curb and gutter. A sidewalk will be constructed along the east side of the road.

Off-site utilities improvements would include the extension of water, recycled water, wastewater, stormwater, and electrical infrastructure to the site, as described above.

2.5 PROJECT CONSTRUCTION

2.5.1 Project Phasing

Depending on market demand, the project is anticipated to be developed in four phases (see Table 2-3). Phase 1 is anticipated to start construction in late fall 2023 and be complete in 2024. Occupancy for Phase 1 is projected to occur in early 2025. The timing of future phases will be determined based on market readiness and tenant demand. For the purposes of this EIR (specifically, for the air quality and greenhouse gas analysis), all phases (1, 2, 3 and 4) were conservatively assumed to be constructed by 2029. The full buildout year is expected to be no sooner than 2030.

Table 2-3 Proposed Phasing Plan

Phase	Buildings	Timing
1	A, B, C	Anticipated Construction: late fall 2023 through 2024 Occupancy: early 2025
2	D, E	To be determined based on market readiness and tenant demand
3	F, G, H, I	To be determined based on market readiness and tenant demand
4	J, K, L, M, N	To be determined based on market readiness and tenant demand

Source: Information provided by Panattoni in 2021.

The electrical substation would be constructed during either Phase 2 or 3 depending on the specific level of electricity demand of the future tenants. Bridge construction would occur as part of Phase 4.

2.5.2 Construction Activities

Construction hours would be 7:00 a.m. to 7:00 p.m. Monday through Friday. Construction could also occur 8:00 a.m. to 8:00 p.m. on Saturdays and Sundays on an as-needed basis. Special permission from the City of Roseville Building Division would be required prior to allowing nighttime construction, per Section 9.24.160 of the Municipal Code. Per the City's Noise Ordinance, all construction equipment would be fitted with factory installed muffling devices and all construction equipment will be maintained in good working order.

As noted above, construction would be conducted over multiple phases of development. For any given phase, there would be a range of 75—125 construction workers for a given shift. Access during construction would be from Blue Oaks Boulevard.

Construction activities and general sequencing would be as follows: installation of stormwater pollution prevention plan BMPs; clear and grub; mass grading and soil stabilization; installation of footings, slab, wall panels, roof structure; installation of mechanical, electrical, and plumbing infrastructure and building envelope and finishes; installation of underground wet and dry utilities, hardscape/paving, and irrigation and landscaping.

The type and quantity of equipment would fluctuate throughout construction, but would generally include earthmoving equipment (scrapers, dozers, excavators); concrete mix trucks and concrete pumps; a crane for erection of panels; semi-trucks and other trucks for deliveries; and a variety of crew trucks, gradealls, boom lifts, scissor lifts, trenchers, generators, and personal autos.

Building materials and equipment would be staged in various locations on the project site throughout the duration of construction and would vary as the phases are constructed.

Based on the current soils analysis, it is anticipated that the southern parcel will balance (i.e., no soils import or export would be required) and the northern parcel would be an export site with soils remaining. However, given the amount of uncertainty surrounding the Placer Parkway development, it is unknown whether there would be soil to export and in what quantity.

During project construction, several protected trees may be removed from small, isolated groves on the project site and from the valley oak riparian woodland habitat adjacent to Pleasant Grove Creek. These trees (including two interior live oaks and eight valley oaks) would be removed and replaced consistent with Chapter 19.66, "Tree Preservation," of the City of Roseville Municipal Code, which includes such methods as replacing trees on-site, relocating trees, implementing a revegetation plan, and providing an in-lieu mitigation fee. The applicant plans to satisfy this requirement by replacing trees when possible and/or paying in-lieu mitigation fees.

2.6 PROJECT OPERATION

Though actual tenants are not known yet, it is assumed that 80 percent of uses will be warehousing and distribution, 10 percent will be light manufacturing, and 10 percent will be equipment and materials storage yards. All on-site equipment (e.g., forklifts, yard trucks) would be electric. At full buildout, it is assumed that there would be 1 employee per 1,250 sf or 1,600 employees in the south parcel and 338 employees in the north parcel, for a total of 1,938 employees.

Operational hours would vary based on the actual tenants but typical operational hours would be 6:00 a.m. to 8:00 p.m. Some businesses may need to operate outside these typical hours, including potentially 24 hours per day.

2.7 POTENTIAL PERMITS AND APPROVALS REQUIRED

Elements of the project could be subject to permitting and/or approval authority of other agencies. As the lead agency pursuant to CEQA, the City is responsible for considering the adequacy of the EIR and determining if the project should be approved. The City will be the permitting agency for the project with regards to the General Plan Amendment, Rezone, Major Project Permit, Development Agreement, Tree Permit, and Tentative Parcel Map. Other potential permits required from other agencies could include:

2.7.1 Federal

- Federal Emergency Management Agency: Letter of Map Revision.
- US Army Corps of Engineers: Compliance with Section 404 of the Clean Water Act for discharge of fill to Waters of the US.
- US Environmental Protection Agency: Concurrence with Clean Water Act Section 404 permit.

2.7.2 State

- California Department of Fish and Wildlife, Region 2: Section 1602 streambed alteration agreement for construction activities that occur within the bed or bank of adjacent waterways.
- Central Valley Regional Water Quality Control Board: National Pollutant Discharge Elimination System construction stormwater permit (Notice of Intent to proceed under General Construction Permit) for disturbance of more than 1 acre, discharge permit for stormwater, and Clean Water Act Section 401 water quality certification or waste discharge requirements.

2.7.3 Local

- Placer County Air Pollution Control District: Authority to Construct/Permit to Operate, and Air Quality Management Plan consistency determination.

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3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

APPROACH TO THE ENVIRONMENTAL ANALYSIS

This draft environmental impact report (Draft EIR) evaluates and discloses the environmental impacts associated with the Roseville Industrial Park Project, in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulation, Title 14, Chapter 3, Section 1500, et seq.).

Sections 3.1 through 3.15 of this Draft EIR present a discussion of regulatory background, existing conditions, environmental impacts associated with construction and operation of the project, mitigation measures to reduce the level of impact, and residual level of significance (i.e., after application of mitigation, including impacts that would remain significant and unavoidable after application of all feasible mitigation measures). Issues evaluated in these sections consist of the environmental topics identified for review in the Notice of Preparation (NOP) prepared for the project (see Appendix A).

Chapter 4 of this Draft EIR, "Cumulative Impacts," presents an analysis of the project's impacts considered together with other past, present, and probable future projects producing related impacts, as required by Section 15130 of the State CEQA Guidelines. Chapter 5, "Other CEQA Sections," includes an analysis of the project's growth inducing impacts, as required by Section 21100(b)(5) of CEQA. Chapter 6, "Alternatives," presents a reasonable range of alternatives and evaluates the environmental effects of those alternatives relative to the proposed project, as required by Section 15126.6 of the State CEQA Guidelines.

Sections 3.1 through 3.15 of this Draft EIR each include the following components.

Regulatory Setting: This subsection presents information on the laws, regulations, plans, and policies that relate to the issue area being discussed. Regulations originating from the federal, state, and local levels are each discussed as appropriate.

Environmental Setting: This subsection presents the existing environmental conditions on the project site and in the surrounding area as appropriate, in accordance with State CEQA Guidelines Section 15125. The discussions of the environmental setting focus on information relevant to the issue under evaluation. The extent of the environmental setting area evaluated (the project study area) differs among resources, depending on the locations where impacts would be expected. For example, air quality impacts are assessed for the air basin (macroscale) as well as the site vicinity (microscale), whereas transportation and circulation impacts are assessed for the project site vicinity only.

Environmental Impacts and Mitigation Measures: This subsection presents thresholds of significance and discusses potentially significant effects of the Roseville Industrial Park Project on the existing environment, including the environment beyond the project boundaries, in accordance with State CEQA Guidelines Section 15126.2. The methodology for impact analysis is described, including technical studies upon which the analyses rely. The thresholds of significance are defined and thresholds for which the project would have no impact are disclosed and dismissed from further evaluation. Project impacts and mitigation measures are numbered sequentially in each subsection (Impact 3.1-1, Impact 3.1-2, Impact 3.1-3, etc.). A summary impact statement precedes a more detailed discussion of the environmental impact. The discussion includes the analysis, rationale, and substantial evidence upon which conclusions are drawn. The determination of level of significance of the impact is defined in bold text. A "less-than-significant" impact is one that would not result in a substantial adverse change in the physical environment. A "potentially significant" impact or "significant" impact is one that would result in a substantial adverse change in the physical environment; both are treated the same under CEQA in terms of procedural requirements and the need to identify feasible mitigation. Mitigation measures are identified, as feasible, to avoid, minimize, rectify, reduce, or compensate for significant or potentially significant impacts, in accordance with the State CEQA Guidelines Section 15126.4. Unless otherwise noted, the mitigation measures presented are recommended in the EIR for consideration by the City to adopt as conditions of approval.

Where an existing law, regulation, or permit specifies mandatory and prescriptive actions about how to fulfill the regulatory requirement as part of the project definition, leaving little discretion in its implementation, and would avoid an impact or maintain it at a less-than-significant level, the environmental protection afforded by the regulation is considered before determining impact significance. Where existing laws or regulations specify a mandatory permit process for future projects, performance standards without prescriptive actions to accomplish them, or other requirements that allow substantial discretion in how they are accomplished, or have a substantial compensatory component, the level of significance is determined before applying the influence of the regulatory requirements. In this circumstance, the impact would be potentially significant or significant, and the regulatory requirements would be included as a mitigation measure.

This subsection also describes whether mitigation measures would reduce project impacts to less-than-significant levels. Significant and unavoidable impacts are identified as appropriate in accordance with State CEQA Guidelines Section 15126.2(b). Significant and unavoidable impacts are also summarized in Chapter 5, "Other CEQA Sections."

References: The full references associated with the parenthetical references found throughout Sections 3.1 through 3.15 can be found in Chapter 8, "References," organized by section number.

3.1 LAND USE AND AGRICULTURAL RESOURCES

This land use analysis evaluates consistency of the proposed Roseville Industrial Project with applicable land use plans and policies. The physical environmental effects associated with the project, many of which pertain to issues of land use compatibility (e.g., noise, aesthetics, air quality) are evaluated in other sections of Chapter 3 of this Draft EIR.

This section also describes existing agricultural resources on the project site and evaluates potential impacts associated with the conversion of the loss of Prime Farmland, Unique Farmland, and Farmland of Statewide or Local Importance (collectively, Farmland); and Williamson Act contracted land. The issues of forest land as defined in Public Resources Code (PRC) Section 12220(g) and timberland as defined by PRC Section 4526 are addressed in Chapter 1, "Introduction," under "Effects Found Not to be Significant" because the project site and surrounding lands are not designated or zoned as forest land or timberland.

No comment letters regarding land use or agricultural resources were received in response to the notice of preparation (see Appendix A).

3.1.1 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws are applicable to the provision of land use or agricultural resources for the project.

STATE

Planning and Zoning Laws

California Government Code Section 65300 et seq. establishes the obligation of cities and counties to adopt and implement general plans. The General Plan is a comprehensive, long-term, and general document that describes plans for the physical development of a city or county and of any land outside its boundaries that, in the city's or county's judgment, bears relation to its planning. The General Plan addresses a broad range of topics, including at a minimum land use, circulation, housing, conservation, open space, noise, and safety. In addressing these topics, the general plan identifies the goals, objectives, policies, principles, standards, and plan proposals that support the city's or county's vision for the area.

The State Zoning Law (California Government Code, Section 65800 et seq.) establishes that zoning ordinances, which are laws that define allowable land uses within a specific zone district, are required to be consistent with the general plan. Local general plan policies and zoning ordinances, as they relate to the proposed project, are summarized below.

California Department of Conservation Farmland Mapping and Monitoring Program

Farmland in California is classified and mapped according to the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP). Authority for the FMMP comes from Government Code Section 65570(b) and PRC Section 612. Government Code Section 65570(b) requires the DOC to collect or acquire information on the amount of land converted to or from agricultural use for every mapped county and to report this information to the Legislature. PRC Section 612 requires the DOC to prepare, update, and maintain Farmland Series Maps and other soils and land capability information.

The California Land Conservation Act of 1965

The California Land Conservation Act of 1965, or the Williamson Act, preserves agricultural and open space lands through property tax incentives and voluntary restrictive use contracts. Private landowners voluntarily restrict their land to agricultural and compatible open-space uses under minimum 10-year rolling term contracts. In return,

restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value.

LOCAL

City of Roseville General Plan

The Land Use Element of the *City of Roseville General Plan* (2020a) contains the following policies that may be applicable to the project:

- **Policy LU1.5:** Promote land use patterns that result in the efficient use of urban lands and preservation of open space, as specified in the Open Space and Conservation Element.
- **Policy LU5.1:** Implement a land use mix and pattern of development that provides linkages between residents' jobs and local employment-generating uses, facilitates a match between the number and type of local jobs and the local labor force, and maintains the fiscal viability of the City.
- **Policy LU5.6:** Maintain land use patterns, intensities, and densities that ensure an adequate supply of land for office, commercial, industrial, and other employment-generating development.
- **Policy LU5.7:** Support activities that attract employment uses to the City, as identified in the Economic Development Strategy.
- **Policy LU8.4:** The City shall accommodate projected population and employment growth in areas where the appropriate level of public infrastructure and services are planned or will be made available concurrent with development.
- **Policy LU9.1:** The City may consider modification to the General Plan for new growth where adequate public services and facilities and preservation and conservation of natural resources can be provided in conjunction with the following:
    a. Additional land to accommodate demand for housing or employment uses
    b. Projects that will provide community benefits, including, but not limited to the provision of public transit services
    c. Ensure that growth provides benefits to the community as a whole and weigh community benefits against public costs
- **Policy LU9.9:** Development proposed on the western edge of the City shall provide a distinctive open space transition to create a physical and visual buffer between the City and County that ensures that the identity and uniqueness of the City and County will be maintained.

There are no General Plan policies related to agricultural resources that are applicable to the project.

City of Roseville Zoning Ordinance

The City of Roseville's Zoning Ordinance (Title 19 of the Roseville Municipal Code) is the key regulatory tool meant to implement the General Plan, specifically the Land Use Element. The purpose of the ordinance is to protect and promote the public health, safety, and welfare of the city and to provide the economic and social advantages that result from an orderly, planned use of the environment. The Zoning Ordinance establishes specific, enforceable standards with which development must comply such as minimum lot size, maximum building height, minimum building setback, and a list of allowable uses. Zoning applies on a parcel-by-parcel basis, whereas the General Plan has a community-wide perspective.

City of Roseville Blueprint Project Implementation Strategies

The *Implementation Strategy to Achieve Blueprint Project Objectives* (City of Roseville 2005) includes options for the City to implement the Blueprint Growth Principles adopted by the Sacramento Council of Governments (SACOG) in December 2004. The options include programs and specific projects that are either currently in place in the City of

Roseville or could be considered for implementation over time. The Blueprint Project spans a 50-year time horizon. The Implementation Strategy includes goals to provide a variety of services in proximity to residential uses to reduce the reliance on automobile travel and give residents transit options and use existing assets to strengthen and direct development toward existing development areas.

Sacramento Area Council of Government's Sustainable Communities Strategy

On November 19, 2019, SACOG approved the *2020 Metropolitan Transportation Plan/Sustainable Communities Strategy* (2020 MTP/SCS), which is a regional transportation plan and land use strategy designed to support good growth patterns in the Sacramento region, including Roseville. The plan covers the following:

- increased housing and transportation options;
- inwardly focused growth and improved economic viability of rural areas;
- minimized direct and indirect transportation impacts on the environment;
- a transportation system that delivers cost-effective results and is feasible to construct and maintain;
- effective connections between people and jobs;
- improved opportunities for businesses and citizens to easily access goods, jobs, services, and housing; and
- real, viable choices for methods of travel.

The 2020 MTP/SCS includes a land use strategy to improve mobility and reduce travel demand from passenger vehicles by prioritizing compact and transit-oriented development, reducing the growth in vehicle miles traveled and associated greenhouse gas emissions (SACOG 2019).

Placer Local Agency Formation Commission

The Placer County Local Agency Formation Commission (LAFCO) is responsible for reviewing, approving, or disapproving changes in organization to cities and special districts, including annexations, detachments, new formations, and incorporations. LAFCOs must, by law, create municipal service reviews and update spheres of influence for each independent local governmental jurisdiction within their countywide jurisdiction. The most recent municipal service review for Roseville was prepared in 2017 (Placer LAFCO 2017). Placer County LAFCO Commission policies encourage the orderly formation of local governmental agencies and the efficient provision of governmental services, the preservation of agricultural land and open space resources, and logical patterns of growth and discourage urban sprawl.

City of Roseville/Placer County Memorandum of Understanding

In 2000, the City and County entered into a Memorandum of Understanding (MOU) to promote interagency communication and foster cooperative land use planning. Recognizing that future development was likely to occur, the MOU established a transition area (MOU Transition Area) that covers approximately 5,527 acres of land area adjacent to the city's western boundary. In this area, any proposed development must be reviewed by both the City and County and meet certain standards to mitigate any development-related impacts. The MOU states that development in the MOU Transition Area needs to demonstrate adequate capacity and infrastructure for surface water, sewer, and transportation. In addition, the MOU states that "to the greatest extent practically and legally feasible, the City and County will process development applications in the MOU Transition Area such that development proceeds in an orderly east-to-west progression."

3.1.2 Environmental Setting

LAND USE

Surrounding Land Uses

The project site is in the northwest corner of the City of Roseville, in Placer County. The Al Johnson Wildlife Area is located northwest of the site and is part of a 1,700-acre site planned to accommodate the City's stormwater Regional Retention facility and potential recreation uses. Agricultural uses are located to the west and southwest of the project site. To the east, immediately adjacent to the project site, is the Creekview Specific Plan area, which is planned to accommodate 2,011 residential units at buildout. To the south of the project site is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area, which is 60 percent built out, and will include 9,496 residential units, parks, open space, and commercial and industrial uses.

Land use designations to the southwest and northeast include Open Space which allows for preserved natural lands, passive recreation and minor recreation facilities, mitigation, and drainage detention. Lands to the northwest are designated as Public/Quasi-Public, which allows for municipal, governmental or public facilities, places of worship, and related uses; and land uses to the east are designated as Residential, which allows for residential development, parks, open space, and utilities (Figure 3.1-1).

Project Site

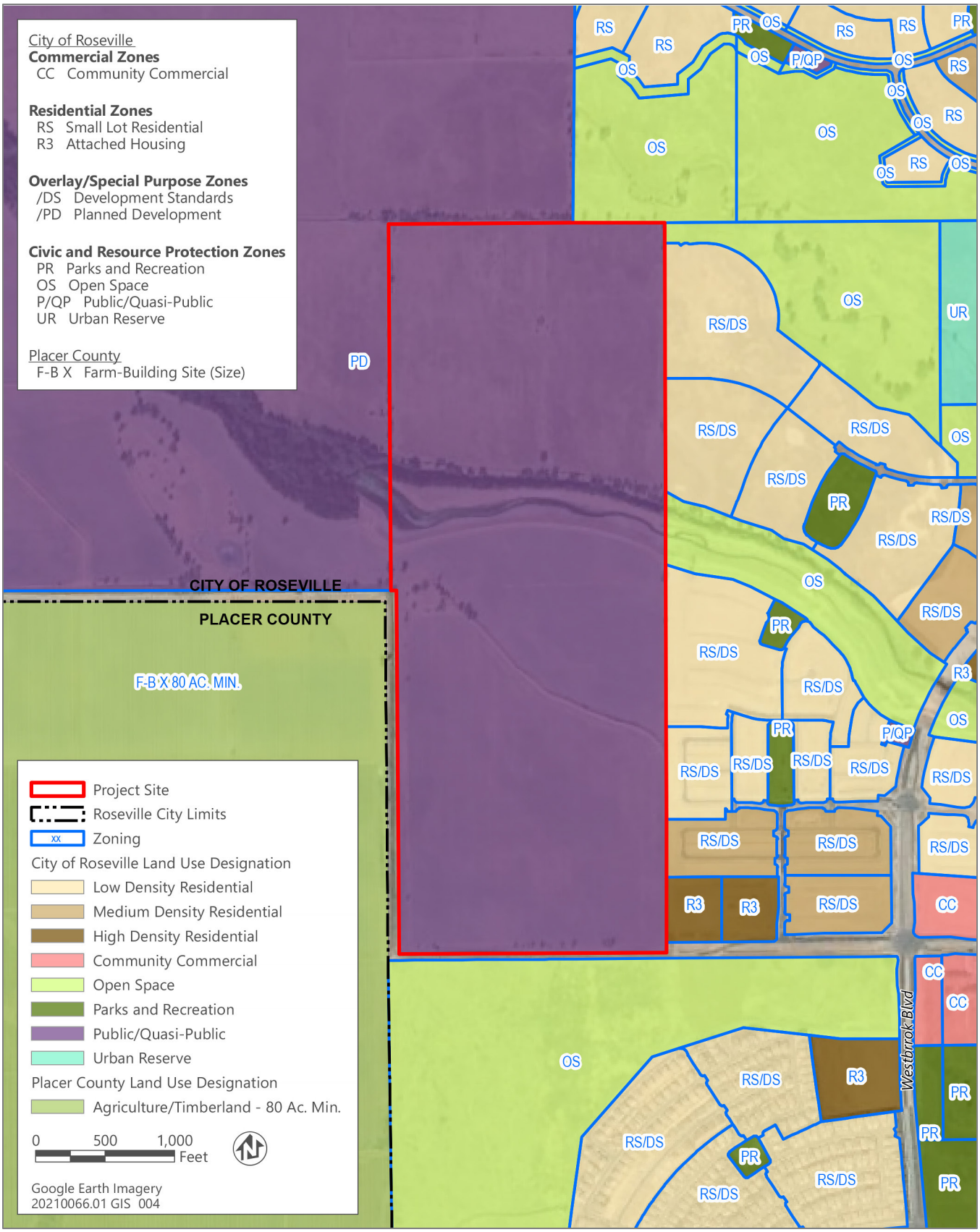
The project would be located at 6382 Phillip Road on approximately 241 acres of undeveloped grazing land. The project site, which is currently owned by the City, is predominantly flat with some sparsely vegetated, low hills. Of the total 241 acres, 176.5 acres are considered developable with approximately 6.6 acres for Blue Oaks Boulevard and Phillip Road extensions/widening. The remaining 57.9 acres include approximately 13.6 acres of the Pleasant Grove Creek Floodplain and Pleasant Grove Creek Bypass Channel, approximately 21.6 acres of undevelopable land northwest of the future Placer Parkway, and approximately 22.7 acres for the planned Placer Parkway alignment. (The future Placer Parkway, a planned regional facility, would connect Highway 65 in Placer County to Highway 99 in Sutter County, providing an alternate highway to Interstate 80.) Table 3.1-1 identifies and categorizes the site acreage.

Table 3.1-1 Site Acreage

	Acreage (approximate)
Developable Land	176.5
Blue Oaks Boulevard and Phillip Road extensions/widening	6.6
Undevelopable Land	
Pleasant Grove Creek Floodplain and Pleasant Grove Creek Bypass Channel	13.6
Planned Placer Parkway alignment	22.7
Land northwest of the future Placer Parkway	21.6
Total undevelopable land	57.9
Total Site Acreage	241

Source: Provided by Panattoni in 2022.

The only structures identified within the project site are two water wells, one located along the southern edge of the property and one along the eastern edge of the property (ATC 2021).



Source: Data downloaded from City of Roseville and Placer County in 2021.

Figure 3.1-1 Land Use and Zoning

The project site's Assessor's Parcel Number is 017-101-008-000. The existing General Plan land use designation for the project site is Public/Quasi-Public. As discussed above, the Public/Quasi-Public land use designation primarily allows for municipal and governmental facilities. The project site is also zoned as Public/Quasi-Public (P/QP), which establishes areas for municipal, governmental, or public facilities (Figure 3.1-1).

AGRICULTURAL RESOURCES

Farmland Classification

The State of California maps and classifies farmland through the DOC FMMP. Classifications are based on a combination of physical and chemical characteristics of the soil and climate that determine the degree of suitability of the land for crop production. The classifications under the FMMP are as follows:

- Prime Farmland—land that has the best combination of features for the production of agricultural crops;
- Farmland of Statewide Importance—land other than Prime Farmland that has a good combination of physical and chemical features for the production of agricultural crops, but that has more limitations than Prime Farmland, such as greater slopes or less ability to store soil moisture;
- Unique Farmland—land of lesser quality soils used for the production of the state's leading agricultural cash crops;
- Farmland of Local Importance—land of importance to the local agricultural economy;
- Grazing Land—existing vegetation that is suitable for grazing;
- Urban and Built-Up Land—land occupied by structures in density of at least one dwelling unit per 1.5 acres;
- Land Committed to Nonagricultural Use—vacant areas; existing land that has a permanent commitment to development but has an existing land use of agricultural or grazing lands; and
- Other Land—land not included in any other mapping category, common examples of which include low-density rural developments, brush, timber, wetland, and vacant and nonagricultural land surrounded on all sides by urban development.

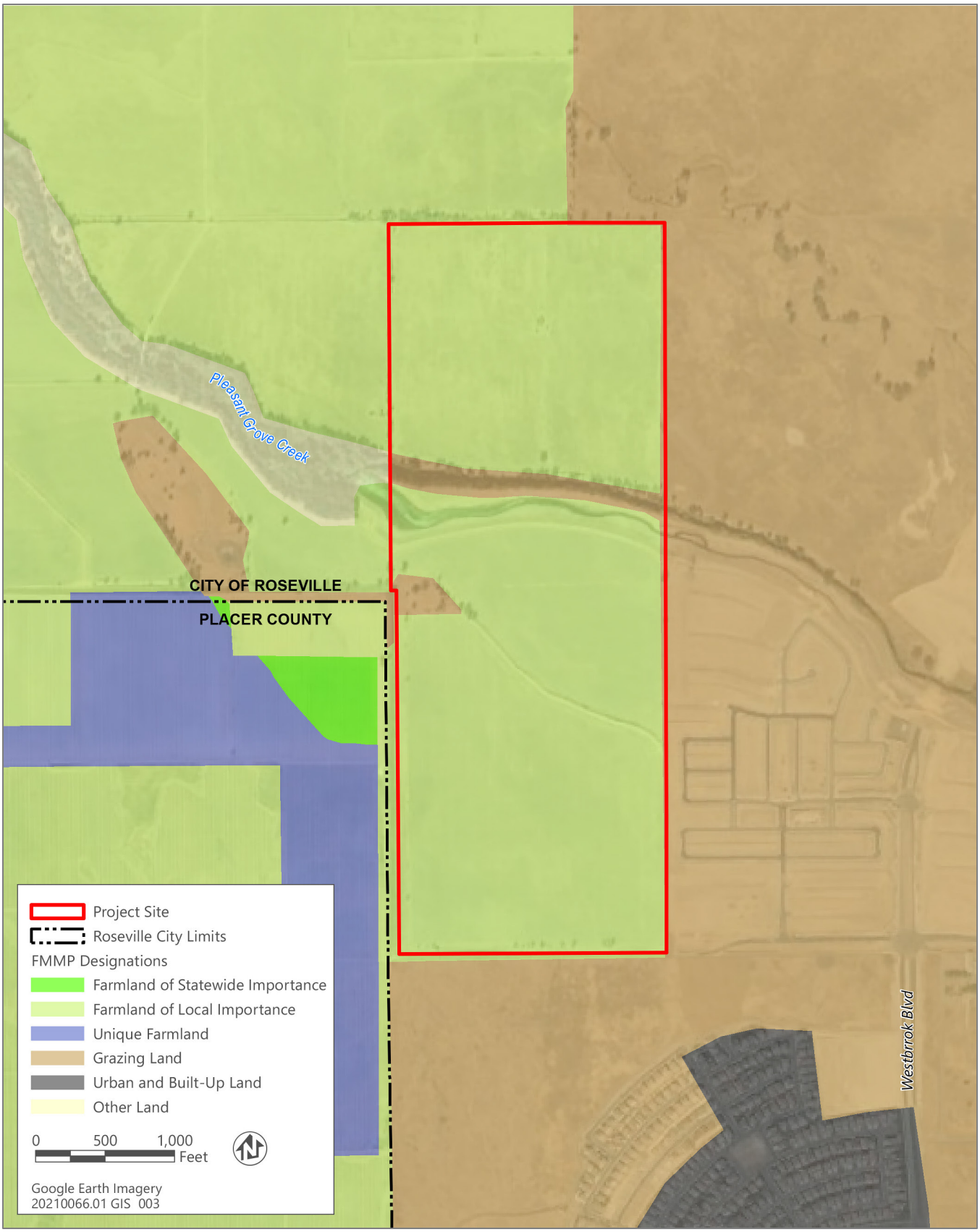
CEQA Section 21095 and CEQA Guidelines Appendix G, together, define Prime, Unique, and Farmland of Statewide Importance as "Farmland," the conversion of which may be considered significant. Local jurisdictions can further consider other classifications of farmland as important and can also use an agricultural land evaluation and site assessment model to determine farmland importance and impacts from conversion.

Existing Farmland

Agricultural lands including row crops, grain crops, orchards, and grassland that support livestock grazing are located in the west and northwest areas of the city and south of the project site. The City of Roseville does not contain any lands under Williamson Act contracts or zoned for agricultural uses (City of Roseville 2020b).

Lands immediately west of the project site are within Placer County and are in active agriculture production. Lands to the west and southwest are designated as Farmland of Local Importance, Unique Farmland, and Farmland of Statewide Importance; and lands to the northwest are designated as Farmland of Local Importance (Figure 3.1-2).

The project site is not currently in agricultural production but has been used historically for agricultural purposes and is currently used for grazing. The parcel was originally planted during the 1950s and was maintained in rice production through the 1990s. The project site is designated by the DOC's FMMP as Farmland of Local Importance, with two small areas designated as grazing land (Figure 3.1-2).



Source: 2018 FMMP data downloaded from DOC in 2021.

Figure 3.1-2 Farmland Designations

3.1.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Land Use

Evaluation of potential land use impacts is based on a review of documents pertaining to the project site, including the *City of Roseville General Plan 2035* (2020a), 2035 *General Plan Update Final Environmental Impact Report* (2020b), and *Draft Environmental Impact Report for the City of Roseville Detention Basin* (City of Roseville 2002a). In determining the level of significance, this analysis assumes that the project would comply with relevant state and local ordinances and regulations related to land use.

Agricultural Resources

To evaluate potential impacts of the proposed project on agricultural resources, the type and degree of agricultural resources that would be lost/converted were considered in relation to FMMP designations of lands within the project site and any policies and programs related to the preservation of agricultural resources.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would have a significant impact related to land use if it would:

- physically divide an established community; or
- 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.

The project would have a significant impact related to agricultural resources if it would:

- 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; or
- involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

ISSUES NOT DISCUSSED FURTHER

The project site is in the northwest corner of the City of Roseville bordering agriculture/open space in Placer County. The project site is located adjacent to the western edge of existing development within the city. The current General Plan land use designation and zoning for the project site are Public/Quasi-Public. The project site is surrounded by existing and planned development to the east (Creekview Specific Plan) and south (West Roseville Specific Plan). Agricultural and open space uses are located to the north and west within Placer County. In addition, a portion of the site would be used for the future alignment of the Placer Parkway, a planned east-west regional thoroughfare. Therefore, no part of the project would create a barrier within the established community and connectivity would be maintained through the site. Because project improvements would generally be limited to the project site (with the exception of off-site utility extensions and roadway improvements), and the project is located at the edge of the existing developed area of the city, the project would not divide an established community. Therefore, there would be no impact, and this issue is not discussed further.

The project site is not subject to a Williamson Act contract (City of Roseville 2020b), nor is it designated or zoned for agricultural use. The project includes a General Plan Amendment (GPA) and rezone of the project site from Public/Quasi-Public to Industrial uses (M1 and M2). Therefore, there would be no impact relative to conflicts with agricultural zoning or Williamson Act contracts and these issues are not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.1-1: Conflict with any Land Use Plan, Policy, or Regulation Adopted for the Purpose of Avoiding or Mitigating an Environmental Effect

The proposed project would require a GPA and rezoning of the project site to allow for a range of industrial uses and open space. With the approval of the GPA, the project would be consistent with the *City of Roseville General Plan*, and with approval of rezoning within the project site, the project would be consistent with the City of Roseville Zoning Ordinance. In addition, the project would not conflict with other land use plans in the project area. This impact would be **less than significant**.

The *City of Roseville General Plan* and City of Roseville Zoning Ordinance are the primary planning documents applicable to the project site. The proposed project requires a GPA and rezone. The proposed GPA would change the land use designation from Public/Quasi-Public, which primarily allows for municipal and governmental facilities to Light Industrial (LI), General Industrial (IND), and Open Space (OS) along Pleasant Grove Creek. Light Industrial allows for uses such as research and development, warehousing, intensive commercial uses (e.g., auto body repair, landscaping material sales, retail, and wholesale lumberyards), and associated administrative offices. General Industrial allows for manufacturing, wholesale distribution, large storage areas, and other industrial uses. The Open Space designation adjacent to Pleasant Grove Creek would allow for natural lands, passive recreation and minor recreation facilities, walking and bike trails, and resource interpretive facilities.

The *City of Roseville General Plan* includes compatibility guidelines for land use designations. While Open Space and Light Industrial are considered compatible with residential uses, General Industrial is not compatible with residential and other sensitive receptors (City of Roseville 2020a). To address this potential incompatibility, a special area overlay (explained below) would be applied to the project site to restrict certain land uses within the Light Industrial and General Industrial designations to provide a transition between the project site and surrounding land uses and ensure overall compatibility of existing and planned land uses. Further, potential impacts of locating industrial uses adjacent to residential uses are addressed throughout this EIR (see Section 3.3, "Transportation and Circulation," Section 3.4, "Air Quality," Section 3.6, "Noise and Vibration," Section 3.9, "Hazardous Materials, Wildfire, and Other Hazards," and Section 3.13 "Aesthetics"). With the approval of the GPA, the project would be consistent with the *City of Roseville General Plan*. In addition, the GPA to allow for OS along Pleasant Grove Creek would be more protective of sensitive environmental resources than the existing land use designation.

Rezoning of the project site would change the zoning from Public/Quasi-Public to industrial uses. M1 zoning with a special area overlay would be applied to the eastern portion of the project site (buildings A, B, C, D, J, K, and N), which allows for light manufacturing, printing and publishing, research, light wholesale and distribution, and similar uses. M2 zoning with a special area overlay would be applied to the western portion of the project site (buildings E, F, G, H, I, L, and M), which allows all industrial uses allowed under the M1/SA zoning, as well as and equipment and materials storage, general industrial, and heavy wholesale and distribution. Some of the uses that would ordinarily be permitted in the M1 and M2 zones (for example, enclosed or unenclosed recycling facilities or hazardous materials handling) will not be allowed per the proposed special area overlay. In addition, the area surrounding Pleasant Grove Creek would be rezoned as Open Space, which allows for agriculture, resource protection and restoration, and resource related recreation. With approval of these rezones, the project would be consistent with the City of Roseville Zoning Ordinance.

Other land use plans that are applicable to the project site include the *Implementation Strategy to Achieve Blueprint Project Objectives,* 2020 MTP/SCS, Placer County LAFCO Commission policies, and City/County MOU. The *Implementation Strategy to Achieve Blueprint Project Objectives* and 2020 MTP/SCS have objectives related to locating

jobs in proximity to housing. The proposed project is expected to generate more than 1,900 jobs in proximity to the Creekview Specific Plan area that is planned to accommodate 2,011 residential units and the West Roseville Specific Plan Area that will include 9,496 residential units. In addition, the *Implementation Strategy* has an objective to incorporate public-use open space within development projects. The proposed project would designate the area surrounding Pleasant Grove Creek as Open Space. The 2020 MTP/SCS includes goals to provide effective connections between people and jobs, which the project would do by being adjacent to residential development and the future Placer Parkway that would provide connectivity between the project site and other areas of the city. The Placer County LAFCO Commission policies encourage orderly growth and development of vacant or underdeveloped land within the existing boundaries of a city. The project site is considered underdeveloped land within the city and is adjacent to existing and planned development. Placer County and the City of Roseville also have a MOU that pertains to lands adjacent to the city's western boundary (MOU Transition Area) including the project site. The MOU requires that projects developed within this area demonstrate that adequate surface water and sewer capacity and infrastructure exists to serve the project and that transportation infrastructure exists to serve the project. Water and sewer demand for the project are addressed in Section 3.11, "Utilities and Service Systems," and transportation impacts of the project are addressed in Section 3.3, "Transportation and Circulation." As discussed in these sections, adequate supply and infrastructure exists to serve the proposed project and/or would be installed as part of the project.

Therefore, with implementation of the GPA and rezoning, the proposed project would be consistent with land use plans, policies, and regulations applicable to the project site. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.1-2: Result in the Conversion of Farmland

The project site has been used historically for agricultural purposes and is designated by the DOC's FMMP as Farmland of Local Importance; it is therefore not considered to be "Farmland" pursuant to CEQA. The conversion of Farmland of Local Importance is not considered a significant impact under Appendix G of the State CEQA Guidelines. Therefore, this impact would be **less than significant**.

The project site has been used historically for agricultural purposes and is designated by the DOC's FMMP as Farmland of Local Importance, with two small areas designated as grazing land (Figure 3.1-2). The proposed GPA would change the land use designation from Public/Quasi-Public, Light Industrial, General Industrial, and Open Space and rezoning of the project site would change the zoning from Public/Quasi-Public to industrial uses and open space. Use of the project site for industrial uses would not result in conversion of Farmland, because the site is not designated by the DOC's FMMP as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. In addition, the project site is not designated or zoned for agricultural purposes and is not currently in agricultural production (though it is used for grazing). Because the conversion of Farmland of Local Importance and grazing land is not considered a significant impact under Appendix G of the State CEQA Guidelines, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

3.2 POPULATION, EMPLOYMENT, AND HOUSING

This section addresses the potential impacts of the proposed Roseville Industrial Park Project with respect to population, employment, and housing in the City of Roseville. Additional analysis of potential growth inducement caused by the project is presented in Section 5.1, "Growth-Inducing Impacts," of this Draft EIR.

No comment letters regarding population, employment, and housing were received in response to the notice of preparation (see Appendix A).

3.2.1 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws related to population, employment, and housing are applicable to the project.

STATE

State law requires each local government in California to adopt a comprehensive, long-term general plan for the physical development of its city or county, and the housing element is one of seven mandated elements of the general plan. Housing elements address the existing and projected housing needs of all economic segments of the community.

State law sets out a process for determining each local jurisdiction's fair share of regional housing needs (e.g., California Government Code section 65584). As a first step in the process, the California Department of Housing and Community Development assigns each regional council of governments a required number of new housing units for that region, including affordable housing. The council of governments (the Sacramento Area Council of Governments [SACOG] in the project area), in turn, allocates the region's share to cities and counties in the region. SACOG is discussed further below as a local agency.

LOCAL

City of Roseville 2035 General Plan

The City of Roseville 2035 General Plan (General Plan) establishes long-range development policies, provides a basis for judging whether private development proposals and public projects are in harmony with the policies, and guides public agencies and private developers in designing projects that are consistent with City policies.

The pace of development within Roseville is influenced by policies and implementing actions of the General Plan. In addition, outside factors influence development and growth within the including global, national, state, and regional economic conditions; federal budget and regulatory actions; state budget allocations, relevant policy direction, and regulatory actions; perceptions about the quality of life in the region; and housing costs, demographic trends, and community character. While it is difficult to accurately predict the amount and pace of long-term development given the influence of outside factors, the City provides estimates for future development to guide goals and policies within the General Plan, which are shown in Table 3.2-1.

With buildout of the General Plan in 2035, Roseville is estimated to have a total population of approximately 198,000, with approximately 75,200 dwelling units, 60 million square feet of non-residential building square footage, and between 120,000 and 150,000 local jobs (City of Roseville 2020).

Table 3.2-1 Existing and Future Development in the City of Roseville

Development Factor	2016	2035
Dwelling Units	52,900	75,200
Population	135,800	198,000
Non-Residential Square Footage	33,000,000	60,000,000
Jobs	82,000	120,000 to 150,000
Jobs to Dwelling Units	1.55	1.6 to 2

Source: City of Roseville 2020.

The City of Roseville General Plan sets guidelines for managing land use change within Roseville (City of Roseville 2020). The Land Use Element contains policies that are intended to promote a beneficial jobs/housing balance. This balance is based on the number of residents that commute, the transportation mode used for that commute, and the commute distance and time required. The relationship between jobs and housing is affected by local employment opportunities, household incomes, housing prices, and non-residential lease rates and land costs. The following policies are applicable to the project:

Community Form: Jobs/Housing and Economic Development

- **Policy LU5.1** Implement a land use mix and pattern of development that provides linkages between residents' jobs and local employment-generating uses, facilitates a match between the number and type of local jobs and the local labor force, and maintains the fiscal viability of the City.
- **Policy LU5.6** Maintain land use patterns, intensities, and densities that ensure an adequate supply of land for office, commercial, industrial, and other employment-generating development.
- **Policy LU5.7** Support activities that attract employment uses to the City, as identified in the Economic Development Strategy.

Growth Management - General

- **Policy LU8.4** The City shall accommodate projected population and employment growth in areas where the appropriate level of public infrastructure and services are planned or will be made available concurrent with development.
- **Policy LU8.6** The City shall oppose urban density residential, commercial, or industrial development in unincorporated areas unless adequate public facilities and services can be provided and mechanisms to ensure their availability and provision are secured during the land use entitlement process. It is the City's preference that urban development occur within incorporated areas.

City of Roseville 2021 Housing Element

The City of Roseville 2021 General Plan Housing Element (Housing Element) identifies and analyzes existing and projected housing needs within Roseville to preserve, improve, and develop housing for all economic segments of the community (City of Roseville 2021). The Housing Element also includes goals for long-term development of housing in Roseville. There are no housing policies that are applicable to the project.

Regional Housing Needs

As stated above, SACOG prepares the Regional Housing Needs Plan (RHNP) for the Sacramento region to determine potential locations for future housing stock based on projected population growth, employment trends, and development suitability. The RHNP allocates to SACOG cities and counties their "fair share" of the region's projected housing needs. The City of Roseville's published Regional Housing Needs Allocations (RHNA) for the planning period (2021 through 2029) projected a need for the construction of an additional 12,066 housing units, allocated as follows: 3,855 very low-income units, 2,323 low-income units, 1,746 moderate income units, and 4,142 above moderate-income units (SACOG 2020: ES-3).

City of Roseville 2017-2022 Economic Development Strategy

The City of Roseville 2017-2022 Economic Development Strategy (Economic Development Strategy) is a five-year plan that outlines a framework for economic growth within Roseville (City of Roseville 2017). The Economic Development Strategy establishes goals and strategies for capturing and expanding business investment and focuses on partnerships, sharing resources, and building on competitive advantages. Specifically, Strategy 1.1 Business Attraction aims to "Increase Roseville's competitiveness for new businesses and those seeking to relocate. Focus on companies that create quality jobs, strengthen high value industries, support existing businesses, fill vacant tenant spaces, and provide support that the community values."

3.2.2 Environmental Setting

POPULATION

Population and Population Growth

The project is located in the City of Roseville, which is the largest city within Placer County. The California Department of Finance (DOF) estimates the City's current population to be 146,875 (DOF 2021). Table 3.2-2 illustrates the City's increase in population over the past 20 years using data from the US Census. Between 2000 and 2010, the City's population increased significantly (49 percent). Population growth continued to increase at a slower pace between 2010 and 2019, following the 2008 housing crisis during which time Roseville experienced a substantial slowdown in residential development. Between 2010 and 2019, the population continued to grow, but at a slower rate (19 percent).

While growth was slower between 2010 and 2019, Roseville has experienced a generally steady population growth in the past two decades, which can be attributed to a strong economy and development in the City's specific plan areas (City of Roseville 2020). While the project site is not within a specific plan, immediately to the east is the Creekview Specific Plan area, and to the south, along the southern edge of the project site, is the West Roseville Specific Plan area.

Table 3.2-2 City of Roseville Population Growth (2000-2019)

Year	Population
2000	80,092
2010	119,335
2019	141,492
Population Growth	
Year	**Population change (%)**
2000 - 2010	49
2010 - 2019	19

Sources: US Census 2000, 2010, 2019.

Planned Population Density

Development in accordance with the General Plan would result in a population density that is expected to be distributed in a relatively even manner throughout the City's planning area. With buildout of the General Plan, the population is estimated to be 198,000 (City of Roseville 2020: II-23), an increase of 62,200 from the 2016 population of 135,800.

HOUSING

Household Composition

A household refers to the people occupying a home, such as a family, single person, or unrelated people living together. Family households often prefer single-family homes or condominiums to accommodate children, while non-family households generally occupy smaller apartments or condominiums (US Census 2019).

Table 3.2-3 lists the composition of households within Roseville in 2010 and 2019, categorized into families with no children or children over 18; families with children under 18; and non-family households. Family households comprised a majority of the households within Roseville in both 2010 and 2019.

Table 3.2-3 Household Composition in the City of Roseville (2010-2019)

Household Composition	2010		2019	
	Number	Percentage	Number	Percentage
Families with no children or children over 18	13,180	29.9	20,066	37.8
Families with children under 18	16,177	36.7	17,677	33.3
Non-family	14,722	33.4	15,350	28.9
Total households	**44,079**	**100**	**53,093**	**100**

Source: US Census 2019.

Household Size

Over the past decade, household sizes within Roseville have remained similar. Table 3.2-4 shows the breakdown of household sizes within Roseville in 2010 and 2019. Households containing two people are the most prevalent household size comprising 35.2 percent of all households within Roseville in 2019, which is an increase of 1.3 percent from the 2010 percentage of 33.9. Three-person households increased by 3.7 percent between 2010 and 2019, while four-person households decreased by 2.8 percent during that same period (US Census 2010, 2019).

Table 3.2-4 Household Size in the City of Roseville (2010-2019)

Household size	2010	2019
	Percentage	Percentage
1-Person household	24.6	23.6
2-Person household	33.9	35.2
3-Person household	12.2	15.9
4-or-More person household	29.2	25.4

Sources: US Census 2010, 2019.

Overcrowded Housing

The US Census defines overcrowding as more than one person per room for physical health, mental health, and personal safety (US Census 2007). The Census includes living rooms, dining rooms, bedrooms, kitchens, finished attics and basements, recreation and family rooms, permanently enclosed porches, and rooms used for offices in the definition of a "room." Within the City, 1.8 percent of occupied housing units contained more than one occupant per room in 2019, which is a decrease 2010, when 2.9 percent of occupied housing units contained more than one occupant per room (US Census 2010, 2019).

Housing Occupancy

Housing occupancy generally increased within Roseville from 2010 to 2019. As shown in Table 3.2-5, the number and percentage of occupied housing units increased in 2019 compared to 2010. The homeowner and rental vacancy rate both decreased during this time period as well.

Table 3.2-5 Housing Occupancy in the City of Roseville (2010-2019)

Household size	2010		2019	
	Number	Percentage	Number	Percentage
Occupied housing units	44,079	91.2	53,093	94.0
Vacant housing units	4,253	8.8	3,401	6.0
Homeowner vacancy rate	3.7	—	0.0	—
Rental vacancy rate	9.4	—	6.7	—

Sources: US Census 2010, 2019.

Housing Unit Types

The majority of housing in Roseville is single-family housing. As shown in Table 3.2-6, the percentage of single-family housing increased by 3.5 from 2010 to 2019. Multi-family housing comprises approximately 21.3 percent of housing units within Roseville, which is a decrease from 2010 when 25.5 percent of housing units were multi-family. Alternative housing types including boats, recreational vehicles (RVs), and vans make up a small portion (0.5 percent) of the housing unit type within Roseville, which is an increase from 2010 when no alternative housing types were recorded.

Table 3.2-6 Housing Inventory Trends by Unit Type in the City of Roseville (2010-2019)

Housing unit type	2010		2019	
	Number	Percentage	Number	Percentage
1-unit, detached	34,449	71.3	41,674	73.8
1-unit, attached	1,110	2.3	1,867	3.3
2 units	147	0.3	235	0.4
3 or 4 units	3,010	6.2	2,004	3.5
5 to 9 units	4,175	8.6	3,065	5.4
10 to 19 units	1,639	3.4	2,869	5.1
20 or more units	3,387	7.0	3,911	6.9
Mobile home	415	0.9	588	1.0
Boat, RV, van, etc.	0	0.0	281	0.5
Total Housing Units	48,332		56,494	

Sources: US Census 2010, 2019.

Jobs/Housing Balance

The jobs/housing balance is defined as the ratio of the number of jobs to the number of housing units in an area. Jobs and housing are balanced when there are an equal number of employed residents and jobs in an area, with a ratio of approximately 1.0. The relationship between jobs and housing is affected by local employment opportunities, household incomes, housing prices, and non-residential lease rates and land costs. The Land Use Element of the General Plan also outlines policies to guide the jobs/housing balance within the City, as described above. The jobs to dwelling units ratio is 1.55 and is estimated to increase to 1.6 to 2.0 with buildout of the General Plan in 2035 (City of Roseville 2020).

EMPLOYMENT

Unemployment Rate

As shown in Table 3.2-7, the unemployment rate within Roseville decreased from 11.3 percent to 3.4 percent between 2010 and 2019. This unemployment pattern mirrored the state's unemployment rate drop from 12.8 percent to 5.1 percent.

However, in 2020, the Coronavirus Disease 2019 (COVID-19) pandemic began and affected labor market metrics for every state, economic sector, and major demographic group in the United States (CRS 2021). In April 2020, when

unemployment rates were at their highest, California was ranked as the state with the second highest unemployment rate at 8.3 percent. During this time, the City's unemployment rate was higher than the state's average at 13.3 percent. By June 2021, employment rates dropped to 5.5 within Roseville and 7.7 percent overall within the state (Bureau of Labor Statistics 2021a, 2021b).

Table 3.2-7 Unemployment Rates in the City of Roseville and California (2010-2021)

Year	California				City of Roseville			
	2010	2019	2020	2021	2010	2019	2020	2021
Unemployment Rate (%)	12.8	5.1	8.3	7.7	11.3	3.4	13.3	5.5

Sources: US Census 2010, 2019; CRS 2021; Bureau of Labor Statistics 2021a, 2021b.

Employment by Industry

As shown in Table 3.2-8, the health care and social assistance industry employs the most individuals (16.7 percent) within Roseville in 2019. The other main industries in the City include manufacturing (6.1 percent); retail trade (12.1 percent); finance and insurance (7.1 percent); and professional, scientific, and technical services (9.4 percent).

Between 2010 and 2019, employment ratios remained fairly similar across industries even though the total workforce increased by 17,313 individuals. Public administration jobs increased the most (3 percent) between 2010 and 2019; followed by health care and social assistance jobs (2.5 percent); and professional, scientific, and technical services jobs (2.3 percent).

Table 3.2-8 Employment by Industry in the City of Roseville (2010-2019)

Industry	2010		2019	
	Number	Percent	Number	Percent
Agriculture, forestry, fishing and hunting	0	0.0	91	0.1
Mining, quarrying, and oil and gas extraction	0	0.0	57	0.1
Construction	2,716	5.1	2,288	3.2
Manufacturing	3,690	6.9	4,333	6.1
Wholesale trade	1,131	2.1	2,459	3.5
Retail trade	7,109	13.2	8,570	12.1
Transportation and warehousing	2,608	4.9	2,163	3.0
Information	498	0.9	1,286	1.8
Utilities	1,589	3.0	974	1.4
Finance and insurance	4,357	8.1	5,057	7.1
Real estate and rental and leasing	1,575	2.9	2,929	4.1
Professional, scientific, and technical services	3,805	7.1	6,709	9.4
Management of companies and enterprises	0	0.0	249	0.4
Administrative and support and waste management services	2,375	4.4	2,288	3.2
Educational services	5,065	9.4	4,762	6.7
Health care and social assistance	7,637	14.2	11,855	16.7
Arts, entertainment, and recreation	951	1.8	1,281	1.8
Accommodation and food services	2,987	5.6	3,693	5.2
Other services, except public administration	2,730	5.1	4,056	5.7
Public administration	2,914	5.4	5,950	8.4
Total workforce [1]	**53,737**	**100**	**71,050**	**100**

[1] The total workforce is composed of the civilian employed population 16 years and over.

Sources: US Census 2010, 2019.

3.2.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

The population, employment, and housing analysis relies on technical data from the 2010 Census, 2010–2019 American Community Survey (e.g., population, housing, growth rates, and income levels), and the General Demographic Data Characteristics, as well as applicable elements and policies from the City of Roseville General Plan.

The analysis focuses on the population growth expected from buildout of the proposed project. The calculation of new employment opportunities generated by the project is based on applying commonly used rates of the number of employees per square foot of development. Employee generation rates vary based on the type of uses. For example, retail uses would be expected to have more employees per square foot than warehouse uses. Thus, a general industry average of 1 employee per 1,250 square feet of development, is used in this analysis (as described in Chapter 2, "Project Description". At full buildout, it is assumed that there would be 1,600 employees in the south parcel and 338 employees in the north parcel, for a total of 1,938 employees.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to population, employment, and housing if it would:

- induce substantial unplanned 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 homes, necessitating the construction of replacement housing elsewhere.

ISSUES NOT DISCUSSED FURTHER

The project would not remove any existing housing and would not displace any people or housing. The project would be located on approximately 241 acres of undeveloped grazing land owned by the City. No housing is present on the project site and, thus, none would be displaced with implementation of the project. Therefore, the project would not displace existing people or homes, requiring the construction of replacement housing elsewhere. This issue is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.2-1: Potential to Induce Substantial Unplanned Population Growth

The project involves the development of an industrial park with a range of uses, including light manufacturing, warehousing, and distribution. Construction and operation of the project would generate temporary and permanent jobs that could induce population growth. Existing construction personnel in the region would be sufficient to meet demand associated with the project (up to 125 workers); therefore, this temporary increase in employment is not expected to generate substantial new population growth in the area. Operation of the project would generate jobs for 1,938 workers, which is approximately 30 percent of the total 6,496 workers employed in the manufacturing, transportation, and warehousing industries within Roseville. Given the existing number of workers within Roseville, the future buildout of adjacent specific plan areas, and current unemployment rates, the project's potential to contribute directly to unplanned population growth during operation would be minimal.

The project would require the extension of existing and development of new infrastructure; however, off-site infrastructure improvements would serve the project's utility requirements, and would not substantially create opportunities for other development in a way that could induce substantial population growth. For these reasons, the project would have a **less-than-significant** impact related to unplanned population growth.

While the project would not directly induce population growth through the construction of new homes, the project would develop an industrial park for light manufacturing, warehousing, and distribution businesses, which could lead to direct population growth. Project construction would require 75 to 125 construction workers during peak construction, and at full operational buildout, approximately 1,938 permanent jobs would be generated. The creation of jobs during construction and operation of the project could directly induce unplanned population growth in the area if the local workforce could not support the employment need of the project.

As shown in Table 3.2-8, Roseville had 2,288 people employed in the construction industry as of 2019. This would be sufficient to meet the demand for construction workers that would be generated by the project. Therefore, construction of the project would not contribute to substantial population growth.

Within the City, there are approximately 6,496 workers employed in the manufacturing, transportation, and warehousing industries. At buildout, the project would employ 1,938 workers, which is approximately 30 percent of the total manufacturing, transportation, and warehousing workers employed in Roseville in 2019 (Table 3.2-8). Immediately to the east of the project site is the Creekview Specific Plan area, which is planned to accommodate 2,011 residential units at buildout. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area, which is 60 percent built out, and will include 9,496 residential units. To the northwest, south of West Sunset Boulevard and approximately 1.5 miles west of Fiddyment Road, is the Amoruso Ranch Specific Plan area, which is in the early stages of buildout (as of October 2021) and will include 2,827 residential units. It is not possible at this time to predict the residential location of future employees of the project. It is possible that the jobs generated by the project could draw employees from outside of Roseville. However, given the existing number of workers within Roseville and the future buildout of the Creekview and West Roseville Specific Plans as well as other specific plan areas within the City, the project would not contribute to substantial unplanned population growth.

Furthermore, the COVID-19 pandemic significantly increased the unemployment rate from 3.4 percent in 2019 to 13.3 percent in 2020 (Table 3.2-7). While the unemployment rate has recovered substantially in 2021 (5.5 percent), the unemployment rate is still higher compared to the pre-pandemic unemployment rate of 3.4 percent in 2019. The project would create substantial and permanent employment opportunities for residents of Roseville and surrounding areas, which would aid in the recovery of the City's job market. It is anticipated that the project would likely draw largely from the local employment pool, including the unemployed. As a result, the employment opportunities provided by the project would not result in a large number of employees relocating from areas outside of the region and, therefore, would not result in substantial population growth.

The project would require the extension of existing and development of new infrastructure. Off-site improvements would include the extension of Blue Oaks Boulevard along the southern frontage of the project. Blue Oaks Boulevard would be constructed in phases, as described in Chapter 2, "Project Description." Ultimately, Blue Oaks Boulevard will consist of six travel lanes, with bike lanes on each side, a median, curb and gutter, and detached sidewalk on both sides of the road. Extending and widening Blue Oaks Boulevard was identified as a capital improvement project in the City's 2035 General Plan Update EIR. Improvements would also be made to Phillip Road along the western frontage of the project. Phillip Road will be improved with two lanes, turning lanes, bike lanes, curb and gutter, and sidewalks.

Water, recycled water, wastewater, stormwater, and electrical infrastructure would also be extended to support operation of the project. The project includes construction of an electrical substation to provide the additional 15 MW of power needed for the project. The off-site infrastructure improvements would be sized to serve the project's transportation, circulation, and utility requirements, and would not be sized to support future development beyond the project. Therefore, the project would not substantially create opportunities for other development in a way that could induce substantial population growth.

As described above, population growth by itself is not considered a significant environmental impact and direct impacts associated with development needed to accommodate increased population are evaluated in appropriate sections in this EIR (e.g., Section 3.3, "Traffic and Transportation"; Section 3.7, "Biological Resources"; Section 3.10, "Public Services"; Section 3.11, "Utilities and Service Systems"). For these reasons, the project would not directly or indirectly induce substantial unplanned population growth within the region; therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

3.3 TRANSPORTATION AND CIRCULATION

This section identifies applicable regulatory requirements and describes the existing transportation system in the vicinity of the project site. Additionally, impacts related to the generation of vehicle miles traveled (VMT); bicycle, pedestrian, and transit facilities; transportation hazards; emergency access; and temporary construction resulting from implementation of the project are evaluated. Impacts are evaluated under near-term (present-day) conditions with and without the project, and cumulative (year 2035) conditions with the project. Mitigation measures are recommended as necessary to reduce significant transportation impacts.

As discussed in additional detail below under Section 3.3.1, "Regulatory Setting," pursuant to Senate Bill (SB) 743, Public Resources Code (PRC) Section 21099, and California Code of Regulations (CCR) Section 15064.3, generally, VMT has replaced congestion as the metric for determining transportation impacts under CEQA. Section 15064.3 of the CEQA Guidelines provides that VMT is the "most appropriate measure of transportation impacts" and mandates analysis of VMT impacts effective July 1, 2020. A project's effect on automobile delay is no longer a consideration when identifying a significant impact; therefore, the impact of the project on delay-based traffic operations is not addressed in this Draft EIR. However, outside of the CEQA process, the City has investigated how continued development in the project vicinity could influence the need for infrastructure improvements.

Several agencies and organizations issued comment letters on the notice of preparation (NOP) for this EIR. Specifically, the California Department of Transportation (Caltrans) submitted a comment letter requesting trip generation estimation, a VMT analysis, and a safety investigation of conditions at the State Route (SR) 65 freeway on/off ramps at Blue Oaks Boulevard. No other NOP letters contained comments pertaining to transportation and circulation.

3.3.1 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws related to transportation and circulation are applicable to the project.

STATE

The State of California has enacted several pieces of legislation that outline the state's commitment to encourage land use and transportation planning decisions and investments that reduce VMT and contribute to reductions in greenhouse gas (GHG) emissions in line with state climate goals. The legislation with applicability to the analysis of the project includes:

- Assembly Bill (AB) 32 (2006),
- SB 375 (2008), and
- SB 743 (2013).

Senate Bill 743

SB 743, passed in 2013, required the California Governor's Office of Planning and Research (OPR) to develop new guidelines that address transportation metrics under CEQA. Enacted as part of SB 743 (2013), PRC section 21099, subdivision (b)(1), directed the OPR to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

Subdivision (b)(2) of PRC section 21099 further provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to [CEQA], except in locations specifically identified in the guidelines, if any." (emphasis added)

OPR published its proposal for the comprehensive updates to the CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to SB 743. The updated CEQA Guidelines were adopted on December 28, 2018; and according to the new CEQA Guidelines Section 15064.3, VMT replaced congestion as the metric for determining transportation impacts. The guidelines state that "lead agencies may elect to be governed by these provisions of this section immediately. Beginning July 1, 2020, the provisions of this section shall apply statewide."

To provide guidance to agencies implementing the new CEQA requirements, OPR published the Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) in December 2018 (OPR 2018). The Technical Advisory describes considerations agencies may use in selecting VMT metrics, calculation methodologies, and significance thresholds. The Technical Advisory does not mandate the use of specific metrics, methodologies or significance thresholds, because agencies have discretion to select those that are appropriate for the local land use and transportation context.

VMT-Focused Transportation Impact Study Guide

On May 20, 2020, the VMT-Focused Transportation Impact Study Guide (TISG) was adopted by Caltrans (2020a). The TISG provides guidance on how Caltrans will review land use projects, with focus on VMT analysis and supporting state land use goals, state planning priorities, and GHG emission reduction goals; as well as identifying land use projects' possible transportation impacts to the State Highway System and potential non-capacity increasing mitigation measures.

The TISG emphasizes that VMT analysis is Caltrans' primary review focus and references the OPR Technical Advisory as a basis for the guidance in the TISG. Notably, the TISG recommends the use of the recommended thresholds in the Technical Advisory for land use projects. The TISG also references the Technical Advisory for screening thresholds that would identify projects and areas presumed to have a less-than-significant transportation impact. Caltrans supports streamlining for projects that meet these screening thresholds because they help achieve VMT reduction and mode shift goals.

Interim Land Development and Intergovernmental Review Safety Review Practitioners Guidance

In December 2020, Caltrans released the *Interim Land Development and Intergovernmental Review Safety Review Practitioners Guidance* (2020b). The purpose of the guidance is to provide instructions for conducting safety impact analysis for proposed land use projects and plans in compliance with CEQA. The guidance is focused on potential safety impacts affecting the State Highway System and sets expectations for Caltrans staff and lead agencies about what information and factors to consider in safety impact analysis. Caltrans recommends lead agencies use a similar approach, specifically local roadway safety plans (LRSPs) and Systemic Safety Analysis Reports (SSARs), as a model for safety analysis of the local transportation network. This guidance supports implementation of SB 743 and complements the current TISG. The new guidance has two main parts:

- Reactive: a review by Caltrans of its safety monitoring program data to see what known safety issues may be affected by the project; and
- Systemic: a review of LRSPs, SSARPs, and other available plans and assessments to see what safety patterns and improvements may be applicable to Caltrans facilities in the study area.

Four Pillars of Traffic Safety

The Caltrans 2020–2024 Strategic Plan lists "Safety First" as its top goal through 2024 (Caltrans 2021). The 2020 Caltrans Annual Accomplishments Report describes the Four Pillars of Traffic Safety, which will help guide the department toward the ultimate goal of zero deaths or severe injuries on California roads by 2050. The Four Pillars of Traffic Study are:

1. Double Down on What Works
2. Accelerate Advanced Technology
3. Lead Safety Culture Change
4. Integrate Equity

Each of these pillars, including their applicability to the project, are described later in this section.

REGIONAL

Sacramento Area Council of Governments

The Sacramento Area Council of Governments (SACOG) is the metropolitan planning organization (MPO) governing the six-county Sacramento region consisting of El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba Counties and their 22 cities. SACOG is responsible for the preparation of, and updates to, the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) and the associated Metropolitan Transportation Improvement Program (MTIP) for the six-county region. Adopted in November 2019, the SACOG 2020 MTP/SCS provides a 20-year transportation vision and corresponding list of transportation projects. The MTIP identifies short-term projects (i.e., projects with a 7-year horizon) in more detail.

The SACOG 2020 MTP/SCS provides the basis for air quality conformity findings related to the national Clean Air Act and determinations of whether the region is complying with GHG reduction targets for automobiles and light trucks established under SB 375. Major projects that are inconsistent with the 2020 MTP/SCS could jeopardize the plan's effectiveness for air pollution and GHG reduction. Consequently, consistency with the MTP/SCS is a potential basis for determining adverse impacts related to these environmental topics.

The SACOG 2020 MTP/SCS acknowledges the following:

> A more compact land development pattern and providing alternatives to driving alone are critical strategies for reducing the amount of driving we do in our daily lives. Location within the region is likely the most important variable in determining how much time people spend in their vehicles. Communities within existing urban areas, and with a mix and density of uses, tend to produce less VMT per resident than places that are farther away and spread out. These "lower VMT" areas also tend to have the density and mix of uses to support better transit service and are friendlier to biking and walking for some trips. (SACOG 2019)

LOCAL

City of Roseville 2035 General Plan

The following policies from the *City of Roseville 2035 General Plan* (2020) are applicable to the project.

- **Policy CIRC1.4:** Maintain a system of truck routes to provide for the safe and efficient movement of goods and to avoid impacting residential neighborhoods.
- **Policy CIRC3.1:** Promote transit service that is convenient, cost-effective, and responsive to the challenges and opportunities of serving Roseville and surrounding communities, and explore opportunities for transit innovation and service improvements.
- **Policy CIRC3.5:** Consider access to health care, community services and employment, and the needs of persons who may be transit-dependent when making decisions regarding transit service.

- **Policy CIRC3.7:** Pursue transit routes that optimize ridership.
- **Policy CIRC4.1:** The City will review and condition projects as appropriate, to reduce travel demand per capita and per employee by promoting increased density near transit, improving the quality of non-vehicular transportation options, providing incentives for non-vehicular travel, encouraging the mixing of complementary land uses in proximity to one another, and using other feasible methods.
- **Policy CIRC4.3:** Specific Plan Amendments and land use development projects not included in a Specific Plan shall be evaluated for consistency with the City's VMT Impact Standards.
- **Policy CIRC4.4:** If the evaluation required by CIRC4.3 finds a Specific Plan Amendment or land use development project not included in an adopted Specific Plan is inconsistent with thresholds established within the City's VMT Impact Standards, on-site land use, transportation, and urban design-related VMT-reducing features should be prioritized to demonstrate consistency. If feasible on-site features cannot achieve the VMT threshold, Specific Plan Amendments and land use development projects outside Specific Plan Areas may demonstrate equivalent consistency through off-site actions or fair-share fee contributions, or if consistency cannot be achieved, shall implement all feasible measures.
- **Policy CIRC5.1:** Develop a comprehensive and safe system of recreational and commuter bicycle routes and trails that provides connections between the City's major destinations (including employment) and housing areas and between its existing and planned bikeways.
- **Policy CIRC6.1:** Establish and maintain a safe and continuous pedestrian network that provides connections between residential areas and commercial retail and services, employment, public services, parks, and public transit.
- **Policy CIRC6.3:** Enhance pedestrian-friendly street environments and design public spaces and destinations in a way that encourages walking.
- **Policy CIRC6.4:** Sidewalks shall be required in all new Specific Plan Areas, with new roadway construction, and with roadway expansion.
- **Policy CIRC6.5:** In reviewing proposed development projects and implementing public projects, the City will incorporate standards designed to protect the security of pedestrians and minimize the potential for collisions involving pedestrians.

Transportation Systems Management Ordinance

The City has a Transportation Systems Management (TSM) program, the purpose of which is to develop an integrated and cooperative approach between the City and the business community to promote alternative transportation options, reduce traffic congestion, and improve air quality in the Roseville area. The TSM program applies to businesses or common work locations (such as office building/complex, commercial/retail center, or industrial building/park) with 50 or more employees. The City's TSM requirements are located in Chapter 11.33 of the Roseville Municipal Code.

The goals and intent of the TSM program are to:

- Reduce total vehicle emissions in the City by reducing the number of vehicular trips that might otherwise be generated by home-to-work commuting.
- Reduce peak-hour traffic circulation in the City by reducing both the number of vehicular trips and the vehicular miles traveled that might otherwise be generated by home-to-work commuting by a minimum of 20%.
- Increase the efficiency of the existing transportation network in the City.
- Promote an integrated and cooperative approach between the City and the business community to promote alternative transportation opportunities and improve the air quality in Roseville.
- Cooperate and coordinate with other cities, counties, communities, and regional agencies in these endeavors.

Typical measures included in a TSM include the provision of bicycle lockers and on-site showering facilities, workplace ride-share programs, and employee education and incentive programs to use alternative transportation.

Traffic Impact Fee Programs

The City currently participates in four traffic mitigation fee programs to fund capital projects in Roseville and south Placer County. Within the City, traffic impact fees are used to fund improvements contained in the Capital Improvement Program (CIP). The funding for those improvements is nexus-based and is designed to fund improvements. The fee structure considers both the number and length of trips generated by new land developments. And as such, it is considered a type of VMT-based fee program. The traffic mitigation fees are collected by the participating agencies at building permit issuance. The payment of Roseville impact fees in lieu of improvements has been determined to be acceptable mitigation for transportation impacts caused by a project.

City of Roseville Bicycle Master Plan

The *City of Roseville Bicycle Master Plan* (2008) includes the following policies that are relevant to the project:

- Support facilities that encourage bicycling should, to the extent feasible, be made a standard component of all new public and private projects.
- Provide short-term bike parking (bike racks) conveniently located at businesses entrances and safe, secure long-term covered bike parking (lockers, cages, rooms) at employment sites.
- Where construction operations occur near Class II or III bikeways, the developer/ contractor will be responsible for maintaining clear and clean paths of travel.
- Street maintenance overlay projects and other construction projects within the public right-of-way and along designated bikeways shall be reviewed for conformance with the Bicycle Master Plan. Where existing facilities are not in conformance with the Bicycle Master Plan and current City standards, the facilities may be brought up to standards where determined feasible by the Public Works Director/City Engineer.

City of Roseville Pedestrian Master Plan

The *City of Roseville Pedestrian Master Plan* (2011a) was adopted by the City Council to establish policies, projects, and programs that improve the pedestrian system in Roseville and increase walking for transportation, recreation, and health. The Pedestrian Master Plan includes goals, policies, and implementation measures for pedestrian improvements and programs; a recommended pedestrian network; and a Capital Improvements Program (CIP) that establishes a 20-year framework for improvements to the pedestrian environment. The Pedestrian Master Plan includes the following policies that are relevant to the project:

- Provide continuous and direct pedestrian connections between residential areas, schools, shopping areas, public services, employment centers, parks, and public transit stops.
- Include sidewalks in the planning and design of all new, reconstructed or widened streets. Sidewalks should be installed on both sides of the street, unless circumstances call for an exception.
- Sidewalks and street crossings should provide access for all people, regardless of physical abilities, consistent with the Americans with Disabilities Act (ADA) and ADA Transition Plan.

City of Roseville Final Short-Range Transit Plan 2018–2025

The *City of Roseville Final Short-Range Transit Plan (SRTP) 2018-2025* (LSC 2018) provides a detailed business plan to guide transit improvements in the City. The plan reviews demographics and transit needs, evaluates effectiveness and efficiency of existing services, analyzes a wide range of system options, and provides operational, capital and institutional plans, including an implementation plan. The City's plan was prepared jointly with the development of parallel SRTPs for Placer County Transit, Auburn Transit, and the Western Placer Consolidated Transit Service Agency. The plan acknowledges there are many large development projects in West Roseville that could increase transit demand in the area by 2025. To this end, Figure 25 of the SRTP shows three concept bus routes that would operate on Blue Oaks Boulevard, Pleasant Grove Boulevard, or Vista Grande Boulevard west of Fiddyment Road.

The SRTP recommends a detailed transit master planning process for West Roseville. As noted on page 170 of the SRTP, "While general land uses and policies have been defined for these areas (including the need for transit services and the provision of funding strategies for transit), specific routes, stops and schedules will depend on more detailed planning to be developed over the next several years. Once this detail is available, transit master planning for these areas should be conducted. An additional route into the area along the Blue Oaks Boulevard corridor (as discussed in Chapter 8) will ultimately be warranted."

City of Roseville Design and Construction Standards

The *2021 Amendments to City of Roseville Design and Construction Standards* (City of Roseville 2021a) includes an updated Section 4 related to how to conduct VMT studies. The following guidance and recommendations are contained in that document (City of Roseville 2021a: TS16 through TS22):

- A project may be screened from additional VMT analysis if it meets any of nine distinct screening criteria. Given the project's size and location, and use type, the two screening criteria listed below are potentially applicable:

    1. Within the Scope of Prior CEQA Analysis – This screening applies if the VMT generated by the project is within the scope of a prior California Environmental. Prior analysis includes the analysis performed for the General Plan Update in 2020.

        Project Evaluation: The project was not considered in the 2035 land use dataset for the General Plan Update. Therefore, this screening criteria would not apply.

    2. Development in Low VMT Areas – This screening applies if the project is within a low VMT area of the City and comprised of land use consistent with existing land use in the area. This condition may be demonstrated by providing evidence of this conclusion via demonstration that the project will be located in a traffic analysis zone in the Roseville travel forecasting model which has VMT performance that meets the qualitative thresholds described in Section 4-10 below.

        Project Evaluation: This screening criterion would not apply because no land development was previously assumed for this site in the General Plan update. Accordingly, detailed VMT analysis is necessary.

- A quantitative study of VMT analysis is generally required if the project does not meet any of the conditions for screening. For non-residential projects, analysis should be based on VMT per service population, where service population consists of the total number of residents and employees. The service population methodology includes home-based production VMT and VMT from all other sources, including trips attracted from homes outside of the area into the area for work, shopping, or other purposes and trips with neither end at the home (such as from work to shopping). VMT is based on the full length of each trip, including distance outside of the City. VMT estimates are to be produced using the City of Roseville travel demand model.
- An alternative metric (e.g., VMT/employee) may be applied if it relies on the data and analysis of the current citywide VMT analysis and is reviewed and approved by the City.
- Factors to convert Roseville travel forecasting model inputs (i.e., square footage) to employment (as used in development of the General Plan) are as follows:
    - Industrial: One employee per thousand square feet (KSF)
- The analysis conducted for VMT studies shall be documented in a report for review by the City, with supporting tables and figures. It shall be the intent of the VMT study to evaluate the reasonable worst-case impacts for the proposed development allowed by zoning unless a specific use/user is identified by the applicant.
- A project would have a significant impact if it exceeded a threshold of which is 15 percent below existing Citywide development VMT (baseline VMT per service population for non-residential projects).
- If a proposed project can be shown to result in a net overall decrease in total City VMT when compared to baseline VMT, the project would lead to a less-than-significant transportation impact.

- If screening is not used, explanation should be provided on how VMT was calculated. This should include a description of metrics, models and tools, inputs for the analysis, and thresholds used.
- If it is concluded that the project would exceed the significance threshold, a list of feasible mitigation measures which would either reduce impacts to below the threshold, or reduce impacts to the extent feasible shall be provided, beginning with on-site measures. The VMT-reducing effects of each measure shall be quantified to the extent feasible.

The City of Roseville is in the process of developing its LRSP. However, that plan remains in development at this time and is therefore not referenced or utilized in this Draft EIR.

3.3.2 Environmental Setting

This section describes the existing environmental setting, which is the baseline scenario upon which project-specific impacts are evaluated. The baseline for this study represents conditions in July 2021, the release date of the project's NOP that an EIR was to be prepared. The environmental setting for transportation includes baseline descriptions for roadway, bicycle, pedestrian, and transit facilities.

PROJECT STUDY AREA

The project site is located at the westerly terminus of Blue Oaks Boulevard, which becomes Phillip Road (Figure 3.3-1). The following describes the roadway, bicycle, pedestrian, and transit facilities in the project vicinity.

Figure 2-3 in Chapter 2, "Project Description," displays the project site plan. As shown, the proposed project would consist of North and South parcels of land, which are separated by Pleasant Grove Creek. A two-lane bridge over the creek would connect the two parcels. The North parcel would be situated directly east of the future alignment of Placer Parkway, a planned four-lane expressway. The North parcel would not be accessible via Placer Parkway, instead being entirely accessed from the South parcel. The South parcel is bounded by Phillip Road on the south and west, Pleasant Grove Creek on the north, and the Creekview Specific Plan on the east. Phillip Road would be upgraded along the project frontages to include an improved cross-section, which includes turn lanes.

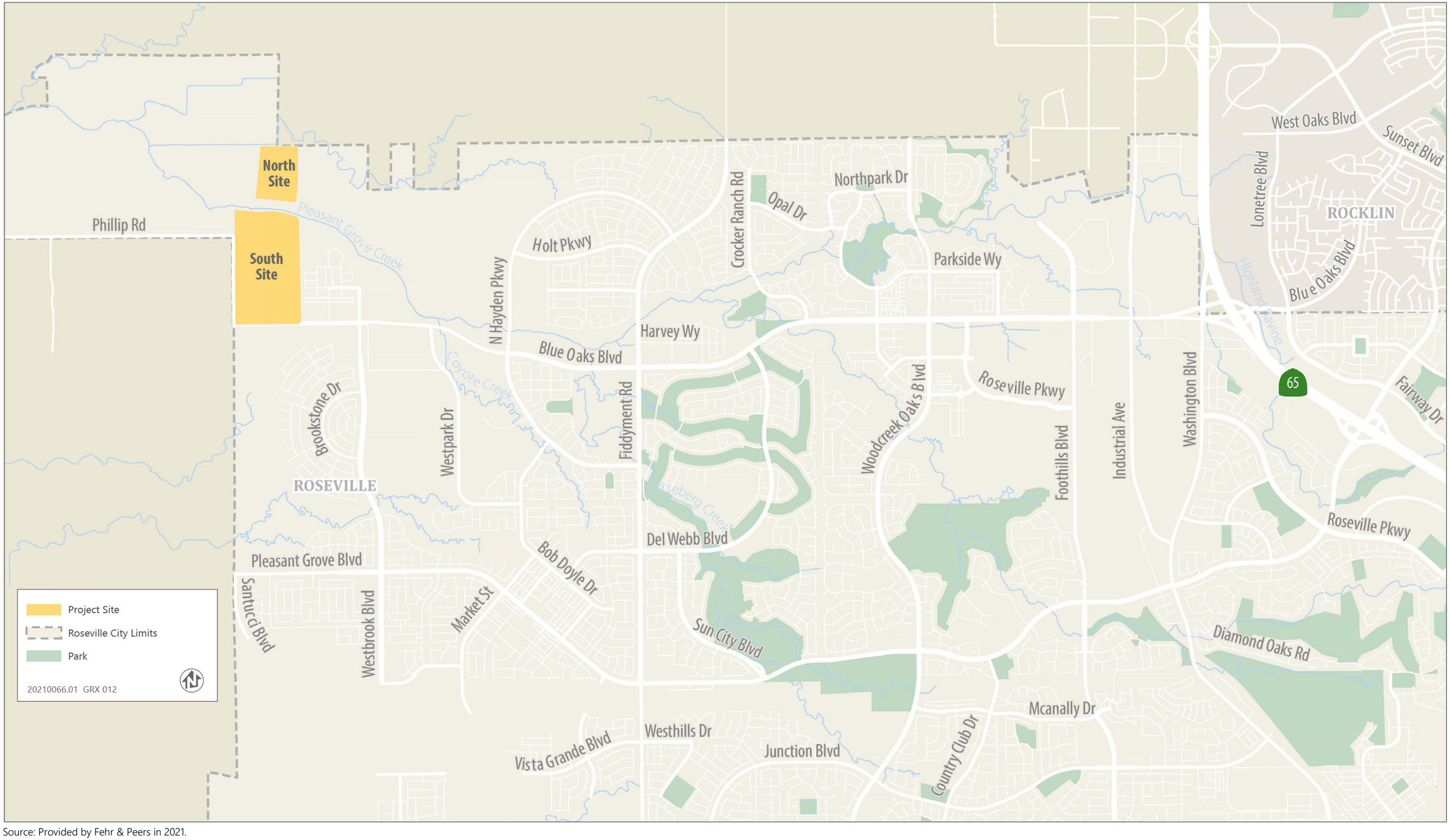
ROADWAY SYSTEM

Figure 3.3-2 illustrates the existing roadway network in the study area including the number of travel lanes. The project would be situated directly west of the Creekside Specific Plan and also near the West Roseville and Sierra Vista Specific Plans. All three plan areas are actively being developed, often in different phases by different landowners. The result is a network of streets that are partially built but not yet fully connected, as shown in Figure 3.3-2. The following key roadways would serve the project:

- Blue Oaks Boulevard is a major east-west arterial connecting the Cities of Roseville and Rocklin. It begins at Westbrook Boulevard in west Roseville and extends 6.5 miles, terminating at Sunset Boulevard in Rocklin. West of Fiddyment Road (Figure 3.3-2), it features one lane in each direction separated by a striped median. Posted speed limits in this area range from 45 to 50 miles per hour (mph). East of Fiddyment Road, it is a six-lane median-divided arterial with a posted speed limit of 45 mph. The SR 65 / Blue Oaks Boulevard interchange is situated about five miles east of the project site. From this interchange, Interstate 80, a major east-west freeway that extends across the Bay Area into Nevada, can be accessed three miles to the south.
- Westbrook Boulevard is a north-south arterial that currently begins a short distance north of Blue Oaks Boulevard and extends for a distance of 1.8 miles to Pleasant Grove Boulevard. The roadway will ultimately extend from Baseline Road on the south to Sunset Boulevard West on the north (within unincorporated Placer County). The constructed portion of the roadway features two lanes in each direction, separately by a landscaped median. The posted speed limit is 40 mph.

- Fiddyment Road is a north-south arterial that begins at Baseline Road and extends northerly through Roseville into unincorporated Placer County and the City of Lincoln. It consists of two lanes in each direction with a posted speed limit of 45 mph from Pleasant Grove Boulevard to the City's north City limits (1.5 miles north of Blue Oaks Boulevard). North of the City limits, it becomes a two-lane undivided rural roadway.

Phillip Road is not considered one of the roadways that would serve the project despite its proximity to the site. As shown on Figure 3.3-1, it extends in a westerly direction from the project site within unincorporated Placer County, terminating 2.75 miles to the west at Brewer Road. While much of the roadway is paved, about one mile of it is not. The road is about 20 feet wide without any pavement markings and the pavement is in fair to poor condition (e.g., potholes and cracks in pavement). It is unlikely that any project trips (either employee commute trips or truck routes) would choose this rough, slow route given there are more comfortable routes heading to/from the west, such as Baseline Road. Phillip Road/Blue Oaks Boulevard (west of Cloud Dancer Drive) was closed to all traffic for roadway reconstruction as of September 2022.



Source: Provided by Fehr & Peers in 2021.

Figure 3.3-1 Project Location

Source: Provided by Fehr & Peers in 2022.

Figure 3.3-2 Existing Roadway Network and Average Daily Traffic Volumes

Existing Traffic Volumes

Traffic data was collected on Blue Oaks Boulevard, Pleasant Grove Boulevard, and Fiddyment Road to represent conditions on a weekday in late August 2021. Schools in the area had returned to in-person instruction at the time of the data collection; however, the effects of COVID-19 on commuting were still present, with many employees still choosing (or being required) to work from home. Nonetheless, new counts are preferred over historic counts (i.e., pre-COVID) due to the level of new development occurring on the west side of the City. Data collection methods included both placement of a hose tube count for multiple days along Blue Oaks Boulevard as well as traffic volume flows at signalized intersections from the City's ITS traffic count database.

Figure 3.3-2 shows the average daily traffic (ADT) volumes on existing study roadways. This information is used as inputs into other technical areas of this Draft EIR. It is also presented for informational purposes but is not used for any type of capacity or level of service (LOS) analysis. Figure 3.3-3 shows Blue Oaks Boulevard, one of the roadways for which traffic volume data was collected.

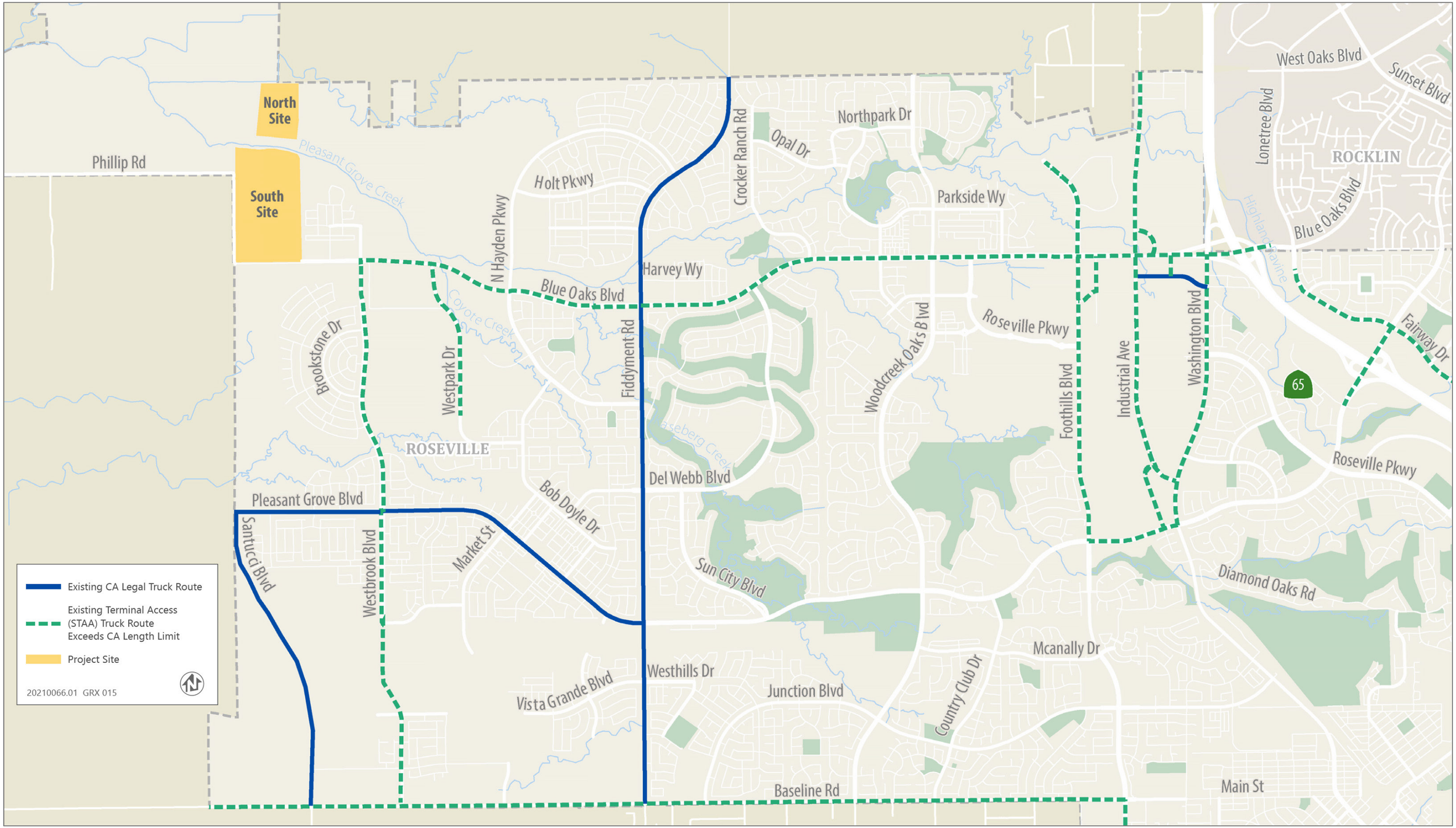
Source: Photograph by Fehr & Peers in 2021.

Figure 3.3-3 View of Blue Oaks Boulevard west of Fiddyment Road (looking west)

Truck Routes

Within the City of Roseville, there are two types of truck routes: Surface Transportation Assistance Act (STAA) routes and local routes (Caltrans 2019). STAA routes allow large trucks to operate on the interstate freeway system and certain primary routes. These trucks, referred to as STAA trucks, are longer than California legal trucks. 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.

Figure 3.3-4 shows the STAA Terminal routes and local routes established within the City of Roseville (City of Roseville 2021b). This map, which was updated in October 2021, shows an STAA terminal access truck route that extends on Blue Oaks Boulevard from SR 65 to Westbrook Boulevard. STAA routes also exist along Baseline Road and Westbrook Boulevard. There are existing California legal truck routes on portions of Fiddyment Road, Pleasant Grove Boulevard, Westpark Drive, and Santucci Boulevard. SR 65 is also an STAA route. Thus, a variety of established truck routes are located in the proximity of the project site.



Source: Provided by Fehr & Peers in 2021.

Figure 3.3-4 Existing Truck Routes

TRANSIT SYSTEM

Roseville Transit provides fixed-route local and commuter bus service, a public Dial-A-Ride reservation bus service, and complementary Americans with Disabilities Act (ADA) paratransit service in the City of Roseville. Bus service currently operates along portions of Blue Oaks Boulevard and Pleasant Grove Boulevard but does not extend to the project site. The nearest stop is located on Pleasant Grove Boulevard at Market Street (Route M), which is approximately two miles southeast of the project site (Roseville Transit 2019).

BICYCLE/PEDESTRIAN SYSTEM

There are no bicycle or pedestrian facilities located along the project frontages on Phillip Road. Figure 3.3-5 displays existing (as of September 2022) bicycle and pedestrian facilities located on arterial and collector streets in the project vicinity. A Class II bike lane (on-street lane with appropriate pavement markings and signs) is present in both directions of Blue Oaks Boulevard from west of Westbrook Boulevard to east of Fiddyment Road, as well as other streets as shown.

Pedestrian facilities in the area include sidewalks, crosswalks, and a multi-use Class I path (for joint use by pedestrians and bicyclists) along the north side of Blue Oaks Boulevard from Hayden Parkway to the project site. Heading east from the project site on Blue Oaks Boulevard, sidewalks are absent on two distinct segments, causing lack of connectivity (Figure 3.3-6).

Source: Photograph by Fehr & Peers in 2021.

Figure 3.3-6 View of Class II Bike Lane (and Lack of Sidewalk) on North Side of Blue Oaks Boulevard (Looking West Toward Westbrook Boulevard)

It should be noted that Blue Oaks Boulevard west of Fiddyment Road is a planned six-lane arterial. As readily apparent from aerial imagery, the southerly half section has been constructed from Fiddyment Road westerly to beyond Hayden Parkway. From there, only the northerly half section has been constructed. This explains the lack of continuous sidewalks on both sides of the street (i.e., as they would be "throw-away" if built on the south side of street west of Westpark Drive, for instance). Planned bicycle and pedestrian improvements in the area are described in more detail later in this section.

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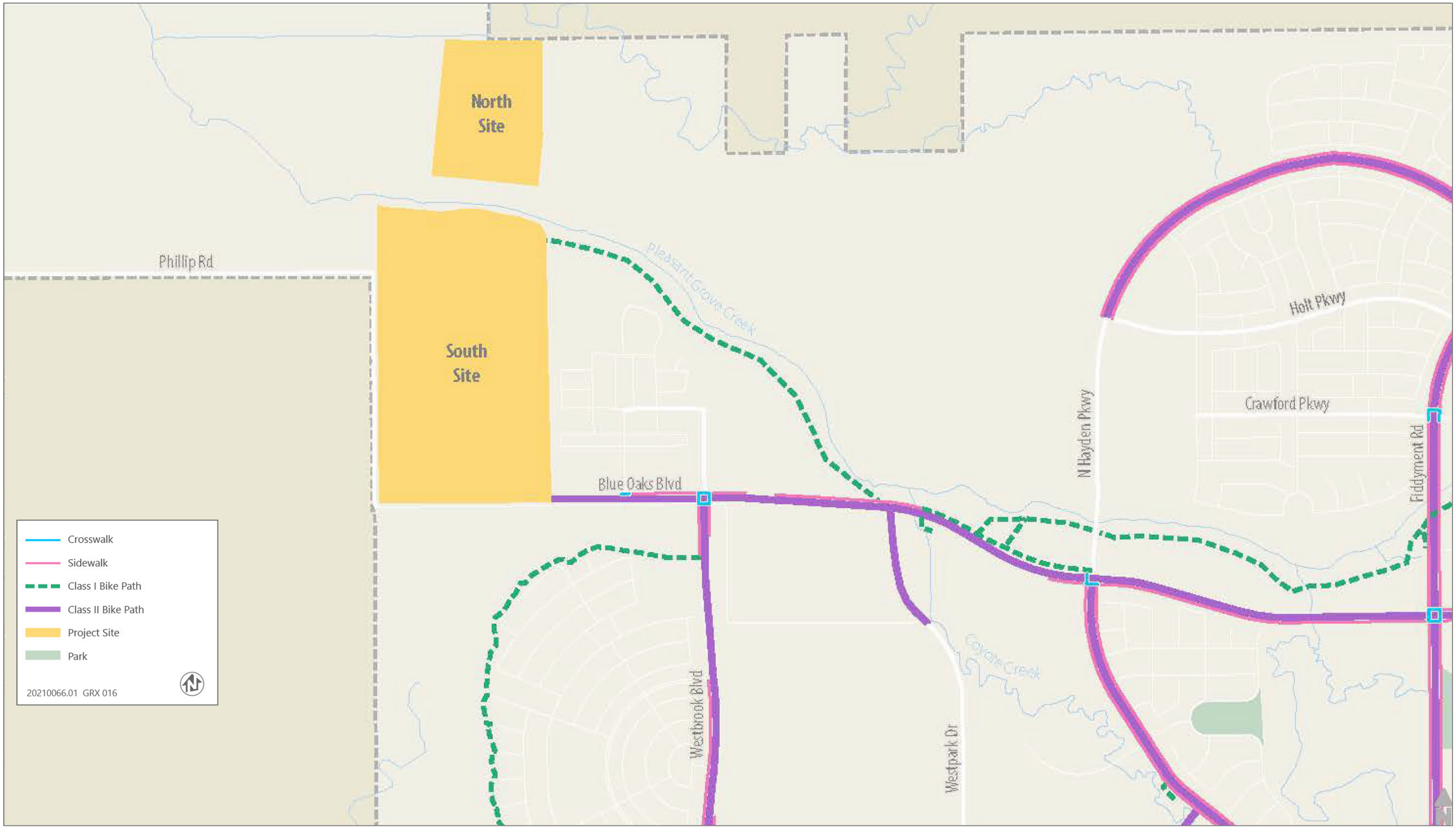


Source: Provided by Fehr & Peers in 2022.

Figure 3.3-5 Existing Bicycle and Pedestrian Facilities

3.3.3 Environmental Impacts and Mitigation Measures

This section describes the analysis techniques, assumptions, and results used to identify potential significant impacts of the project on the transportation system. Transportation and circulation impacts are described and assessed, and mitigation measures are recommended for impacts identified as significant or potentially significant.

METHODOLOGY

The transportation and circulation methodology relies on the anticipated travel characteristics of the project, including its expected trip generation and distribution, as described below. Specific methods used in the analysis are based on the most recent version of the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition* (ITE 2021) and the City of Roseville travel demand model.

The assumptions, analytical approaches, and other parameters used to conduct the VMT analysis for this project were conducted according to Section 4 of the *2021 Amendments to City of Roseville Design and Construction Standards* which provides guidance for how to analyze VMT impacts of land developments within Roseville.

It should be noted that the baseline VMT metric of 29 VMT per service population contained in Table VMT-2 of the General Plan is no longer the applicable value. That is considered an outdated metric because it was derived (as part of the General Plan update) using an older version of the City's base year travel demand model and was based on a methodology that has since been updated. The *Final Transportation Impact Study for the Roseville Housing Element Update* (Fehr & Peers 2021) reset the VMT thresholds for subsequent project-level analysis. This effort was more than just a study of modifications in zoning for the Housing Element Update, which was adopted by the City Council on August 18, 2021 (City of Roseville 2021c). Importantly, it accomplished the following:

1. Updated City of Roseville base year model to a February 2020 (pre-COVID) condition. Note that prior model was validated to an approximately 2014-2016 condition.
2. Developed a new Year 2035 model.[1]
3. Updated existing and Year 2035 citywide signalized intersection operating levels.[2]
4. Updated the VMT per service population metrics.

The VMT analyses that follow are based on the updated base year (2020) and cumulative (2035) versions of the City's model.

Trip Generation

The project would be situated on a 127-acre site that would yield approximately 2.4 million square feet of general industrial space. The "Industrial Park" (Land Use Code 130) category from the *Trip Generation Manual, 11th Edition* (ITE 2021) was chosen to estimate the project's trip generation and is defined as follows (see Appendix B of this Draft EIR):

> An industrial park contains several individual industrial or related facilities. It is characterized by a mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. Many industrial parks contain highly diversified facilities. Some parks in the database have a large number of small businesses and others have one or two dominant industries.

The Industrial Park dataset used to develop the average daily trip rate consisted of 27 studied sites with an average size of 760,000 square feet. The largest project size in that database was 2.5 million square feet. Studied sites were

[1] Although land uses did not materially change (aside from the Housing Element rezones) from the prior 2035 model, the overall forecasts did change as the result of a new base year model (whose detailed inputs such as roadway network parameters, traffic analysis zone centroid placements, etc.) are replicated in the 2035 model.

[2] While not relevant to this EIR analysis, this is nonetheless an important consideration because the City's General Plan contains policy language pertaining to overall intersection operations. If the project would cause this policy to no longer be achievable, it may be found inconsistent with the General Plan. The project's effect on this policy is evaluated in a separate document that is available online and at City offices.

located throughout the United States (plus one location in Canada). A different dataset for PM peak hour conditions, which is the City's overall busiest hour of travel, consisted of 35 studied sites with an average size of 900,000 square feet, . The largest project size in that database was 6.8 million square feet. The following weighted average trip rates are provided for this land use category (fitted curve equations are not provided):

- Daily: 3.37 trips per KSF,
- AM Peak Hour: 0.34 trips per KSF, and
- PM Peak Hour: 0.34 trips per KSF.

Many agencies are seeing strong demand from the private sector for placement of logistics facilities, which often consist of a mix of warehouse and distribution centers. Fehr & Peers is actively studying a number of these projects in the California Central Valley. In June 2021, Fehr & Peers conducted counts at 39 such buildings located throughout San Joaquin County. Based on those counts (and each building's occupied square footage), the following average trip rates were measured: 1.5 daily trips per KSF, 0.18 AM peak hour trips per KSF, and 0.21 PM peak hour trips per KSF. These rates are substantially below those shown above, which are being applied for the project analysis. This suggests that if the project site were to attract logistics/warehousing type uses, the analysis presented here would cover those user types.

Table 3.3-1 shows the project's estimated weekday daily, AM peak hour, and PM peak hour trip generation. As shown, the project would generate approximately 8,200 daily trips, with the AM and PM peak hours each generating 820 trips. Trips during these two periods would be highly directional, with 81 percent inbound in the AM peak hour and 78 percent outbound during the PM peak hour.

Table 3.3-1 Project Trip Generation

Land Use	ITE Code	1000 Sq. Ft.	Daily		AM Peak Hour of Adjacent Street				PM Peak Hour of Adjacent Street			
			Trip Rate	Trips	Trip Rate	Vehicle Trips			Trip Rate	Vehicle Trips		
						In	Out	Total		In	Out	Total
Industrial Park	130 [1]	2,421.7	3.37	8,160	0.34	667	156	823	0.34	181	642	823

[1] Weighted average trip rates applied.

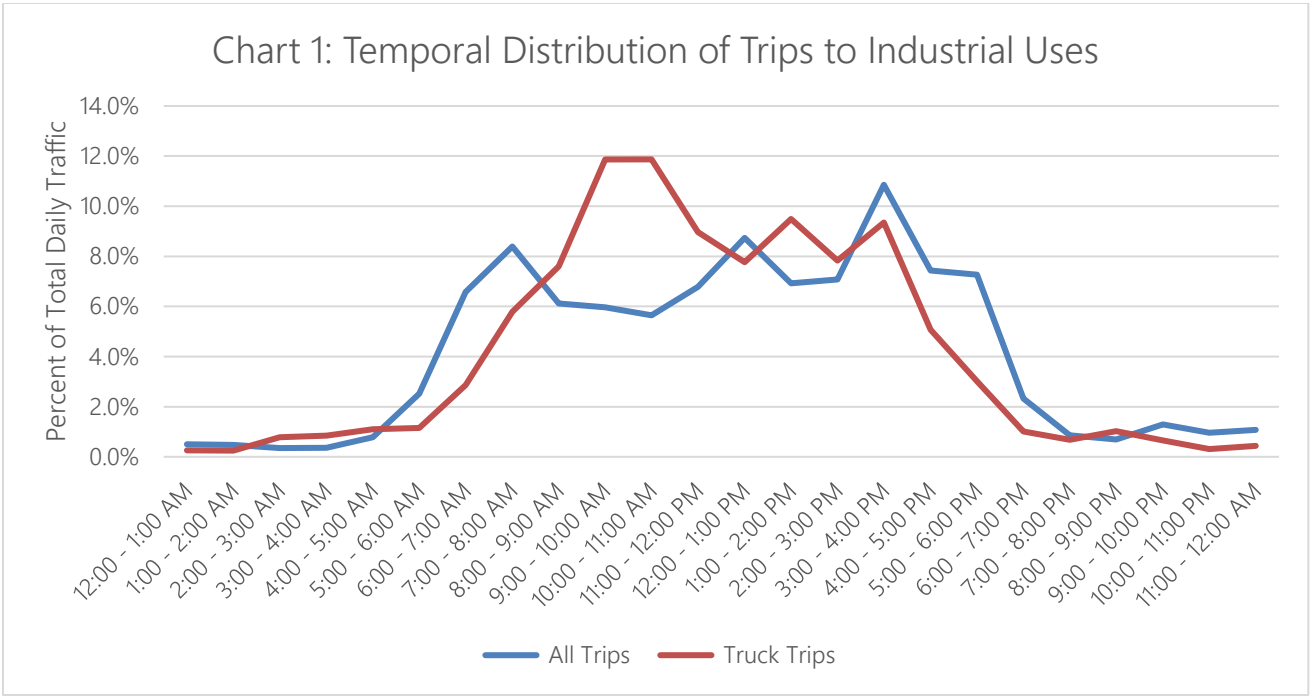
Sources: ITE 2021; Fehr & Peers 2021.

Figure 3.3-7 shows the expected hourly distribution of trips generated by industrial uses according to *Trip Generation Manual* (ITE 2021) data. The chart is based on averaged results from the general light industrial, manufacturing, and warehouse land use categories (data for industrial park was not provided). Data is shown for both total trips and truck trips only. It is apparent that truck trips have overall peak travel characteristics from 9 to 11 a.m., which is outside the typical a.m. and p.m. peak hours of adjacent street traffic.

Data from the *Trip Generation Manual* (ITE 2021) also provides insights into the relative amount of passenger vehicle with truck traffic at industrial parks. As shown in Appendix B, ITE truck and total trip rate data was provided for three specific data sites. Key findings from this data were:

- On a daily basis, trucks ranged from 10 to 16 percent of total trips at the three sites, for an average of 14 percent trucks.
- During the AM peak hour, trucks ranged from 11 to 13 percent of total trips at the three sites, for an average of 12 percent trucks.
- During the PM peak hour, trucks ranged from 4 to 12 percent of total trips at the three sites, for an average of 8 percent trucks.

The above percentages are considered more accurate than the percentages shown in Figure 3.3-7 because they are based on observed proportions of truck traffic at three industrial park sites, versus the blended average of light industrial, manufacturing, and warehouse uses that are the source of Figure 3.3-7. Using the above percentages, the project's trip generation from Table 3.3-1 was classified as either being trucks or passenger vehicles. That result is shown in Table 3.3-2.



Source: Data derived from the *Trip Generation Manual* (ITE 2021) and as provided by Fehr & Peers in 2021.

Figure 3.3-7 Temporal Distribution of Trips to Industrial Uses

Table 3.3-2 Project Trip Generation by Vehicle Type

Land Use	1000 Sq. Ft.	Daily				AM Peak Hour of Adjacent Street				PM Peak Hour of Adjacent Street			
		Total Trips	% Trucks	Trucks[1]	Passenger Vehicles[1]	Total Trips	% Trucks	Trucks[1]	Passenger Vehicles[1]	Total Trips	% Trucks	Trucks[1]	Passenger Vehicles[1]
Industrial Park	2,421.7	8,160	14%	1,140	7,020	820	12%	100	720	820	8%	70	750

[1] Values rounded to the nearest ten.

Source: Data provided by Fehr & Peers in 2021.

Trip Distribution/Assignment

The expected distribution of project trips under existing conditions was estimated using the City of Roseville base year (2020) travel demand model. This source of information was coupled with a travel time comparison for travel between the project site and Fiddyment Road south of Pleasant Grove Boulevard. It would typically be quicker for motorists to use Pleasant Grove Boulevard to Westbrook Boulevard to access the project site, versus remaining on Fiddyment Road to Blue Oaks Boulevard.

Another consideration in the trip distribution is designated truck routes. As shown on Figure 3.3-4, a variety of north-south and east-west STAA and California legal truck routes connect to the project site. Therefore, trucks will not be limited to a single route or two. The most direct route to access the State Highway System is Blue Oaks Boulevard to SR 65.

Figure 3.3-8 shows the expected distribution of trips under existing conditions. Directly east of the site, about 60 percent of trips would use the Blue Oaks Boulevard route, many of which would access SR 65 via its interchange. Approximately 35 percent would use Westbrook Boulevard to Pleasant Grove Boulevard, to either travel to/from the east on Pleasant Grove Boulevard or to/from the south on Fiddyment Road.

The remaining 5 percent would remain within the area west of Fiddyment Road and south of Blue Oaks Boulevard. Although the project would improve the jobs-housing balance in this area of the City, there is a misalignment between the cost of housing in that area (i.e., most residences in the area are single-family) and the likely pay scale for many of the industrial-related jobs that would be present at the site. To illustrate, the same San Joaquin County study referenced previously also found (using "big data" from Streetlight Inc.) that two-thirds of the passenger vehicle trips to the 39 studied buildings had average annual household incomes of $75,000 or less.

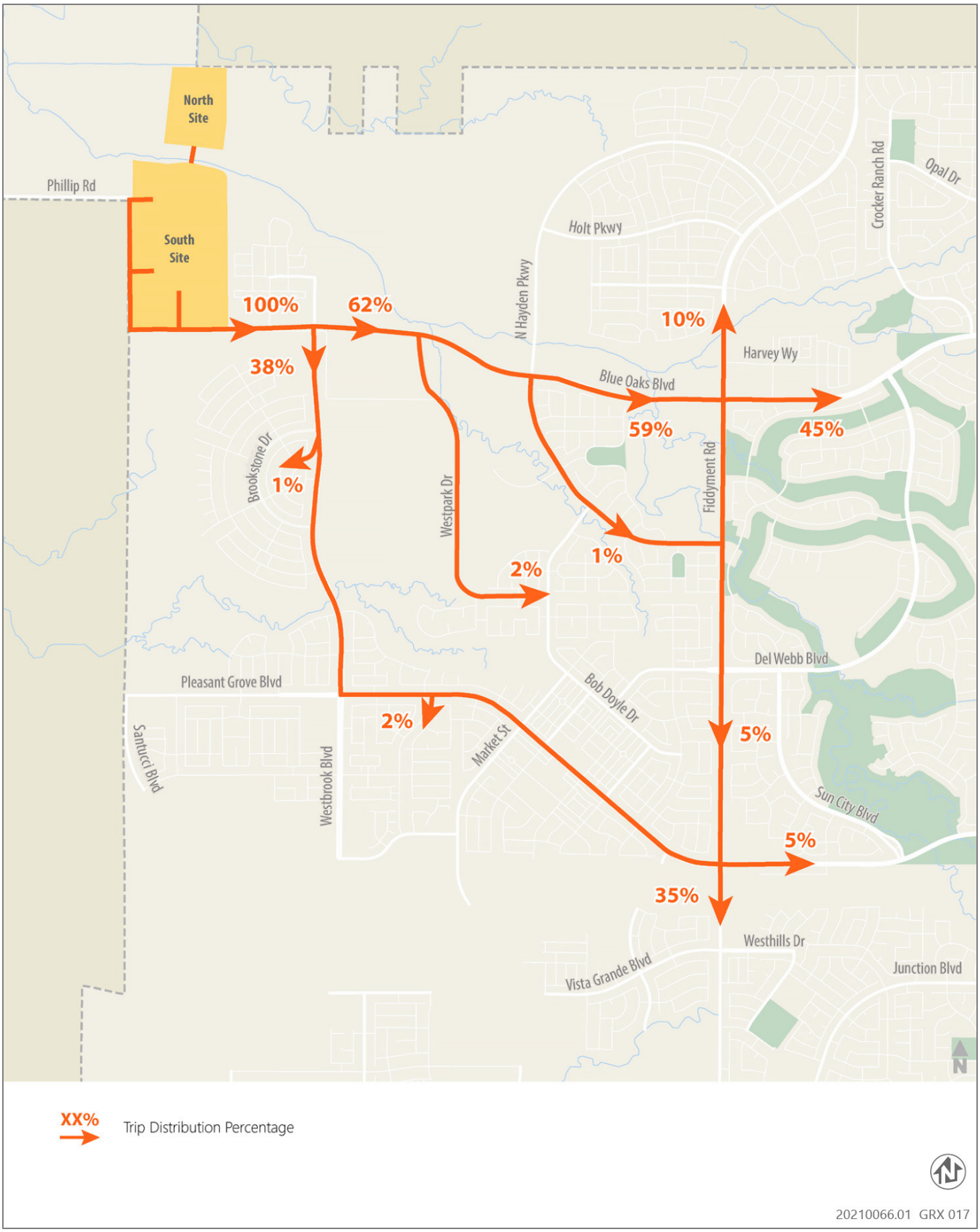
Existing Plus Project Average Daily Traffic Volumes

Project trips were assigned to the roadways in the area in accordance with the project trip generation and distribution. Those volumes were then added to existing volumes to yield the existing plus project volumes, which are shown on Figure 3.3-9. Key findings from this exhibit are:

- The project would add nearly 5,000 daily trips to the two-lane section of Blue Oaks Boulevard between Westbrook Boulevard and Fiddyment Road, with about 700 of those daily trips being trucks. The volume of traffic on this segment would nearly double, making the roadway feel much busier.
- Motorists passing through the all-way stop-control intersections along Blue Oaks Boulevard at Westbrook Boulevard, Westpark Drive, and Hayden Parkway would experience lengthy queues and delays during peak periods with the addition of project trips.[3]
- The project would add about 3,000 daily trips to the four-lane section of Westbrook Boulevard south of Blue Oaks Boulevard, which features three all-way stop-control intersections. Under existing plus project conditions, the daily traffic volume would be 9,100 ADT. Because two lanes in each direction are present, all-way stop would continue to function adequately with this level of added traffic.

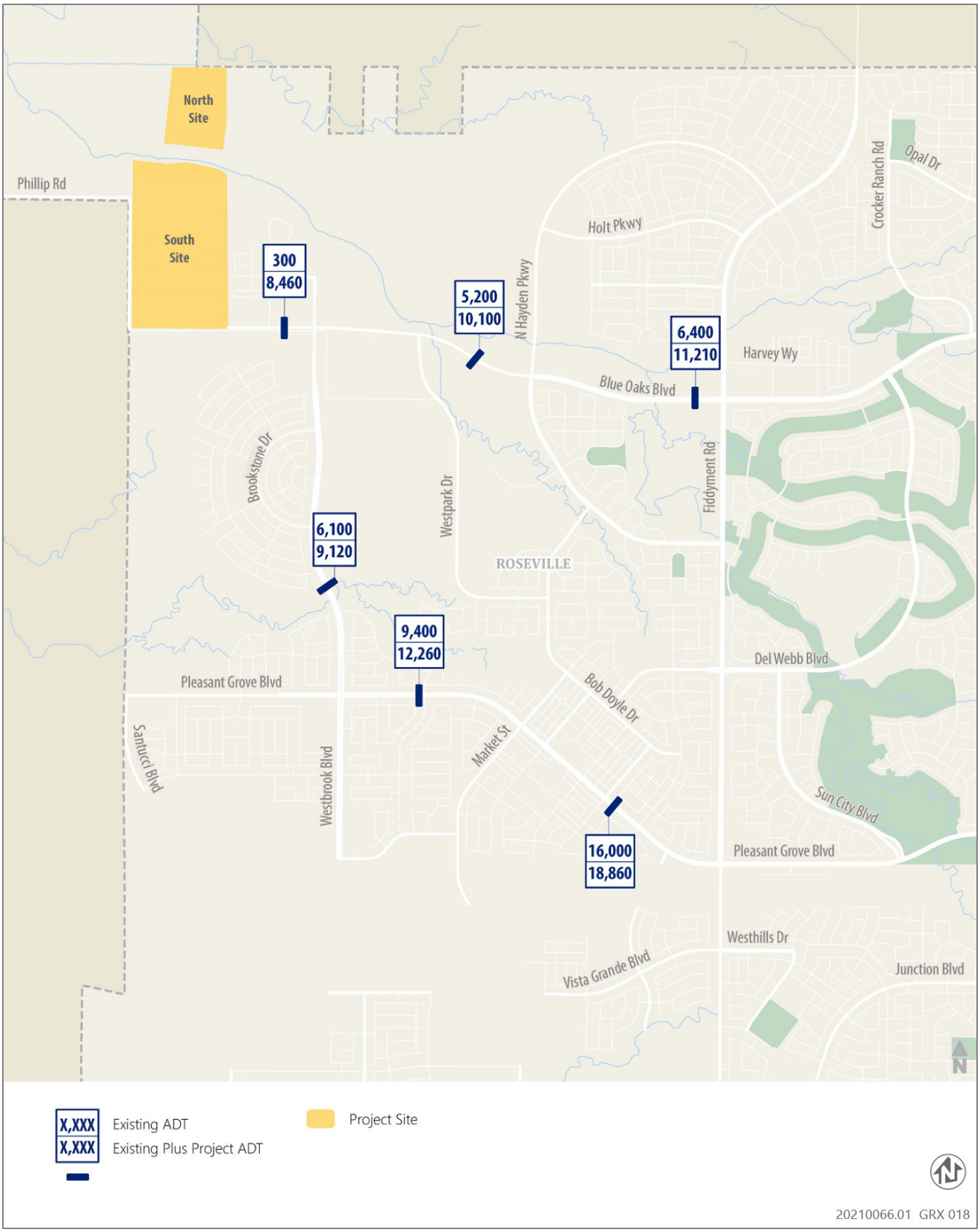
It is anticipated that the projected levels of project-added traffic (about 2,900 ADT add to Pleasant Grove Boulevard as indicated on Figure 3.3-9) will not materialize because Westbrook Boulevard will be extended southerly to connect to Baseline Road prior to the project being constructed. Supplemental traffic model runs showed that almost half of the traffic on Westbrook Boulevard would remain on that route to access Baseline Road, which is an STAA route that provides access to SR 99.

[3] A separate phasing analysis of Blue Oaks Boulevard has been commissioned by the City of Roseville to better understand the timing of required infrastructure along this route given expected continuing development within the Sierra Vista, West Roseville, Creekview, and Amoruso Ranch Specific Plans, plus the potential development of the initial phases of the proposed project. As is discussed later in this section, that analysis also explored whether any capacity-increasing improvements would induce VMT.



Source: Provided by Fehr & Peers in 2021.

Figure 3.3-8 Trip Distribution – Existing Plus Project Conditions



Source: Provided by Fehr & Peers in 2021.

Figure 3.3-9 Average Daily Traffic Volumes (ADT) – Existing Plus Project Conditions

Transportation Safety Hazards

Caltrans' August 9, 2021 NOP comment letter indicates that the northbound off-ramp and southbound on-ramp at the SR 65/Blue Oaks Boulevard interchange have collision rates that are statistically greater than similar ramps statewide (based on Caltrans' review of data from October 2015 through September 2020). This section, therefore, focuses on these interchange ramps.

The northbound SR 65 off-ramp at Blue Oaks Boulevard features two lanes exiting the freeway. Once on the off-ramp, motorists must choose between one of the following two routes:

- Blue Oaks West: Stay to the right on the two-lane off-ramp, which then crosses under Blue Oaks Boulevard and above SR 65, effectively becoming a direct flyover onto westbound Blue Oaks Boulevard. A 50-mile-per-hour advisory curve is present at the beginning of the ramp's curvature to the west. This route has a posted STAA terminal sign designating its usage by STAA trucks.
- Blue Oaks East and Washington Boulevard: Exit the two-lane off-ramp to the left via a secondary off-ramp that connects to the Blue Oaks Boulevard overcrossing at a signalized T-intersection where left-turns toward Washington Boulevard and right-turns toward Fairway Drive/Lonetree Boulevard can be made.

The secondary off-ramp to Blue Oaks East is situated about 850 feet from the freeway off-ramp gore point, which equates to about 10.5 seconds of elapsed time for a motorist to perceive the ramp and react (assuming travel at 55 miles per hour). The configuration effectively requires a motorist to "stay right to go left" (and vice versa), which is contrary to typical travel behavior. Numerous observations by Fehr & Peers staff of travel behavior on this off-ramp indicate the following prevailing motorist behavior that represents a potential safety hazard:

- Motorists (unfamiliar with the area) are situated in the outside off-ramp travel lane. They process the various signs and roadway configuration, and then weave across the inside off-ramp lane to exit onto the secondary Blue Oaks East off-ramp. This movement is often made at the last minute and can create conflicts with continuing traffic in the inside lane heading on the flyover. Figure 3.3-10 shows an example of this movement about to be made (by the braking vehicle).

The eastbound Blue Oaks Boulevard on-ramp to southbound SR 65 features two lanes. The outside lane is a general-purpose lane that features a ramp meter located about 1,200 feet from Blue Oaks Boulevard. The non-metered inside lane is designated as a high occupancy vehicle (HOV) lane when the ramp meter is operational, and functions as a general-purpose lane otherwise. A motorist traveling on eastbound Blue Oaks Boulevard onto southbound SR 65 may experience several travel challenges including:

- *Limited visibility of whether ramp meter is operational*. A changeable ramp meter on/off sign is located 250 feet beyond the ramp entrance. The sign is about 6 feet above the ground and of limited size. These factors can make visibility of the sign difficult for a motorist traveling on Blue Oaks Boulevard (particularly due to blocked visibility by trucks, etc.). This poses challenges in selecting the appropriate on-ramp entry lane while approaching Washington Boulevard.
- *Merging downstream of the ramp meter*. The two on-ramp lanes merge into a single lane immediately downstream of the ramp meter and become an auxiliary lane that connects to the Pleasant Grove Boulevard off-ramp. A motorist who stops at the ramp meter must accelerate quickly to merge with motorists (who are not required to stop) in the adjacent HOV bypass lane, and then decelerate to merge onto the adjacent southbound SR 65 freeway lane which is often congested.

The project would add both truck and passenger vehicle trips to each of these ramps, as well as other movements at the interchange.

Source: Photograph by Fehr & Peers in 2021.

Figure 3.3-10 View of Vehicle Braking on Northbound Blue Oaks Boulevard Off-Ramp Just Prior to Weaving Across the Inside Lane to Access the Secondary Off-Ramp at Blue Oaks Blvd East / Washington Blvd.

THRESHOLDS OF SIGNIFICANCE

The significance criteria used to evaluate the project impacts to transportation and circulation under CEQA are based on Appendix G of the State CEQA Guidelines and various City of Roseville published plans described in Section 3.3.1 "Regulatory Setting" and Section 3.3.3, "Methodology." Impacts to the transportation system would be significant if the project would:

Roadway Network

- exceed the applicable VMT per service population threshold, which is a 15 percent reduction from the Citywide average.

Pedestrian Network

- conflict with adopted policies, plans, or programs regarding pedestrian facilities.

Bicycle Network

- conflict with adopted policies, plans, or programs regarding bicycle facilities.

Transit Facilities and Services

- disrupt existing or planned transit facilities or conflict with adopted policies, plans, or programs regarding transit facilities or service.

Hazards

Substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses, or inadequate emergency access.

ISSUES NOT DISCUSSED FURTHER

Pursuant to Section 21099 to the Public Resources Code, automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment. This issue is not evaluated or discussed further in this Draft EIR.

IMPACTS AND MITIGATION MEASURES

Impact 3.3-1: Vehicle Miles Traveled Per Service Population

The project would generate additional VMT associated with industrial park land uses, which would include trucks and passenger vehicles. As shown in Table 3.3-4, the project would have an average VMT per service population under existing plus project conditions of 65.4 miles, which is well above the Citywide average VMT per service population of 32.5 miles. Because the project would exceed the City's VMT per service population threshold, which is a 15 percent reduction from the Citywide average, this impact would be **significant**.

Table 3.3-3 presents the project's (buildout) expected VMT under existing plus project conditions. As shown, the VMT estimate of 85,680 is derived by multiplying the project's average daily trips (including all employee, truck, visitor, and delivery trips) by the average trip length, which is derived from the base year City of Roseville travel demand model. The VMT calculations include the entire length of the trips (and not solely the portion of the trips within the Roseville City limits).

Table 3.3-3 Project (Buildout) VMT – Existing Plus Project Conditions

Land Use	1000 Sq. Ft.	Daily Trips [1]	Average Trip Length [2]	Project VMT
Industrial Park	2,421.7	8,160	10.5 miles	85,680

[1] Trip generation based on trip rates from Trip Generation Manual, 11th Edition (ITE 2021).

[2] Average trip length based on output from City of Roseville base year travel demand model.

Source: Data provided by Fehr & Peers in 2021.

For non-residential projects, the City of Roseville uses VMT per service population to determine VMT impacts. Service population is the sum of residents and jobs within the City of Roseville. This metric is calculated in this section in a manner consistent with the methodology described in the *Final Transportation Impact Study for the Roseville Housing Element Update* (Fehr & Peers 2021). Details of this methodology are described in the footnotes of Table 3.3-4.

Table 3.3-4 shows the Citywide VMT per service population from the base year (2020) travel demand model. This table also shows the project's VMT per service population. Refer to footnotes in the table for calculation methods and Appendix B for detailed calculations. As shown in Table 3.3-4, the project's VMT per service population would be substantially greater than the Citywide average for the following two primary reasons:

1. The very nature of the service population methodology, whereby residents and employees are lumped together into the denominator of the ratio, puts non-residential uses at a "VMT disadvantage." For example, one added industrial employee adds about seven daily trips (because all trips generated by the use are associated back to the employee) whereas one added resident adds about three daily trips. When daily trips are then converted into VMT by multiplying by the trip length, the same trend occurs.
2. The project is situated in a geographically inefficient part of the City of Roseville because it is further from freeways than other employment centers in the City. Additionally, the project location lacks neighbors to its west and north from which shorter trips could be drawn.

Table 3.3-4 Comparison of Project VMT with Citywide Baseline VMT

Measure	Existing (2020) Citywide Conditions [1]	Project VMT Under Existing Conditions [7]
VMT [2]	7,172,610	158,368
Residents [3]	140,629	0
Employees [4]	80,350	2,422
Service Population [5]	220,979	2,422
Efficiency Metric (VMT per service population) [6]	32.5	65.4

Notes: KSF = thousand square feet; TAZ = traffic analysis zone; VMT = vehicle miles traveled

[1] Analyzed using base year (2020) City of Roseville Travel Demand Model.

[2] Reported VMT represents all travel generated by Roseville land uses (including full length of the trip beyond City boundaries). VMT associated with trips that are internal-internal (i.e., remain within the City) are counted twice due to use of service population methodology (i.e., because such trips involve two Roseville residents and/or employees). Accordingly, VMT shown here does not match the project VMT estimate in Table 3.3-3 due to differing VMT calculation methods.

[3] Base year model was calibrated to early 2020 (pre-COVID) conditions. Estimated number of residents is very close to the 141,500 residents reported in July 2019 from the US Census Bureau (2019).

[4] Measure represents jobs located in the City. Base year estimate based on unit employment yields per KSF of non-residential space. Unit employment yields were calibrated to employment levels in the City (US Census Bureau 2018), which showed 81,400 employees in the City during 2018 (the most recent year of available data).

[5] Service population is the sum of residents plus employees.

[6] Efficiency metric is the ratio of VMT to service population.

[7] Project was added to TAZ 1502 with VMT calculated in same manner as Citywide value. Per the Roseville General Plan, VMT per service population calculations use the same employee yields across different parcels (by land use type) to provide consistency of approach and fairness in VMT reviews. Therefore, the project adds an assumed 2,422 employees (i.e., one employee per KSF of industrial building space).

Source: Data provided by Fehr & Peers in 2021.

As shown in Table 3.3-4, the project would have an average VMT per service population under existing plus project conditions, which is well above the Citywide average VMT per service population of 32.5 miles. Because the project would exceed the City's VMT per service population threshold of 27.6, which is a 15 percent reduction from the Citywide average, this impact would be **significant**.

It is possible that the City may choose to place a condition of approval on the project requiring the project applicant to widen a portion of Blue Oaks Boulevard west of Fiddyment Road. A scenario was tested in which Blue Oaks Boulevard was widened to six lanes from Fiddyment Road to west of the Pleasant Grove Creek bridge and widened to four lanes from the Pleasant Grove Creek bridge to just east of Westpark Drive. The City's model was run without and with these improvements, and a net increase of 2,000 VMT was estimated as a result of the widening. OPR's Technical Advisory identifies induced travel effects (and added VMT increases) caused by roadway widening projects to be a potentially significant impact.

The City of Roseville 2035 General Plan EIR (AECOM 2020) included the widening of this segment of Blue Oaks Boulevard to six lanes. In conjunction with the General Plan update, Circulation Policy 4.1 was amended to more clearly describe the city's intent to reduce VMT through a variety of transportation and land use actions. The General Plan EIR concluded VMT impacts in Roseville would be significant and unavoidable and included this street widening in the analysis. Therefore, the widening of Blue Oaks Boulevard and associated VMT impacts have been fully analyzed in the City's 2035 General Plan EIR; no further CEQA analysis of the effects of this widening on VMT is required.

Mitigation Measures

Mitigation Measure 3.3-1: Implement Transportation Demand Management Strategies to Reduce Project VMT

Prior to issuance of building permits for tenant improvements, the project applicant shall submit a Transportation Demand Management (TDM) Plan for review and approval by the Engineering Division of the City's Development Services Department that includes the following strategy for reducing project VMT that shall be implemented prior to and during project operation. This strategy was obtained from the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA 2021), which was adopted by the California Air Pollution Control Officer Association (CAPCOA) Board of Directors in December 2021.

- Project applicant shall implement a Commute Trip Reduction (CTR) program (Individual effectiveness = 0 percent to 4 percent).

Significance after Mitigation

A mandatory CTR program includes mandatory trip reduction requirements (including penalties for non-compliance) and regular monitoring and reporting to ensure the calculated VMT reduction matches the observed VMT reduction. The effectiveness of mandatory programs is highly project- and context-specific but has been shown to reduce VMT by as much as 26 percent.

The TDM program has many overlapping elements to the City's Transportation Systems Management (TSM) program, which is described in Section 3.3.1, "Regulatory Setting." TSM plans often include providing on-site bicycle facilities, showers, and lockers, preferential carpool parking, and identification of a TSM coordinator whose responsibilities include posting TSM information regarding public transit including schedules, rates, procedures for obtaining transit passes, and routes of public transit service, bicycle route maps, commuter rideshare matchlisting, emergency ride home program, vanpool program, telecommuting, and the transit pass subsidy program, and flexible work hours. TSM plans are submitted by an applicant and approved by the City pursuant to Chapter 11.33 of the City's Municipal Code.

As noted previously, the recommended TDM strategy was obtained from the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (CAPCOA 2021) and is supported by research published at Transportation Research Board annual meetings, published by public agencies such as the San Diego Association of Governments, CARB, or published by researchers from leading universities such as UCLA and UC Davis. As noted on page 91 of the *Handbook*, "The efficacy of individual programs may vary highly based on individual employers and local contexts."

To reach a conclusion of less than significant, the project's VMT per service population would need to decrease by 58 percent (i.e., 1 – 27.6/65.4). It is apparent that the recommended TDM strategy would not be sufficient to accomplish this. Therefore, implementation of Mitigation Measure 3.3-1 would reduce this impact but not to a less-than-significant level because even with the recommended mitigation, the project's average VMT per service population of 65.4 miles would be well above the applicable threshold of 27.6 miles. Thus, the impact would be **significant and unavoidable.**

Impact 3.3-2: Conflict with Adopted Policies, Plans, or Programs Regarding Pedestrian Facilities

Continuous pedestrian facilities are lacking on Blue Oaks Boulevard and Westbrook Boulevard near the project site. This would be inconsistent with General Plan policies CIRC6.1, CIRC6.3, and CIRC6.5, which call for establishing and maintaining a safe and continuous pedestrian network that encourages walking. Therefore, this impact would be **potentially significant**.

According to Figure 3.3-5, continuous pedestrian facilities are lacking on Blue Oaks Boulevard and Westbrook Boulevard near the project site to enable an employee of the site to walk to work. This would be inconsistent with General Plan policies CIRC6.1, CIRC6.3, and CIRC6.5, which call for establishing and maintaining a safe and continuous pedestrian network that encourages walking. Specifically, policy CIRC6.1 states that connections should be provided

between residential areas and employment centers. It is not currently possible to walk to the site via Blue Oaks Boulevard or Westbrook Boulevard via continuous sidewalks. Instead, pedestrians would either walk in a grassy field, in a landscaped area, or in the Class II bike lane. Implementation of the project would add vehicle traffic and potentially pedestrians to the existing network, which would worsen the condition. Therefore, the project would be inconsistent with General Plan policies CIRC6.1, CIRC6.3, and CIRC6.5; and thus, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-2: Construct Pedestrian Facilities in the Project Vicinity

To provide continuous sidewalks in the project vicinity, the applicant shall install temporary sidewalks, if not already constructed prior to issuance of certificate of occupancy. Prior to issuance of occupancy permits, the project applicant shall take necessary action resulting in the following pedestrian facilities being constructed in the project vicinity (if not already in place at that time):

- an approximate 800-foot length of sidewalk along the north side of Blue Oaks Boulevard immediately east of the project site to connect with the existing sidewalk starting at Cloud Dance Drive;
- an approximate 420-foot length of sidewalk along the north side of Blue Oaks Boulevard immediately west of Lower Banks Drive; and
- an approximate 520-foot length of sidewalk along the west side of Westbrook Boulevard south of Blue Oaks Boulevard to provide a continuous sidewalk.

These sidewalks have been planned and their potential environmental impacts have been evaluated as part of the Creekview and West Roseville Specific Plan EIRs (City of Roseville 2004, 2011b). Therefore, no further environmental review of these planned sidewalks is needed at this time.

It is further noted that Mitigation Measure 3.3-2 serves a dual purpose for also helping to reduce the significance of project VMT impacts (see Impact 3.3-1).

Significance after Mitigation

Implementation of Mitigation Measure 3.3-2 would result in the construction of sidewalks in the areas specified and would lead to consistency with adopted City policies, plans, or programs regarding pedestrian facilities and, thus, would effectively mitigate the impact. However, this mitigation measure would require the project applicant to work with the various property owners where the missing segments are located to obtain permission and the rights to construct temporary sidewalks in these areas. Further, the City does not have the jurisdiction to monitor or enforce this mitigation measure. Thus, while the mitigation would be effective, the extent to which it can be implemented is conditional based on other property owners and is outside the City's jurisdiction to implement. Therefore, after mitigation, this impact would be **significant and unavoidable**.

Impact 3.3-3: Conflict with Adopted Policies, Plans, or Programs Regarding Bicycle Facilities

A continuous set of on-street and/or off-street bicycle facilities are present to connect the project site with neighborhoods to the south and east, as well as more remote destinations to the east along Blue Oaks Boulevard. The project would be consistent with applicable policies, plans, and programs contained in the City's General Plan and Pedestrian Master Plan. Therefore, this impact would be **less than significant**.

As shown in Figure 3.3-5, a continuous set of on-street and/or off-street bicycle facilities are present to connect the project site with neighborhoods to the south and east, as well as more remote destinations to the east along Blue Oaks Boulevard. A bicyclist could ride on an eastbound or westbound Class I or II bike lane continuously from the project site along Blue Oaks Boulevard to Fiddyment Road and beyond. Similarly, bicyclists could ride on Westbrook Boulevard to access the project site from various residential communities to the south. Therefore, exiting bicycle facilities would provide continuous and direct access to the project site; and thus, would be consistent with Policy

CIRC3.1 of the General Plan which strives to develop a comprehensive and safe system of recreational and commuter bicycle routes and trails that provides connections between the City's major destinations (including employment) and housing areas. The project would provide bike racks for visitors and secure long-term bike parking on-site for employees, at a minimum per the California Green Building Code. Thus, the project would not conflict with applicable policies, plans, and programs contained in the City's General Plan or Bicycle Master Plan. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.3-4: Conflict with Adopted Policies, Plans, or Programs Regarding Transit Facilities

The project would add new employees to a site that is not currently served by public transit. The project would construct a bus turnout along its southern frontage (on the north side of Blue Oaks Boulevard) to accommodate future fixed-route bus service. Additionally, the Roseville City Council approved a contract in fall 2022 to enable Roseville Transit to operate a pilot micro-transit service in the City. Additionally, the Roseville Transit Dial-A-Ride provides curb-to-curb public bus service within the City limits, which includes the project site. However, because transit service is not currently provided along Blue Oaks Boulevard and there are no assurances that adequate transit service would be available to serve the project, the project would not be consistent with General Plan policies related to transit. Until public transit is provided to the project site, this impact would be **potentially significant**.

The project would add new employees to a site that is not currently served by public transit. General Plan policies direct the City to "pursue transit routes that optimize ridership and the need for access to employment centers." The project would construct a bus turnout along its southern frontage (on the north side of Blue Oaks Boulevard) to accommodate future fixed-route bus service. The City's short-range transit plan recommends that a transit master plan process be prepared for West Roseville. According to page 170 of the City's short-range transit plan, service along Blue Oaks Boulevard "will ultimately be warranted." At such time that it is determined to expand fixed-route bus service to West Roseville, a bus stop, designed to City standards, will be available adjacent to the project site. Additionally, the Roseville City Council approved a contract in Fall 2022 to enable Roseville Transit to operate a pilot micro-transit service in the City. The micro-transit service will enable riders to request a ride via smartphone app, computer, or phone. The service will then notify the rider of the pick-up time and vehicle location. Micro-transit service is currently planned throughout the City; however, this is a pilot program and future service is not certain. Additionally, the Roseville Transit Dial-A-Ride provides curb-to-curb public bus service within the City limits, which includes the project site. However, because transit service is not currently provided along Blue Oaks Boulevard and there are no assurances that adequate transit service would be available to serve the project, the project would not be consistent with General Plan policies related to transit. Until public transit is provided to the project site, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.3-4: Contribute Fair Share Funding for a Transit Master Plan and/or a Comprehensive Operational Analysis for West Roseville

Prior to the issuance of a grading permit, the project applicant shall contribute fair share funding to enable the City to lead the preparation of a Transit Master Plan and/or a Comprehensive Operational Analysis (COA) for West Roseville. This plan is an essential planning tool that will enable the City to properly plan for expanded transit service to West Roseville. The plan should address topics such as transit service coverage, transit service levels (e.g., frequency, service span, etc.), transit infrastructure needs, identification of key destinations, capital and operations & maintenance costs, ridership estimates, transit service performance standards, and an implementation timeline.

Significance after Mitigation

Implementation of Mitigation Measure 3.3-4 would result in the project applicant contributing fair share funding to enable the City to prepare a Transit Master Plan and/or COA for West Roseville, thus enabling the City to plan for

expanded transit service to West Roseville, including the project site. However, timing for preparation of this plan is uncertain and would not ensure the provision of transit service to the project site. Therefore, because transit service is not currently provided along Blue Oaks Boulevard and there are no assurances that adequate transit service would be available to serve the project, this impact would be **significant and unavoidable**.

Impact 3.3-5: Increased Hazards due to Geometric Design Features, Incompatible Uses, or Inadequate Emergency Access

The project would not result in inadequate emergency access or increase hazards due to geometric design features, incompatible uses, or inadequate emergency access. Therefore, this impact would be **less than significant**.

Several emergency services are located within the project area. Roseville Fire Station #9 is situated on Hayden Parkway less than 1.5 miles from the project site and future Fire Station #11 would be located to the northeast of the project site (in the Amoruso Ranch Specific Plan area). Roseville Police headquarters are located at 1051 Junction Boulevard. Roseville's existing roadway and transportation network provides accessibility for fire, police, and other emergency service providers. Additionally, traffic signals in Roseville include emergency vehicle pre-emption equipment that would allow emergency responders to turn the signal green, allowing for efficient access to the scene. The project would not create roadway and transportation facilities that impede access for emergency response vehicles. Thus, the project would not result in inadequate emergency access.

As part of the project, the existing Phillip Road along with project's south frontage would be reconstructed and renamed Blue Oaks Boulevard. It would consist of one lane in each direction separated by a two-way left-turn lane. Class II bike lanes and a sidewalk along the north side of the street would also be constructed. The project would dedicate right-of-way for an ultimate six-lane facility. The project would also upgrade Phillip Road along the project's west frontage to consist of one lane in each direction separated by a two-way left-turn lane. Class II bike lanes and a sidewalk along the east side of the street would also be constructed. Project access would be provided by two driveways on Blue Oaks Boulevard and two driveways on Phillip Road. Driveway spacing (relative to each other and adjacent intersections) would adhere to City design standards. Thus, the project would not result in hazards due to its proposed geometric design features.

As noted previously, the project would add trips to the Blue Oaks Boulevard on-ramps and off-ramps at SR 65. While the northbound off-ramp and southbound on-ramp have certain geometric conditions that may be associated with increased risk of collisions, the project would add primarily repeat travelers to those ramps who would become accustomed to their operations (e.g., employees that regularly drive to and from the project site). The project would not cause any potential queue spillbacks onto SR 65 as both the northbound off-ramp flyover and the southbound off-ramp right turn movement are free-flowing movements. Thus, the project would not substantially increase hazards due to geometric design features. It is further noted that fees (collected from new development including the proposed project) remain within the Highway 65 Joint Powers Authority (JPA) to help fund reconstruction of a portion of this interchange. Although specific improvements at this interchange and their timing for construction have not been identified at this time, the focus has primarily been on the west side of the interchange and could result in modifications to the southbound on-ramp.

The project would add trucks to Blue Oaks Boulevard, which is an STAA terminal route. These vehicles would travel adjacent to Class II bike lanes. The recent completion of the Class I multi-use bike path from the project site parallel to Blue Oaks Boulevard to Fiddyment Road provides a viable alternate path for those users that would prefer to ride off-street. Other paved and gravel/dirt paths are also provided south of Blue Oaks Boulevard. Because there are readily available alternatives to riding in the Class II bike lane on Blue Oaks Boulevard and because Blue Oaks Boulevard is classified as an STAA route, the project would not result in hazards due to increased truck travel on Blue Oaks Boulevard. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

3.4 AIR QUALITY

This section provides a discussion of existing air quality conditions, a summary of applicable regulations, and an analysis of potential construction and operational air quality impacts associated with proposed development of the Roseville Industrial Park Project. Mitigation measures are proposed as necessary to reduce significant air quality impacts.

The California Air Resources Board (CARB) commented on the notice of preparation (NOP) that the project could potentially have a health impact due to its size and type of land use. To assess potential health effects from the proposed project, a health risk assessment (HRA) was conducted, which evaluates project construction and operations. The results of the HRA are summarized in Impact 3.4-4 and detailed inputs and outputs are included in Appendix C.

3.4.1 Regulatory Setting

Air quality in the project area is regulated through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, planning, policymaking, education, and a variety of programs. The agencies responsible for improving the air quality within the air basins are discussed below.

FEDERAL

US Environmental Protection Agency

The US Environmental Protection Agency (EPA) has been charged with implementing national air quality programs. EPA's air quality mandates draw primarily from the federal Clean Air Act (CAA), which was enacted in 1970. The most recent major amendments made by Congress in 1990. EPA's air quality efforts address both criteria air pollutants and hazardous air pollutants (HAPs). EPA regulations concerning criteria air pollutants and HAPs are presented in greater detail below.

Criteria Air Pollutants

The CAA required EPA to establish National Ambient Air Quality Standards (NAAQS) for six common air pollutants referred to as criteria air pollutants. EPA has established primary and secondary NAAQS for the following criteria air pollutants: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (PM) with aerodynamic diameter of 10 micrometers or less (PM_{10}) and fine particulate matter with aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), and lead. The NAAQS are shown in Table 3.4-1. The primary standards protect public health and the secondary standards protect public welfare. The CAA also required each state to prepare a state implementation plan (SIP) for attaining and maintaining the NAAQS. The federal Clean Air Act Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. California's SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins as reported by their jurisdictional agencies. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and whether implementation will achieve air quality goals. If EPA determines a SIP to be inadequate, EPA may prepare a federal implementation plan that imposes additional control measures. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary air pollution sources in the air basin.

Table 3.4-1 National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California (CAAQS)[a,b]	National (NAAQS)[c]	
			Primary[b,d]	Secondary[b,e]
Ozone	1-hour	0.09 ppm (180 µg/m^3)	–[e]	Same as primary standard
	8-hour	0.070 ppm (137 µg/m^3)	0.070 ppm (147 µg/m^3)	
Carbon monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	Same as primary standard
	8-hour	9 ppm[f] (10 mg/m^3)	9 ppm (10 mg/m^3)	
Nitrogen dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	53 ppb (100 µg/m^3)	Same as primary standard
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	—
Sulfur dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)	—	—
	3-hour	—	—	0.5 ppm (1300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	—
Respirable particulate matter (PM_{10})	Annual arithmetic mean	20 µg/m^3	—	Same as primary standard
	24-hour	50 µg/m^3	150 µg/m^3	
Fine particulate matter ($PM_{2.5}$)	Annual arithmetic mean	12 µg/m^3	12.0 µg/m^3	15.0 µg/m^3
	24-hour	—	35 µg/m^3	Same as primary standard
Lead [f]	Calendar quarter	—	1.5 µg/m^3	Same as primary standard
	30-Day average	1.5 µg/m^3	—	—
	Rolling 3-Month Average	–	0.15 µg/m^3	Same as primary standard
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m^3)	No national standards	
Sulfates	24-hour	25 µg/m^3		
Vinyl chloride [f]	24-hour	0.01 ppm (26 µg/m^3)		
Visibility-reducing particulate matter	8-hour	Extinction of 0.23 per km		

Notes: µg/m^3 = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million.

a California standards for ozone, carbon monoxide, SO_2 (1- and 24-hour), NO_2, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

b Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

c National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over three years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. The $PM_{2.5}$ 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the US Environmental Protection Agency for further clarification and current federal policies.

d National primary standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

e National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

f The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: CARB 2016.

Hazardous Air Pollutants and Toxic Air Contaminants

Toxic air contaminants (TACs), or in federal parlance, HAPs, are a defined set of airborne pollutants that may pose a present or potential hazard to human health. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

A wide range of sources, from industrial plants to motor vehicles, emit TACs. The health effects associated with TACs are quite diverse and generally are assessed locally, rather than regionally. TACs can cause long-term health effects such as cancer, birth defects, neurological damage, asthma, bronchitis, or genetic damage; or short-term acute affects such as eye watering, respiratory irritation (a cough), running nose, throat pain, and headaches.

For evaluation purposes, TACs are separated into carcinogens and non-carcinogens based on the nature of the physiological effects associated with exposure to the pollutant. Carcinogens are assumed to have no safe threshold below which health impacts would not occur. This contrasts with criteria air pollutants for which acceptable levels of exposure can be determined and for which the ambient standards have been established (Table 3.4-1). Cancer risk from TACs is expressed as excess cancer cases per one million exposed individuals, typically over a lifetime of exposure.

EPA regulates HAPs through its National Emission Standards for Hazardous Air Pollutants. The standards for a particular source category require the maximum degree of emission reduction that the EPA determines to be achievable, which is known as the Maximum Achievable Control Technology—MACT standards. These standards are authorized by Section 112 of the 1970 CAA and the regulations are published in 40 CFR Parts 61 and 63.

STATE

CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California and for implementing the California Clean Air Act (CCAA). The CCAA, which was adopted in 1988, required CARB to establish California Ambient Air Quality Standards (CAAQS) (Table 3.4-1).

Criteria Air Pollutants

CARB has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, visibility-reducing particulate matter, and the above-mentioned criteria air pollutants. In most cases the CAAQS are more stringent than the NAAQS. Differences in the standards are generally explained by the health effects studies considered during the standard-setting process and the interpretation of the studies. In addition, the CAAQS incorporate a margin of safety to protect sensitive individuals.

The CCAA requires that all local air districts in the state endeavor to attain and maintain the CAAQS by the earliest date practical. The CCAA specifies that local air districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources. The CCA also provides air districts with the authority to regulate indirect sources.

Toxic Air Contaminants

TACs in California are regulated primarily through the Tanner Air Toxics Act (Assembly Bill [AB] 1807, Chapter 1047, Statutes of 1983) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588, Chapter 1252, Statutes of 1987). AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. Research, public participation, and scientific peer review are required before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted EPA's list of HAPs as TACs. In 1998, PM exhaust from diesel engines (diesel PM) was identified and was also added to CARB's list of TACs.

After a TAC is identified, CARB then adopts an airborne toxics control measure for sources that emit that particular TAC. If a safe threshold exists for a substance at which there is no toxic effect, the control measure must reduce exposure below that threshold. If no safe threshold exists, the measure must incorporate best available control technology for toxics to minimize emissions.

The Hot Spots Act requires that existing facilities that emit toxic substances above a specified level prepare an inventory of toxic emissions, prepare a risk assessment if emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

The emissions from on-road mobile sources, specifically, heavy-duty trucks contribute a disproportionate amount of diesel PM emissions compared to passenger vehicles. Emissions from on-road mobile sources are regulated at the state and federal levels, and therefore, are outside of the control of the project and also local agencies such as the City and the Placer County Air Pollution Control District (PCAPCD). For example, EPA is working closely with engine and vehicle manufacturers, and other interested parties to identify programs that will reduce emissions from heavy-duty diesel vehicles in California. CARB has adopted diesel exhaust control measures and more stringent emissions standards for various transportation-related mobile sources of emissions, including transit buses, and off-road diesel equipment (e.g., tractors, generators). Over time, the replacement of older vehicles will result in a vehicle fleet that produces substantially lower levels of TACs than under current conditions. Mobile-source emissions of TACs (e.g., benzene, 1-3-butadiene, diesel PM) have been reduced significantly over the last decade and will be reduced further in California through a progression of regulatory measures (e.g., Low Emission Vehicle/Clean Fuels and Phase II reformulated gasoline regulations) and control technologies. With implementation of CARB's Risk Reduction Plan, it was expected that diesel PM concentrations will be 85 percent less in 2020 in comparison to year 2000 (CARB 2000). No updates have been published by CARB since adoption of this plan. Adopted regulations are also expected to continue to reduce formaldehyde emissions emitted by cars and light-duty trucks. As emissions are reduced, it is expected that risks associated with exposure to the emissions will also be reduced.

LOCAL

Placer County Air Pollution Control District

Criteria Air Pollutants

PCAPCD attains and maintains air quality conditions in Placer County through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of PCAPCD includes the preparation of plans and programs for the attainment of ambient air quality standards, adoption and enforcement of rules and regulations, and issuance of permits for stationary sources. PCAPCD also inspects stationary sources, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required by the CAA, CAAA, and CCAA.

All projects are subject to adopted PCACPD rules and regulations in effect at the time of construction. Specific rules applicable to the proposed project may include but are not limited to the following:

- **Rule 202—Visible Emissions.** Requires that opacity emissions from any emission source not exceed 20% for more than 3 minutes in any one hour.
- **Rule 205—Nuisance**. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause to have a natural tendency to cause injury or damage to business or property.
- **Rule 217—Cutback and Emulsified Asphalt Paving Materials.** Prohibits the use of the following asphalt materials for road paving: rapid cure cutback asphalt; slow cure cutback asphalt; medium cure cutback asphalt; or emulsified asphalt.
- **Rule 218—Application of Architectural Coatings.** Requires architectural coatings to meet various volatile organic compound (VOC) content limits.
- **Rule 228—Fugitive Dust.**
  - Visible emissions are not allowed beyond the project boundary line.
  - Visible emissions may not have opacity of greater than 40% at any time.

- Track-out must be minimized from paved public roadways.

- Rule 242—Stationary Internal Combustion Engines:
  - To limit the emission of nitrogen oxides (NO_X) and carbon monoxide (CO) from stationary internal combustion engines.

As a part of the Sacramento federal ozone nonattainment area, PCAPCD works with the other local air districts within the Sacramento area to develop a regional air quality management plan under CAA requirements. This management plan is called a SIP which describes and demonstrates how Placer County, as well as the Sacramento nonattainment area, would attain the required federal 8-hour ozone standard by the required attainment deadline. One of the proposed mitigation strategies in the SIP is to recommend and implement mitigation measures through the review of land use projects at the local level (PCAPCD 2017). PCAPCD also adopted the 2014 Reasonably Available Control Technology (RACT) State Implementation Plan Analysis and Federal Negative Declarations for 16 Control Technique Source Categories. CARB submitted the 2014 RACT SIP to the EPA as a revision to the California SIP.

Toxic Air Contaminants

At the local level, air pollution control or management districts may adopt and enforce CARB's control measures. PCAPCD limits emissions and public exposure to TACs through a number of programs. PCAPCD prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors.

Sources that require a permit are analyzed by PCAPCD based on their potential to emit toxics. If it is determined that the project would emit toxics in excess of PCAPCD's threshold of significance for TACs pursuant to CEQA Section 15064.7 (b)(c)., sources have to implement best available control technology (BACT) for TACs to reduce emissions. If a source cannot reduce the risk below the threshold of significance even after BACT has been implemented, PCAPCD will deny the permit required by the source. This helps to prevent new problems and reduces emissions from existing older sources by requiring them to apply new technology when retrofitting with respect to TACs.

City of Roseville General Plan 2035

The Air Quality and Climate Change Element of the City of Roseville's General Plan 2035 contains goals and policies that pertain to criteria air pollutant emissions, TACs, and odors (City of Roseville 2020). Key policies, and implementation measures that are applicable to the proposed project include the following:

Air Quality Policies

- **Policy AQ1.2** Work with the Placer County Air Pollution Control District to monitor air pollutants of concern on a continuous basis, and support Air District efforts to minimize emissions from stationary sources.
- **Policy AQ1.3** Projects that could generate or expose sensitive uses to substantial air pollutant concentrations should incorporate strategies to reduce exposure to such emissions using measures recommended by the Placer County Air Pollution Control District and other applicable, feasible strategies, as needed, to avoid significant air quality impacts.
- **Policy AQ1.4** As part of the development review process, develop mitigation measures to minimize stationary and area source emissions.

General Plan Implementation Measures

Appendix A of the General Plan identifies the General Plan's implementation measures, which are proactive activities designed to implement General Plan polices. The following may apply to the project:

Air Quality and Climate Change Mitigation Strategies - Area and Stationary Sources (Ongoing)
Require area and stationary source projects that generate significant amounts of air pollutants to incorporate air quality mitigation in their design, including the use of best available control technology for stationary industrial sources; clean fuel sources for heating and cooling; clean fuel technology at fueling stations; and other strategies, in consultation with PCAPCD.

Air Quality and Climate Change Mitigation Strategies - Mobile Sources (Ongoing)
Implement mitigation strategies to reduce air pollutant and greenhouse gas emissions from motor vehicles. These strategies, which may consist of improvements and refinements to the transportation and circulation infrastructure, may include, but are not limited to:

- Promote commercial/industrial project proponent sponsorship of van pools or club buses;
- Encourage commercial/industrial project day care and employee services at the employment site;
- Encourage the provision of transit, especially for employment-intensive uses;
- Provide subscription bus service to major trip generators or events; and
- Install sidewalks in residential and commercial developments with protective curbing and adequate lighting and pedestrian amenities.

Air Quality and Climate Change Mitigation Strategies - Land Use (Ongoing)
Encourage development to be located and designed to minimize greenhouse gas and air pollutant emissions and avoid exposure to substantial pollutant concentrations by doing the following:

- Locate point sources, such as manufacturing and extracting facilities, in areas designated for industrial development and separated from residential areas and other sensitive receptors (e.g., homes, schools, and hospitals);
- Provide separation between sources of substantial air pollutant emissions and sensitive receptors and/or provide landscaping using plant species that are shown to reduce pollutant exposure; and
- Provide for mixed-use and transit-supportive development that reduces the length and frequency of vehicle trips or reduces the need for vehicle trips by providing practical pedestrian, bicycle, and transit options.

3.4.2 Environmental Setting

The project site is located in the City of Roseville within western Placer County, California, which is located within the Sacramento Valley Air Basin (SVAB). The SVAB also includes all of Butte, Colusa, Glenn, Sacramento, Shasta, Sutter, Tehama, Yolo, and Yuba counties and the eastern portion of Solano County.

The ambient concentrations of air pollutant emissions are determined by the amount of emissions released by the sources of air pollutants and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources, as discussed separately below.

The nearest sensitive receptors in the vicinity of the project site are future residential areas to the east, immediately adjacent to the project site, which is planned to accommodate 2,011 residential units at buildout. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area (adopted by the city in 2004), which is 60 percent built out, and will include 9,496 residential units, parks, open space, and commercial and industrial uses.

CLIMATE, METEOROLOGY, AND TOPOGRAPHY

The SVAB is a relatively flat area bordered by the north Coast Ranges to the west and the northern Sierra Nevada to the east. Air flows into the SVAB through the Carquinez Strait, the only breach in the western mountain barrier, and moves across the Sacramento–San Joaquin Delta (Delta) from the San Francisco Bay area.

The Mediterranean climate type of the SVAB is characterized by hot, dry summers and cool, rainy winters. During the summer, daily temperatures range from 50 degrees Fahrenheit (°F) to more than 100°F. The inland location and surrounding mountains shelter the area from much of the ocean breezes that keep the coastal regions moderate in temperature. Most precipitation in the area results from air masses that move in from the Pacific Ocean, usually from the

west or northwest, during the winter months. More than half the total annual precipitation falls during the winter rainy season (November through February); the average winter temperature is a moderate 49°F. Also characteristic of SVAB winters are periods of dense and persistent low-level fog, which are most prevalent between storms. The prevailing winds are moderate in speed and vary from moisture-laden breezes from the south to dry land flows from the north.

The mountains surrounding the SVAB create a barrier to airflow leading to the entrapment of air pollutants when meteorological conditions are unfavorable for transport and dilution. Poor air movement is most frequent in the fall and winter when high-pressure cells are present over the SVAB. The lack of surface wind during these periods, combined with the reduced vertical flow caused by a decline in surface heating, reduces the influx of air and leads to the concentration of air pollutants under stable metrological conditions. Surface concentrations of air pollutant emissions are highest when these conditions occur in combination with agricultural burning activities or with temperature inversions, which hamper dispersion by creating a ceiling over the area and trapping air pollutants near the ground.

May through October is ozone season in the SVAB. This period is characterized by poor air movement in the mornings with the arrival of the Delta Sea breeze from the southwest in the afternoons. In addition, longer daylight hours provide a plentiful amount of sunlight to fuel photochemical reactions between reactive organic gases (ROG) and NO_X, which result in ozone formation. Typically, the Delta breeze transports air pollutants northward out of the SVAB; however, a phenomenon known as the Schultz Eddy prevents this from occurring during approximately half of the time from July to September. The Schultz Eddy phenomenon causes the wind to shift southward and blow air pollutants back into the SVAB. This phenomenon exacerbates the concentration of air pollutant emissions in the area and contributes to the area violating the ambient-air quality standards.

The local meteorology of the project area and surrounding area is represented by measurements recorded at the Western Regional Climate Center (WRCC) Rocklin station. The normal annual precipitation is approximately 23 inches. January temperatures range from a normal minimum of 35°F to a normal maximum of 54°F. July temperatures range from a normal minimum of 58°F to a normal maximum of 97°F (WRCC 2022). The predominant wind direction is from the south (WRCC 2022).

CRITERIA AIR POLLUTANTS

Concentrations of criteria air pollutants are used to indicate the quality of the ambient air. A brief description of key criteria air pollutants in the SVAB is provided below. Emission source types and health effects are summarized in Table 3.4-2. Placer County's attainment status for the CAAQS and the NAAQS are shown in Table 3.4-3. Monitoring data applicable to the project site are provided in Table 3.4-4.

Ozone

Ozone is a photochemical oxidant (a substance whose oxygen combines chemically with another substance in the presence of sunlight) and the primary component of smog. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of ROG and NO_X in the presence of sunlight. ROG are volatile organic compounds that are photochemically reactive. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_X are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels.

Emissions of the ozone precursors ROG and NO_X have decreased over the past several years because of more stringent motor vehicle standards and cleaner burning fuels. Emissions of ROG and NO_X decreased from 2000 to 2010 and are projected to continue decreasing from 2010 to 2035 (CARB 2013).

Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2. The combined emissions of NO and NO_2 are referred to as NO_X and are reported as equivalent NO_2. Because NO_2 is formed and depleted by reactions associated with photochemical smog (ozone), the NO_2 concentration in a particular geographical area may not be representative of the local sources of NO_X emissions (EPA 2012).

Particulate Matter

Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less is referred to as PM_{10}. PM_{10} consists of particulate matter emitted directly into the air, such as fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires and natural windblown dust, and particulate matter formed in the atmosphere by reaction of gaseous precursors (CARB 2013). Fine particulate matter ($PM_{2.5}$) includes a subgroup of smaller particles that have an aerodynamic diameter of 2.5 micrometers or less. PM_{10} emissions in the SVAB are dominated by emissions from area sources, primarily fugitive dust from vehicle travel on unpaved and paved roads, farming operations, construction and demolition, and particles from residential fuel combustion. Direct emissions of PM_{10} are projected to remain relatively constant through 2035. Direct emissions of $PM_{2.5}$ have steadily declined in the SVAB between 2000 and 2010 and then are projected to increase very slightly through 2035. Emissions of $PM_{2.5}$ in the SVAB are dominated by the same sources as emissions of PM_{10} (CARB 2013).

Table 3.4-2 Sources and Health Effects of Criteria Air Pollutants

Pollutant	Sources	Acute[1] Health Effects	Chronic[2] Health Effects
Ozone	Secondary pollutant resulting from reaction of ROG and NO_X in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO_X results from the combustion of fuels	increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	Incomplete combustion of fuels; motor vehicle exhaust	headache, dizziness, fatigue, nausea, vomiting, death	permanent heart and brain damage
Nitrogen dioxide (NO_2)	combustion devices; e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines	coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; breathing abnormalities, cough, cyanosis, chest pain, rapid heartbeat, death	chronic bronchitis, decreased lung function
Sulfur dioxide (SO_2)	coal and oil combustion, steel mills, refineries, and pulp and paper mills	Irritation of upper respiratory tract, increased asthma symptoms	Insufficient evidence linking SO_2 exposure to chronic health impacts
Respirable particulate matter (PM_{10}), Fine particulate matter ($PM_{2.5}$)	fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO_2 and ROG	breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	alterations to the immune system, carcinogenesis
Lead	metal processing	reproductive/ developmental effects (fetuses and children)	numerous effects including neurological, endocrine, and cardiovascular effects

Notes: NO_X = oxides of nitrogen; ROG = reactive organic gases.

[1] "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

[2] "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

Source: EPA 2016.

MONITORING STATION DATA AND ATTAINMENT DESIGNATIONS

Criteria air pollutant concentrations are measured at several monitoring stations in the SVAB. The Roseville-North Sunrise Boulevard station is located approximately 8 miles southeast of the project site and is the closest monitoring station to the project site with recent data for ozone, PM_{10}, and $PM_{2.5}$. In general, the local ambient air quality measurements from this station are representative of the air quality near the project given its similar meteorological conditions and urban surroundings. Table 3.4-4 summarizes the air quality data for the four most recent calendar years for which data is available (2016-2019).

Both CARB and EPA use this type of monitoring data to designate areas according to their attainment status in accordance with ambient air quality standards for criteria air pollutants. The purpose of these designations is to

identify those areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are "nonattainment," "attainment," and "unclassified." "Nonattainment" means that an area does not attain State or federal ambient air quality standards for a given pollutant, while "attainment" means that an area either attains or exceeds State or federal ambient air quality standards. "Unclassified" is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of the nonattainment designation, called "nonattainment-transitional." The nonattainment-transitional designation is given to nonattainment areas that are progressing and nearing attainment. Attainment designations for the year 2017 in Placer County are shown in Table 3.4-3 for each criteria air pollutant. Key pollutants for which Placer County is in nonattainment include ozone (California and National), PM_{10} (California), and $PM_{2.5}$ (National).

The Sacramento Regional 8-hour Ozone Attainment and Reasonable Further Progress Plan was prepared to meet requirements of the federal Clean Air Act for the 1997 8-hour ozone standard. This Sacramento Ozone SIP demonstrates how the region is going to reduce emissions and attain the 1997 ozone standard no later than 2018. After this SIP approval, EPA amended its 8-hour ozone standard in 2008, with implementation to begin in 2011. The new ozone SIP to meet the 2008 ozone standard will be prepared for the Sacramento nonattainment area (SRAQP 2017). This air quality plan relies on existing control measures and adopted rules, new state and federal regulations, and new local and regional measures to reduce ozone. The project would be required to adhere to all federal, state, and local regulatory measures to comply with the air quality plan.

Table 3.4-3 Attainment Status Designations for Placer County

Pollutant	National Ambient Air Quality Standard	California Ambient Air Quality Standard
Ozone	Revoked in 2005 (1-hour)[1]	Nonattainment (1-hour) Classification-Serious[2]
	Nonattainment (8-hour)[3] Classification=Severe	Nonattainment (8-hour)
	Nonattainment (8-hour)[4] Classification=Severe	
Respirable particulate matter (PM_{10})	Attainment (24-hour)	Nonattainment (24-hour)
		Nonattainment (Annual)
Fine particulate matter ($PM_{2.5}$)	Nonattainment (24-hour)	(No State Standard for 24-Hour)
	Attainment (Annual)	Attainment (Annual)
Carbon monoxide (CO)	Attainment (1-hour)	Attainment (1-hour)
	Attainment (8-hour)	Attainment (8-hour)
Nitrogen dioxide (NO_2)	Attainment (1-hour)	Attainment (1-hour)
	Attainment (Annual)	Attainment (Annual)
Sulfur dioxide (SO_2)[5]	(Attainment Pending) (1-Hour)	Attainment (1-hour)
		Attainment (24-hour)
Lead (Particulate)	Attainment (3-month rolling avg.)	Attainment (30-day average)
Hydrogen Sulfide	No Federal Standard	Unclassified (1-hour)
Sulfates		Attainment (24-hour)
Visibly Reducing Particles		Unclassified (8-hour)
Vinyl Chloride		Unclassified (24-hour)

Notes:
[1] Air Quality meets federal 1-hour Ozone standard (77 FR 64036). EPA revoked this standard, but some associated requirements still apply.
[2] Per Health and Safety Code (HSC) § 40921.5(c), the classification is based on 1989 – 1991 data, and therefore does not change.
[3] 1997 Standard.
[4] 2008 Standard.
[5] 2010 Standard.
Source: SRAQP 2017.

Table 3.4-4 Summary of Annual Data on Ambient Air Quality (2016-2019)[1]

	2016	2017	2018	2019
Ozone				
Maximum concentration (1-hr/8-hr avg, ppm)	0.115/0.92	0.117/0.088	0.110/0.083	0.089/0.076
Number of days state standard exceeded (1-hr/8-hr)	5/21	4/10	4/11	0/3
Number of days national standard exceeded (8-hr)	0/20	0/9	0/11	0/1
Fine Particulate Matter ($PM_{2.5}$)				
Maximum concentration (24-hour µg/m^3)	21.2	28.8	172.8	28.5
Number of days national standard exceeded (24-hour measured[2])	0	0	17.3	0
Respirable Particulate Matter (PM_{10})				
Maximum concentration (µg/m^3)	39.2	66	202.2	61.3
Number of days state standard exceeded	0	5	16	2
Number of days national standard exceeded	0	0	2	0

Notes: µg/m^3 = micrograms per cubic meter; ppm = parts per million

[1] Measurements from the Roseville-N Sunrise Blvd monitoring station for ozone, PM_{10}, and $PM_{2.5}$.

Source: CARB 2019.

TOXIC AIR CONTAMINANTS

According to the *California Almanac of Emissions and Air Quality* (CARB 2013), the majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being diesel PM. Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a PM exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Diesel PM poses the greatest health risk among these 10 TACs mentioned. Based on receptor modeling techniques, CARB estimated the average cancer risk associated with diesel PM concentrations in the SVAB to be 360 excess cancer cases per million people in the year 2000. Overall, levels of most TACs, except para-dichlorobenzene and formaldehyde, have decreased since 1990 (CARB 2013).

ODORS

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known

as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. Odor sources of concern include wastewater treatment plants, sanitary landfills, composting facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting operations, rendering plants, and food packaging plants. None of these odorous land uses are within proximity to the project site. Regardless, emissions of odors would be subject to PCAPCD's Rule 205, Nuisance, which prohibits the discharge of air contaminants and other materials that would cause detriment, nuisance, or annoyance to any number of people.

SENSITIVE RECEPTORS

Sensitive receptors are generally considered to include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residences, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure of individuals to pollutants.

The nearest sensitive receptors to the Roseville Industrial Park project site are future residential areas to the east, immediately adjacent to the project site, which is planned to accommodate 2,011 residential units at buildout. These receptors were considered in this analysis because homes are currently being constructed and, therefore, would likely be occupied by the time project construction begins. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area (adopted by the city in 2004), which is 60 percent built out, and will include 9,496 residential units, parks, open space, and commercial and industrial uses. In addition to residences, Orchard Ranch Elementary School, West Park High School, Chilton Middle School, and Junction Elementary School are located within two miles of the project area.

3.4.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Regional and local criteria air pollutant emissions and associated impacts, as well as impacts from TACs and odors were assessed in accordance with PCAPCD-recommended methodologies. CO concentrations were not assessed in the analysis because Placer County is in attainment status for CO. The project's estimated emissions were compared to PCAPCD-adopted thresholds as described in the following section.

Construction and operational emissions of criteria air pollutants and precursors were calculated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0 computer program, as recommended by PCAPCD (PCAPCD 2017). Modeling was based on project-specific information (e.g., size of the buildings, duration of construction) where available; reasonable assumptions based on typical construction activities; and default values in CalEEMod that are based on the project's location and land use type.

The project would be developed in four phases. Based on data provided by the project applicant, construction would begin as early as 2023. Phase 1 is anticipated to begin construction in late fall 2023 and be complete in 2024. Full operations for Phase 1 are projected to occur in early 2025. The timing of future phases will be determined based on market readiness and tenant demand. For the purposes of this analysis, all phases (1, 2, 3 and 4) were conservatively assumed to be constructed by 2029. The full buildout year is expected to be 2030. Further, it should be noted that individual construction activities (e.g., site preparation, grading, building construction) that would occur during each phase of the project could potentially overlap in time as one activity wraps up and the next ramps up. This potential overlap in on-site construction activities is accounted for within the emissions modeling, resulting in maximum daily emissions estimate for each phase of the project.

Regarding project operations and based on the nature of proposed uses, the project would result in operational emissions associated with area sources, mobile sources, and off-gassing emissions associated with consumer products and architectural coatings. CalEEMod was used to model all sources with project-specific information as inputs, where available (e.g., building square footage, land use type). Mobile source emissions would result from

vehicle miles traveled (VMT) that would be generated by both heavy-duty trucks as well as light-duty vehicles from employee commute as well as from delivery truck traffic associated with warehouse type land uses. For this analysis, data was provided by Fehr & Peers (Gard, pers. comm., 2021). According to the traffic data, 86 percent of the total VMT was estimated to be heavy-duty trucks and 16 percent of the total VMT was estimated to be light-duty vehicles. Other sources would include diesel generators and on-site emissions from truck idling. Also, there would be use of forklifts and yard trucks during project operations, but they would be electricity powered (Wertheim, pers. comm., 2022) and hence they were not considered for this analysis. Operational trip generation rates and VMT data was used to estimate mobile-source emissions, using CalEEMod but adjusting model defaults to match traffic data. Traffic data was prepared for this project by Fehr & Peers and is included in Appendix B.

The level of health risk from exposure to construction- and operations-related diesel PM emissions was assessed quantitively by conducting an HRA. This assessment was based on the impact of diesel PM-generating construction activity and expected operational activities to off-site sensitive receptors. To determine pollutant concentrations at specific locations (i.e., receptors), air dispersion modeling was conducted using site-specific parameters (e.g., terrain, meteorological data) for construction activities. Multiple runs were conducted to reflect concentrations due to different phases of construction. Dispersion modeling was conducted using the CARB-approved American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee modeling system (AERMOD) Version 21112, with a unit emission rate of 1 gram per second (g/s) for all modeled sources. This approach was used so that resulting ground-level concentrations could be multiplied by actual emission rates for various scenarios (e.g., phase-wise construction, full buildout). The modeling included all standard regulatory default options, including the use of data from the nearest and most representative meteorological station and local terrain. Terrain in the project vicinity is generally flat.

To represent site locations where construction activities would occur, construction emission sources (i.e., the use of heavy-duty equipment on-site) was modeled as an array of adjacent volume sources. Based on recommendations from PCAPCD, each volume source was assumed to have 25-meter (m) sides, 5 m release height, an initial lateral dimension of 5.81 m, and an initial vertical dimension of 1 m, the latter two attributes were calculated from the length of the volume source side. The release height of 5 meter was considered from Sacramento Metropolitan Air Quality Management District's (SMAQMD's) construction health risk guidance as the PCAPCD did not have its own health risk guidance document. Construction hours would occur 8 hours per day and 5 days a week.

To estimate diesel PM emissions, CalEEMod was used, and exhaust PM_{10} emissions were considered to be a surrogate for diesel PM. Diesel PM emissions from construction emissions modeling were applied to the air dispersion modeling outputs to obtain emissions concentrations, which were used to estimate health risks, using HARP 2. For more detailed information regarding the HRA methodology, inputs and outputs, refer to Appendix C.

For operational-related emissions, diesel PM was estimated using CalEEMod Version 2020.4.0. To determine pollutant concentrations at specific locations (i.e., receptors), air dispersion modeling was conducted using site-specific parameters (e.g., terrain, meteorological data) for construction activities. Multiple runs were conducted to reflect concentrations due to operations, using the same model parameters and approach discussed above for construction.

To model health risks from operations, an array of adjacent volume sources was modeled at the North and South parcel of the project site to characterize use of off-road equipment, focusing on areas away from building facades and in proximity to loading docks. Off-road equipment was conservatively assumed to operate in the outdoor areas of the project site. Yard trucks are only expected to operate in the North Parcel while the forklifts would operate throughout the project site. Because yard trucks and forklifts would be electricity powered, exhaust emissions from these equipment were not modeled. Typical operational hours of the on-site and off-site equipment would be 8 hours per day and would occur 7 days a week. Diesel generators were modeled as point sources at the proposed loading docks. Idling activity of transportation refrigeration units (TRU), which is typically modeled as a diesel emissions point source, was modelled as having zero emissions because the TRU loading docks would be electrified as part of the project. TRUs 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. Based on data provided by the project applicant, loading docks are anticipated to be used for 4 hours per day, 7 days a week.

For operational activities, three haul routes (each with separate ingress and egress points) were modeled as line volume sources to represent a series of volume sources. The line volume sources represent the haul truck emissions traveling to and from the site. These line sources were assumed to have an adjacent configuration of volume sources spaced at 8.5-meter (m) intervals, with a 6.8 m plume height, 8.5 m plume width, and a 3.4 m release height. These were calculated based on the assumption that trucks traveling on these routes would have an average height of 4 m (13.5 feet) and width of 2.5 m (8 feet). For more detailed information regarding the HRA methodology, inputs, and outputs, refer to Appendix C.

Impacts related to odors were assessed qualitatively, based on proposed construction and operation activities, equipment types and duration of use, overall construction schedule, and distance to nearby sensitive receptors.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines and PCAPCD recommendations. The project would have a significant impact related to air quality if it would:

- conflict with or obstruct implementation of an applicable air quality plan;
- violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- result in a cumulatively considerable net increase of any criteria air pollutant for which the project region is in nonattainment under any applicable NAAQS or CAAQS (including releasing emissions that exceed mass emission level standards for ozone precursors);
- expose sensitive receptors to substantial pollutant concentrations (including TACs); or
- create objectionable odors affecting a substantial number of people.
- As stated in Appendix G of the State CEQA Guidelines, the significance criteria established by the applicable air district may be relied on to make the above determinations. In its 2017 *CEQA Handbook* (Handbook), PCAPCD provides evidence to support the development and applicability of its thresholds of significance for project-generated emissions of criteria air pollutants and precursors, which may be used at the discretion of a lead agency overseeing the environmental review of projects located within the Mountain Counties Air Basin, Lake Tahoe Air Basin, and SVAB (where the project is located). As stated in the Handbook, "[i]t is the District's position that any 'nonattainment designation' is a significant environmental issue for air quality impacts because all sources in the area, including direct and indirect sources, contribute emissions that result in air quality deterioration. Therefore, the nonattainment status should be addressed within environmental documents and can be used within the CEQA process as a basis to establish thresholds of significance" (PCAPCD 2017: 4). CEQA-related air quality thresholds of significance are tied to long-term air quality planning, which focuses on achieving or maintaining attainment designations with respect to the NAAQS and CAAQS for criteria air pollutants, which are scientifically substantiated, numerical concentrations considered to be protective of human health.
- These numerical thresholds for construction- and operation-related emissions of criteria air pollutants and precursors would determine whether a project's discrete emissions would result in a regional contribution (i.e., significant) to the baseline nonattainment status of SVAB. In developing thresholds of significance for individual project emissions, PCAPCD analyzed emissions values against the PCAPCD's offset thresholds to ozone precursors, which, when applied, prevent further deterioration of ambient air quality in the SVAB. As stated by PCAPCD, "[e]mission offset requirements specified within the local air district's NSR rules are set consistent with the nonattainment classification of the federal and state ozone ambient air quality standards, pursuant to the California Health and Safety Code" (PCAPCD 2017: 4). Using these parameters, PCAPCD has developed quantitative thresholds of significance for project-level CEQA evaluation that may be used to determine the extent to which a project's emissions of criteria air pollutants and precursors would contribute to the regional degradation of ambient air quality within the SVAB. According to PCAPCD, projects with emissions below these thresholds of significance would demonstrate consistency with PCAPCD and other regional air district's air quality

plans, which would minimize the potential for adverse health outcomes from exposure to criteria air pollutants in exceedance of the NAAQS and CAAQS.

- Per Appendix G of the State CEQA Guidelines and PCAPCD recommendations (PCAPCD 2017), an air quality impact is considered significant if implementation of the project would result in:
- construction-generated criteria air pollutant or precursor emissions that would exceed the PCAPCD-recommended threshold of 82 pounds per day (lb/day) for ROG, NO_X, or PM_{10} (PCAPCD 2017: 21), or operation-related (regional) emissions of ROG or NO_X that exceed a mass emission threshold of 55 lb/day, and emissions of PM_{10} that exceed 82 lb/day. While PCAPCD has not established a mass emission threshold for $PM_{2.5}$, which is a subset of PM_{10}, this analysis considers project-generated emissions of $PM_{2.5}$ to be significant if PCAPCD's thresholds for PM_{10} are exceeded (PCAPCD 2017: 21);
- long-term operational local mobile-source CO emissions that would result in an exceedance of the NAAQS and CAAQS for CO (PCAPCD 2017: 21);
- exposure of sensitive receptors to TAC emissions that would exceed 10 in 1 million for the carcinogenic risk (i.e., the risk of contracting cancer) or a noncarcinogenic Hazard Index of 1 for the maximally exposed individual (PCAPCD 2017: 58-62); or
- creation of an objectionable odor affecting a substantial number of people or locating new development such as residential land uses that would be subject to existing odor sources.

ISSUES NOT DISCUSSED FURTHER

Localized emissions of mobile-source CO are not assessed further. The SVAB has been in attainment for CO since 1998, and as vehicle fleets in California continue to become cleaner, CO impacts are less of a concern. Hence, localized mobile-source CO emissions associated with the project are not anticipated to exceed PCAPCD's thresholds and therefore are not discussed further in this analysis.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.4-1: Construction Emissions of Criteria Air Pollutants and Ozone Precursors

Construction of the project would result in emissions of ROG, NO_X, and particulate matter from the use of heavy-duty construction equipment, travel on unpaved surfaces, and earth movement for site preparation/grading activities. Construction activities would result in maximum daily emissions that would not exceed PCAPCD's thresholds of significance in any year except for during Phase 3 when NOx emissions would exceed PCAPCD's daily thresholds of 82 lb/day. This impact would be **significant**.

Project construction activities would result in emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ from site preparation (e.g., excavation, clearing, trenching), off-road equipment, material delivery, worker commute trips, building construction, paving, and application of architectural coatings. Fugitive dust emissions of PM_{10} and $PM_{2.5}$ are associated primarily with site preparation and grading and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance, and VMT on and off the site. Emissions of ozone precursors, ROG and NO_X, are associated primarily with construction equipment and on-road mobile exhaust. Paving and the application of architectural coatings result in off-gas emissions of ROG. PM_{10} and $PM_{2.5}$ are also contained in vehicle exhaust.

Typical construction activities would require earthmoving equipment (scrapers, dozers, excavators), concrete mix trucks and concrete pumps, cranes, welders, pavers, rollers, paving equipment, forklifts, semi-trucks and other trucks for deliveries, trenchers, generators, and personal autos as necessary. Activities would also include hauling, vendor, and worker trips that would occur mostly off-site. For the purposes of this analysis, construction activities are anticipated to occur over four phases and were conservatively assumed to happen over a seven-year timeframe in anticipation of a 2023 start year for construction and a 2030 build out year, although the rate of buildout would be

largely driven by market demand. These phases are not expected to overlap. Phase 1 is anticipated to begin construction in late fall 2023 and be complete in 2024. Occupancy for Phase 1 is projected to occur in early 2025. The construction schedule of future phases was determined based on construction duration suggested by the applicant and CalEEMod defaults.

The electrical substation would be constructed during either Phase 2 or 3 depending on the specific level of electricity demand of the future tenants. For the purpose of this analysis, the electrical substation is assumed to be built during Phase 2. The parking spaces were separately modeled as a land use in CalEEMod. For any given phase, there would be a range of 75 to 125 construction workers for a given shift. Access during construction would be from Blue Oaks Boulevard. The project would also include construction of 3,016 total parking stalls, with 2,480 parking stalls on the south parcel and 536 parking stalls on the north parcel. A bridge would also be constructed across Pleasant Grove Creek to connect the north and south parcels of the project site, which was assumed to occur during construction of Phase 4, to provide the connection needed for Phase 4. Maximum daily emissions for each project phase are presented in Table 3.4-5 and model inputs and outputs are available in Appendix C.

Table 3.4-5 Unmitigated Maximum Daily Emissions of Criteria Air Pollutants and Precursors Emissions Associated with Project Construction (lb/day)

Construction Phase	ROG (lb/day) Emissions	NO_X (lb/day) Emissions	PM_{10} (lb/day) Emissions
Phase 1	9	81	37
Phase 2	9	79	37
Phase 3	9	77	33
Phase 4 (includes bridge construction)	11	100	35
Maximum Daily Emissions	**12**	**107**	**39**
PCAPCD Thresholds of Significance	**82**	**82**	**82**
Threshold Exceeded	**No**	**Yes (during Phase 4)**	**No**

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; PM_{10} = respirable particulate matter; lb/day = pounds per day; PCAPCD = Placer County Air Pollution Control District; tpy = tons per year.

Source: Modeling conducted by Ascent Environmental in 2022.

According to the PCAPCD guidance, projects with daily emissions exceeding the thresholds of 82 lb/day for PM_{10}, NO_X, or ROG would have a significant impact on air quality. As shown in Table 3.4-5, project construction is anticipated to generate emissions that would not exceed the established maximum daily for PM_{10}, NO_X, and ROG during all years of construction except for during Phase 4 when the bridge would be constructed, in which case NO_X emissions would exceed the applicable threshold of 82 lb/day. Because PCAPCD's thresholds of significance are directly tied to attaining the NAAQS, projects that exceed these thresholds would be considered to contribute to adverse health effects. For these reasons, construction emissions from the project could result in negative health outcomes and would be **significant**.

Mitigation Measures

Mitigation Measure 3.4-1: Reduce Construction-Related Emissions of Criteria Air Pollutants and Ozone Precursors

To reduce NO_X emissions to below PCAPCD thresholds, the maximum daily emissions occurring in Phase 3 would need to be reduced by at least 24 percent. Prior to issuance of grading permits for Phase 3 of the project, the applicant and their construction contractors shall submit to the City a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used during any portion of Phase 3 construction.

- The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment.

- The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.
- This information shall be submitted at least 4 business days prior to the use of such off-road equipment.
- The inventory shall be updated and submitted monthly throughout the duration of construction, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.

In addition to the equipment inventory requirement, the project representative shall provide a plan for approval by the City demonstrating that the off-road vehicles (50 horsepower or more) to be used during construction, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average emissions of no more than 82 pounds of NO_X per day. This plan shall be submitted to the City in conjunction with the equipment inventory. Acceptable options for reducing emissions may include use of late model engines (Tier 4), low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.

Significance after Mitigation

Incorporation of Mitigation Measure 3.4-1 would require that emissions control devices, alternative fuel, or cleaner burning construction equipment would be utilized, ensuring that NO_X emissions are sufficiently reduced such that maximum daily emissions do not exceed PCAPCD's daily NO_X thresholds of 82 lb/day during any construction period. Thus, the likelihood of an adverse health impact occurring from exposure to ozone in exceedance of an AAQS from project implementation within the SVAB would also be reduced and this impact would be reduced to a **less-than-significant** level.

Impact 3.4-2: Long-term Operational Emissions of Criteria Air Pollutants and Ozone Precursors

Implementation of the project would result in long-term operational emissions from the use of on-site equipment (e.g., diesel generators), building-related energy, and area-wide sources (e.g., landscaping equipment) as well as from mobile sources associated with employee commute and operational truck travel. Based on modeling conducted, operational emissions would exceed PCAPCD's thresholds of 55 lb/day for both NO_X and ROG, but not for PM_{10}; thus, the project would result in a cumulatively considerable net increase in criteria air pollutants and could result in adverse health impacts. This impact would be **significant**.

Project operation would result in the generation of long-term operational emissions of ROG, NO_X, and particulate matter (e.g., PM_{10} and $PM_{2.5}$) as a result of mobile, energy, and area-wide sources. The full buildout year is considered to be 2030. Defaults were assumed wherever information was not available. For specific assumptions and modeling inputs, refer to Appendix C.

Mobile-source emissions of criteria air pollutants and precursors would result from vehicle trips generated by employee, commute, vendor, and hauling trips (e.g., delivery of supplies). The VMT and average daily trips data was provided by Fehr & Peers (Gard, pers. comm., 2021) for the project. The total project VMT was estimated to be 85,680, which was derived by multiplying the project's average daily trips by the average trip length, which was derived from the base year City of Roseville travel demand model. The VMT calculations include the entire length of the trips (and not solely the portion of the trips within the Roseville City limits). The average daily traffic generated by the project would be 8,160 trips. Out of these trips, 14 percent were assumed to be trucks (i.e., 1,140 trips) and 86 percent were assumed to be passenger vehicles (i.e., 7,020 trips). Out of the total truck trips, 80 percent were assumed conservatively include TRUs. TRU engines usually range from less than 15 to 50 horsepower (hp), with the most common size being about 35 hp (CARB 2003). For the purposes of this analysis, TRUs were conservatively assumed to operate at 35 horsepower and a load factor of 60 percent (CARB 2003). Through the TRU Airborne Toxic Control Measure, CARB limits particulate matter emissions to 0.02 grams per horsepower-hour under the ultra-low emission performance standard. This limit was used as the emission factor to estimate diesel PM emissions from TRUs. In addition, the on-site exhaust emissions from idling of trucks were also estimated using emissions factors from the EMFAC2021 model. The exhaust emissions from truck and TRU idling were considered under area sources.

On-site sources would include the use of diesel generators, truck idling, use of landscaping equipment, the periodic application of architectural coatings, and generation of ROG from the use of consumer products. As details on potential future tenants are unknown at this time, the quantity of diesel generators required was considered for the analysis based on a study done by the South Coast Air Quality Management District (SCAQMD 2014) in consultation with the project applicant. The study contacted 400 high cube warehouses, which are mostly used for storage and distribution of manufactured goods, to investigate their truck trip rates for use in CEQA air quality analyses. The survey also included information about off-road equipment used in these facilities, which was the basis of assumption for this analysis. As mentioned above, truck and TRU idling was estimated as a part of area source and was assumed to occur at the designated loading docks. Refer to Appendix C for more details about the HRA modeling inputs. Energy sources would include electricity and natural gas consumption by the buildings. CalEEMod defaults were assumed to reflect project-specific energy consumption estimated.

Table 3.4-6 summarizes the maximum daily and annual operational emissions of criteria air pollutants and ozone precursors at full project buildout.

Table 3.4-6 Unmitigated Criteria Air Pollutant and Precursor Emissions Associated with Project Buildout Operations (2030)

Source	ROG (lb/day)	NO_X (lb/day)[1]	PM_{10} (lb/day)
Area Sources[2]	58	<0.1	<0.1
On-site Off-Road Equipment[3]	1	9	<1
Energy	1	11	<1
Mobile – Light Duty Vehicles	49	9	47
Mobile – Heavy Duty Vehicles	11	143	10
Total	**120**	**172**	**58**
PCAPCD Thresholds of Significance	**55**	**55**	**82**
Exceeded Threshold	**Yes**	**Yes**	**No**

Notes: ROG = reactive organic gas; NO_X = oxides of nitrogen; CO = carbon monoxide; PM_{10} = respirable particulate matter; lb/day = pounds per day; PCAPCD Placer County Air Pollution Control District. These unmitigated emissions include the project specific VMT provided by Fehr & Peers (Gard, pers. comm., 2021).

[1] NO_X emissions would exceed the threshold of significance when Phase 3 is operational.

[2] Area source includes consumer products, landscaping equipment, and occasional architectural coating.

[3] On-site off-road equipment would include diesel generators. Forklifts and yard trucks are assumed to be electric and would not contribute to local criteria air pollutants.

Source: Modeled by Ascent Environmental in 2022.

Project implementation would generate emissions of criteria air pollutants currently under nonattainment status (i.e., ROG, NO_X, and PM_{10}). Based on project characteristics, operational maximum daily emissions of ROG and NO_X would exceed PCAPCD's thresholds of significance. The project would exceed the threshold of significance when Phase 3 is operational. As discussed under the heading, "Thresholds of Significance," in Section 3.4.3, PCAPCD's mass emissions thresholds have been developed in consideration of long-term air quality planning to attain the NAAQS as a component of the State SIP strategy. Projects that emit emissions in exceedance of these thresholds would conflict with air quality plans that include strategies and inventories to assist an air basin in attaining the NAAQS. The NAAQS are scientifically substantiated concentration-based thresholds used to determine whether an adverse health outcome could occur from exposure. Because PCAPCD's thresholds of significance are directly tied to attaining the NAAQS, projects that exceed these thresholds would be considered to contribute to adverse health effects. For these reasons, operational emissions from the project could result in negative health outcomes and would be **significant**.

Mitigation Measures

Mitigation Measure 3.4-2a: Reduce On-site Criteria Air Pollutants and Ozone Precursors

Project operations would exceed PCAPCD's threshold of significance for ROG and NO_X by 67 lb/day and 127 lb/day, respectively. The applicant shall reduce ROG and NO_X emissions with on-site mitigation measures to the extent possible and then shall offset remaining emissions by participating in PCAPCD's off-site mitigation program. The following mitigation measures shall be implemented by the applicant to reduce emissions from operational activities. These mitigation measures would apply starting in Phase 3.

- All diesel trucks entering the Roseville Industrial Park shall meet or exceed 2010 engine emission standards specified in California Code of Regulations Title 13, Article 4.5, Chapter 1, Section 2025 or be powered by natural gas, electricity, or other diesel alternative(s). Facility operators shall maintain a log of all trucks entering the facility to document that the truck usage meets these emission standards. This log shall be available for inspection by City staff at any time.
- Prior to the issuance of a Building Permit for any project phase, the applicant shall show on the submitted building elevations that, at a minimum, 10 percent of all truck loading and unloading docks shall be equipped with one 110/208-volt power outlet for every two dock doors. Diesel trucks idling for more than the State-required time of 5 minutes shall be required to connect to the 110/208-volt power to run any auxiliary equipment. A minimum 2-foot x 3-foot sign that indicates "Diesel Engine Idling limited to a maximum of 5 minutes" shall be included with the submittal of building plans.
- Prior to Design Review approval for any project phase, the Site Plan shall show that the applicant has provided preferential parking spaces for employees that carpool/vanpool/rideshare. Such stalls shall be clearly demarcated with signage.
- A minimum of 10 percent of the parking spaces shall be electric vehicle-charging stations for automobiles and/or light-duty vehicles. In addition, the remaining on-site parking facilities shall be designed and constructed so that parking spaces are capable of supporting future electric vehicle supply equipment (EVSE) charging locations that can support on-site heavy-duty electric or hybrid trucks. However, because the actual future tenants are unknown at this time, the level to which each individual on-site mitigation measure can be implemented is unknown and therefore emissions reductions from these onsite measures were not quantified.

Mitigation Measure 3.4-2b: Reduce Criteria Air Pollutants and Ozone Precursors through Off-site Measures

The proposed project would exceed the operational air quality thresholds as established by PCAPCD (a maximum of 55 lb/day of ROG and NO_X). The estimated total amounts of excess emissions are 65 lb/day for ROG and 117 lb/day for NO_X (based on subtracting the modelled emissions from the threshold). Per PCAPCD recommendations and to mitigate the project's further contribution to the long-term emission of pollutants, the applicant shall implement one of the following off-site mitigation measures prior to the operation of Phase 3:

- Establish mitigation off-site within the same region (i.e., east or west Placer County) by participating in an off-site mitigation program, coordinated through PCAPCD. Examples include but are not limited to: participation in a "Biomass" program that provides emissions benefits; retrofitting, repowering, or replacing heavy duty engines from mobile sources (e.g., busses, construction equipment, on road haulers); or other programs that the project proponent may propose to reduce emissions.
- Participate in PCAPCD's Off-site Mitigation Program by paying the equivalent amount of money, which is equal to the project's contribution of pollutants (ROG and NO_X), which exceeds the project-level threshold of 55 lbs/day for both ROG and NO_X multiplied by the current cost to mitigate one ton of ozone precursor emissions of $20,873 (updated July 2021). Based on the emission estimates presented in Table 3.4-6, daily NO_X thresholds would be exceeded by 117 lb/day and ROG by 65 lb/day, for a total of 182 lb/day or 33 tons/year of ozone precursors that need to be mitigated. The total area for the project is 2,421,600 square feet (sf) of building. Thus, as the phases of the project are developed over time, the cost of mitigation for each future tenant would be based on the size of the building that each tenant occupies and operates, equivalent to $0.30/square foot.

- In lieu of paying the mitigation fee established above, at the time of Phase 3 development application review, and prior to recordation of the final tentative map plan for any future building to be constructed, the applicant may choose to re-assess the mitigation fee that can be determined based on project-specific operations and more specific details pertaining to the level of on-site mitigation measures incorporated into the project, from the list provided above in Mitigation Measure 3.4-2a. To satisfy this mitigation requirement, the applicant shall hire a qualified professional to quantify on-site and off-site operational criteria air pollutants and ozone precursors and shall provide substantial evidence to the City for approval. Based on this refined analysis, if operational emissions still exceed PCAPCD thresholds of significance, the mitigation fee shall be recalculated based on the cost to mitigate ozone precursors at that time.

Significance after Mitigation

The on-site mitigation measures specified above would effectively reduce the amount of ozone precursors (ROG and NO_X) emitted due to operational activities and the leftover excess emissions would be reduced through participation in PCAPCD's off-site mitigation program. However, because the actual future tenants are unknown at this time, the level to which each individual on-site mitigation measure can be implemented is unknown; thus, emissions reductions from the on-site measures were not quantified for this analysis and a worst-case scenario was considered. In a worst-case scenario where the on-site mitigation measures would not be enough to reduce the ozone precursor emissions, all the excess emissions would be offset by the off-site mitigation program and the applicant and future tenants would pay a maximum amount of $0.30/sf of building constructed to achieve PCAPCD's thresholds of significance.

With incorporation of Mitigation Measure 3.4-2a and 3.4-2b, project-generated operational emissions of criteria air pollutants and ozone precursors would be reduced to below PCAPCD's adopted thresholds of significance. Thus, the likelihood of an adverse health impact occurring from exposure to ozone in exceedance of an AAQS from project implementation within the SVAB would also be reduced and this impact would be reduced to a **less-than-significant** level.

Impact 3.4-3: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

Implementation of the project would result in an inconsistency with the City's 2035 General Plan because the project would require a General Plan Amendment. Additionally, the operational emissions from the project would exceed PCAPCD's threshold of significance, prior to mitigation, which would conflict with the objective of SMAQMD's AQAP (i.e., Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan). However, with incorporation of available on-site mitigation measures and the commitment to offset additional emissions with PCAPCD's off-site mitigation program, project-generated emissions would be reduced to a less-than-significant level. Nonetheless, because the project would conflict with the adopted General Plan, and associated land use projections used for the purpose of AQAP emissions forecasting, this impact would be **significant.**

SVAB is currently designated as nonattainment for ozone and PM_{10}. PCAPCD is a part of SMAQMD's AQAP, which presents comprehensive strategies to reduce volatile organic compounds, NO_X, PM_{10}, and $PM_{2.5}$ emissions from stationary or area, mobile, and indirect sources to achieve attainment status with respect to NAAQS and CAAQS. The emission inventories used to develop the applicable AQAPs are based primarily on projected population and employment growth and associated VMT for the SVAB. This growth is estimated for the region, based in part, on the planned growth identified in regional and local land use plans such as general plans or community plans. Therefore, projects that would result in increases in population or employment growth beyond that projected in regional or local plans could result in increases in VMT above that forecasted in the attainment plans, further resulting in mobile source emissions that could conflict with or obstruct implementation of the AQAP. Increases in VMT beyond that projected in the City's General Plan, SACOG's regional VMT modeling, and SMAQMD regional AQAPs generally would be considered to have a significant adverse incremental effect on the SVAB's ability to attain CAAQS and NAAQS for all criteria air pollutants.

The project site is currently zoned as Public/Quasi-Public (P/QP), which establishes areas for municipal, governmental, or public facilities. As part of the project, the site land use and zoning designations to Light Industrial (LI/M1), General Industrial (IND/M2), and Open Space (OS/OS) through a General Plan Amendment (GPA) and rezone (RZ). Before

approval of GPA, the project would be inconsistent with the existing General Plan. Further, as specified in Impact 3.4-2, operational emissions of ozone precursors (ROG and NO_X) would exceed the PCAPCD's thresholds of significance, prior to mitigation, which would conflict with the goals of SMAQMD's AQAP to attain the NAAQS and CAAQS in the SVAB. The thresholds of significance are developed for achieving attainment with respect to NAAQS and CAAQS. Because SVAB is designated nonattainment for ozone and PM_{10}, the exceedance of threshold due to the operational activities from the project would interfere with the region's ability to achieve attainment status. This impact would be **significant**.

Mitigation Measure 3.4-3: Implement Mitigation Measures 3.4-2a and 3.4-2b

The project applicant shall implement Mitigation Measures 3.4-2a and 3.4-2b, above, which require the implementation of available on-site mitigation measures and the commitment to offset additional emissions with PCAPCD's off-site mitigation program, respectively.

Significance after Mitigation

With incorporation of Mitigation Measures 3.4-2a and 3.4-2b, available on-site mitigation measures would be required and the commitment to offset additional emissions with PCAPCD's off-site mitigation program would ensure that all project-generated emissions would be reduced to a less-than-significant level. Therefore, even considering that the project would be inconsistent with land use projections and associated emissions budgets developed as a part of the attainment strategy for the region, because all emissions above PCAPCD's significant thresholds would be mitigated, the project would not obstruct or conflict with implementation of the AQAP. Further, the likelihood of an adverse health impact occurring from exposure to ozone in exceedance of an AAQS from the operation of the project within the SVAB would be reduced and, with incorporation of Mitigation Measures 3.4-2a and 3.4-2b, this impact would be reduced to a **less-than-significant** level.

Impact 3.4-4: Expose Sensitive Receptors to Substantial Pollutant Concentrations

An HRA was conducted to assess potential health risk exposure from construction and operation of the project. The HRA analyzed two scenarios; Scenario 1 assumes that a sensitive receptor would be exposed to diesel PM from both construction and operations for 30 years starting in 2023 through 2063; Scenario 2 assumes that a sensitive receptor would be exposed to diesel PM due to full operations for 30 years starting in 2030 through 2060. In both scenarios, the cancer risk was found to be less than 10 in a million, which is below PCAPCD's thresholds of significance. The Health Hazard Index (HHI), which indicates chronic non-cancer risk, was also found to be less than one. Therefore, diesel PM emissions from the project would not result in exposure of existing and future receptors to substantial TAC concentrations. This impact would be **less than significant**.

Diesel PM would be the primary TAC of concern associated with the project; thus, diesel PM is the focus of this analysis and the HRA that was conducted. The construction activities would occur at various locations throughout the project site, but, even though the use of off-road heavy-duty diesel equipment would be limited to total project construction split between four phases, the receptors would continue to be exposed by diesel PM emissions due to operational emissions and would result in a longer combined exposure duration; therefore, a construction and operational HRA was conducted in accordance with PCAPCD guidance and CARB recommendations for conducting HRAs.

Because the project would be built out in distinct phases over time, construction and operational emissions sources were modeled separately using different source parameters appropriate for each phase. Further, risk calculations also considered the extended duration of exposure that could occur as one portion of the project is built out and begins to operate while another portion begins to be constructed. As such, the HRA analyzed two scenarios:

- **Scenario 1** assumes that a sensitive receptor would be exposed to diesel PM from both construction and operations starting in 2023; and
- **Scenario 2** assumes that a sensitive receptor would be exposed to diesel PM due to full, buildout operations starting in 2030.

Construction and operational modeling inputs/assumptions are described separately below, then summarized together.

Construction

Construction-related activities would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road, heavy-duty diesel equipment used for site preparation, grading, trenching, building construction, paving and architectural coating, and other miscellaneous activities. On-road diesel-powered haul trucks traveling to and from the construction areas to deliver materials and equipment would also contribute to diesel PM and would affect the receptors around haul routes.

Project construction would occur in four phases with the construction of the first phase starting in 2023. Because construction of subsequent phases is dependent on market demand, specific phasing information was not available for Phases 2 through 4. The relative length of each construction activity for Phase 1, which was available, was used along with the duration of overall construction activities for each subsequent phase to approximate various construction stages for Phases 2 through 4, also informed by default durations in CalEEMod. A bridge would be constructed during Phase 4, which would connect the South and North Parcels.

The nearest sensitive receptors that could be adversely affected by construction are current and future expansion of Creekside Specific Plan area residences to the east, immediately adjacent to the project site, which are planned to accommodate 2,011 residential units at buildout. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area (adopted by the City in 2004), which is 60 percent built out, and will include 9,496 residential units, parks, open space, and commercial and industrial uses.

To determine pollutant concentrations at specific locations (i.e., receptors), air dispersion modeling was conducted using site-specific parameters (e.g., terrain, meteorological data) for construction activities. Multiple runs were conducted to reflect concentrations due to different phases of construction. Dispersion modeling was conducted using AERMOD Version 19191, with a unit emission rate of 1 g/s for all modeled sources. This approach was used so that resulting ground-level concentrations could be multiplied by actual emission rates for various scenarios (e.g., phase-wise construction, full buildout). The modeling included all standard regulatory default options, including the use of data from the nearest and most representative meteorological station and local terrain. Terrain in the project vicinity is generally flat.

To represent site locations where construction activities would occur, construction emission sources (i.e., the use of heavy-duty equipment on-site) was modeled as an array of adjacent volume sources. Based on recommendations from PCAPCD, each volume source was assumed to have 25-meter (m) sides, 5 m release height, an initial lateral dimension of 5.81 m, and an initial vertical dimension of 1 m, the latter two attributes were calculated from the length of the volume source side. The release height of 5 m was considered from Sacramento Air Quality Management District's (SMAQMD's) construction health risk guidance as PCAPCD does not have its own health risk guidance document. Construction hours would occur 8 hours per day and 5 days a week.

To estimate diesel PM emissions, the same modeling output that was described above for Impact 3.4-1 was used, and PM_{10} emissions were considered to be a surrogate for diesel PM. Diesel PM emissions from construction emissions modeling were applied to the air dispersion modeling outputs to obtain emissions concentrations, which were used to estimate health risks, using HARP 2. For more detailed information regarding the HRA methodology, inputs and outputs, refer to Appendix C.

Based on the emissions modeling conducted, annual emissions of exhaust diesel PM would be less than one ton per year during construction activity, which is below PCAPCD's thresholds of significance.

Operations

Project operation would result in the generation of long-term operational emissions of diesel PM as a result of mobile and area-wide sources. Mobile sources would include light-duty and heavy-duty vehicles coming in and out of the project site. Area-wide sources would include the use of diesel generators, forklift, yard trucks, and truck idling. Forklifts and yard trucks would be electricity-powered (Wertheim, pers. comm., 2022), and, hence, would not contribute to any diesel PM emissions. Likewise, loading docks would be electrified for future TRU idling and, hence, idling of diesel trucks would also not result in diesel PM emissions.

Though actual future tenants are not known yet, it was assumed that 80 percent of uses would be warehousing and distribution, 10 percent would be light manufacturing, and 10 percent would be equipment and materials storage yards. At full buildout, it was assumed that there would be 1 employee per 1,250 sf or 1,600 employees in the south parcel and 338 employees in the north parcel, for a total of 1,938 employees.

For the purposes of the HRA, operational-related emissions of diesel PM were estimated using CalEEMod Version 2020.4.0, as described above in Impact 3.4-2 and under the "Methodology" subheading. To determine pollutant concentrations at specific locations (i.e., receptors), air dispersion modeling was conducted using site-specific parameters (e.g., terrain, meteorological data) for construction activities. Multiple runs were conducted to reflect concentrations due to operations, using the same model parameters and approach discussed above for construction.

To model health risks from operations, an array of adjacent volume sources was modeled at the North and South Parcels to characterize use of off-road equipment, focusing on areas away from building facades and in proximity to loading docks. Off-road equipment was conservatively assumed to operate in the outdoor areas of the project site. Yard trucks are only expected to operate in the North Parcel while the forklifts would operate throughout the project site. Because yard trucks and forklifts would be electricity powered, they were modelled as having zero on-site emissions. Typical operational hours assumed for operations of the on-site and off-site equipment would be 8 hours per day and would occur 7 days a week. Diesel generators and TRUs were modeled as point sources at the proposed loading docks where TRU was modelled as zero because the TRU idling would be electrified. Based on data provided by the applicant, loading docks are anticipated to be used for 4 hours per day, 7 days a week.

For operational activities, three haul routes (each with separate ingress and egress points) were modeled as line volume sources to represent a series of volume sources. The line volume sources represent the haul truck emissions traveling to and from the site. These line sources were assumed to have an adjacent configuration of volume sources spaced at 8.5-m intervals, with a 6.8 m plume height, 8.5 m plume width, and a 3.4 m release height. These were calculated based on the assumption that trucks traveling on these routes would have an average height of 4 m (13.5 feet) and width of 2.5 m (8 feet). For more detailed information regarding the HRA methodology, inputs, and outputs, refer to Appendix C.

Table 3.4-7 presents the cancer and chronic non-cancer health risk from construction and operations. Figure 3.4-1 shows the contour of cancer risks from Scenario 1. To evaluate Scenario 1, construction and operational health risks were added to estimate risk due to both the activities over the exposure period of 30 years. This represents a worst-case scenario where the maximum risk from each phase at the particular receptor was considered to be the risk level at every receptor point. Scenario 2 was evaluated for full buildout operations over the exposure period of 30 years.

Table 3.4-7 Calculated Construction and Operations Cancer and Chronic Non-Cancer Risk

Phase	Point of Maximum Impact (PMI)		Maximum Exposed Individual Receptor (MEIR)	
	Cancer Risk (Chances in a Million)	Chronic Non-Cancer Risk (HHI)	Cancer Risk (Chances in a Million)	Chronic Non-Cancer Risk (HHI)
Phase 1 Construction only	2.9	0.005	3.0	0.003
Phase 2 Construction and operations	1.2	0.002	1.2	0.001
Phase 3 Construction and operations	1.2	<0.001	1.2	<0.001
Phase 4 Construction and operations	<1	<0.001	<1	<0.001
Full Buildout Operations[1]	4.6	<0.001	2.0	<0.001
Scenario 1 (construction + operations)[2]	**10.9**	**0.007**	**7.8**	**0.005**
Scenario 2 (operations)[3]	**4.8**	**<0.001**	**2.1**	**<0.001**

Phase	Point of Maximum Impact (PMI)		Maximum Exposed Individual Receptor (MEIR)	
	Cancer Risk (Chances in a Million)	Chronic Non-Cancer Risk (HHI)	Cancer Risk (Chances in a Million)	Chronic Non-Cancer Risk (HHI)
PCAPCD Thresholds of Significance	10	1	10	1
Exceeded Threshold	No	No	No	No

Notes: HHI = Health Hazard Index. PCAPCD = Placer County Air Pollution Control District

[1] Full buildout (operations only) scenarios are modelled for 23 years.

[2] The health risk from the 23-year full buildout scenario is added with the health risk from all the construction phases over 7 years to indicate risk in the case of Scenario 1 (i.e., health risk exposure to the sensitive receptor due to both construction and operational activities). The emissions estimation in CalEEMod was done for a duration of 6 years of active construction.

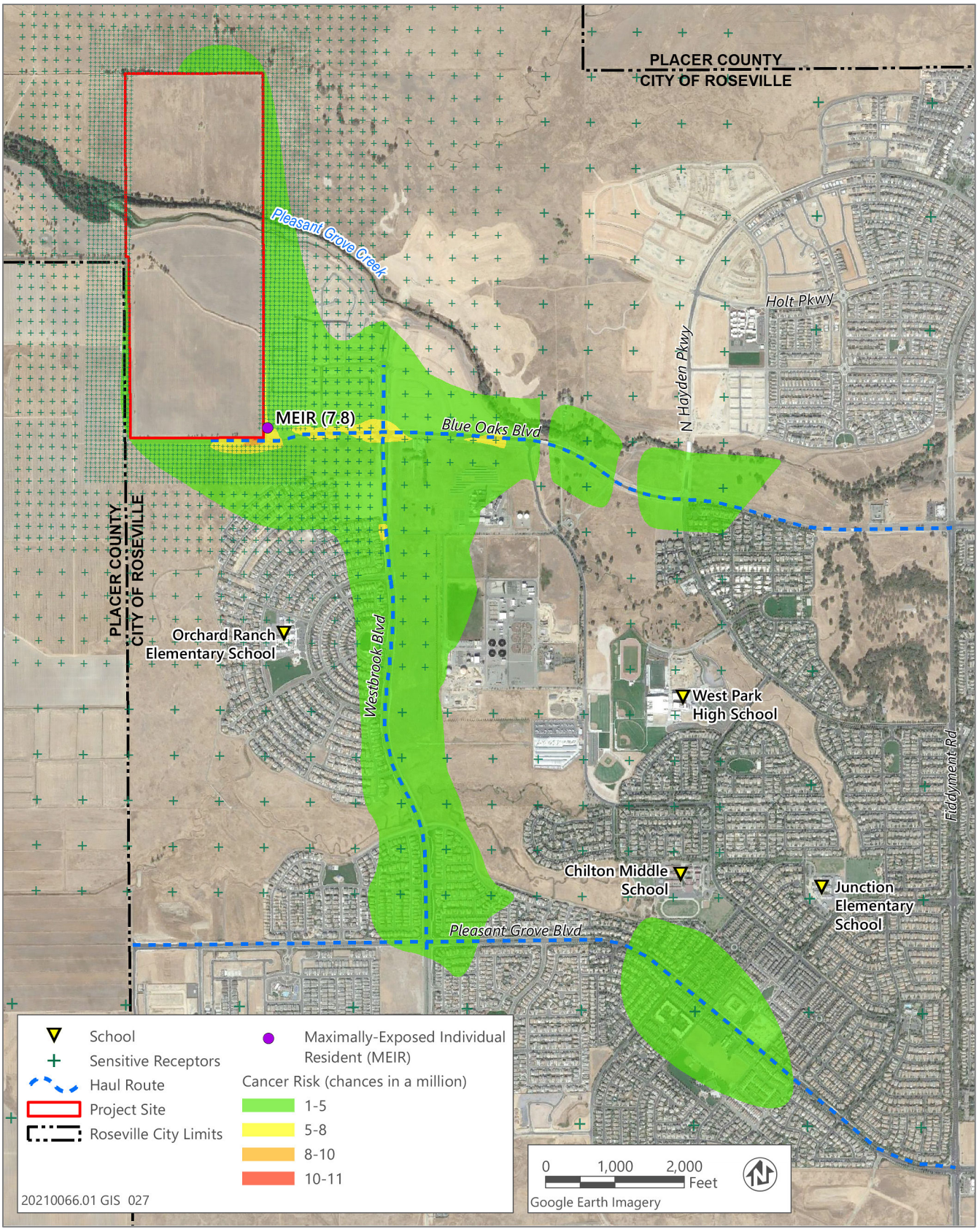
[3] The health risk from the 30-year full buildout scenario reflects Scenario 2 (i.e., health risk exposure to the sensitive receptor due to operations only).

Source: Modeling performed by Ascent Environmental in 2022.

As shown in Table 3.4-7, for both scenarios 1 and 2, the cancer risk was found to be less than one in a million, which is below PCAPCD's thresholds of significance. The HHI, which indicates chronic non-cancer risk, was found to be less than one for both construction and operations. Thus, the project would not expose existing and future receptors to substantial TAC concentrations and the impact due to construction and operations of the Roseville Industrial Park Project would therefore be **less than significant**.

Mitigation Measures

No mitigation is required.



Source: Adapted by Ascent in 2022.

Figure 3.4-1 Cancer Risk for Project Construction and Operations

Impact 3.4-5 Create Objectionable Odors Affecting a Substantial Number of People

The project would introduce new odor sources into the area such as temporary diesel exhaust emissions from the construction equipment and movement of trucks during construction. However, these odor sources would be temporary, intermittent, and dissipate rapidly from the source. Operation activities would include truck idling and diesel generators, both would also be intermittent in nature, and diesel particulate matter dissipates rapidly from the source. In addition, with implementation of Mitigation Measures 3.4-2a and 3.4-2b, project operation would not result in the generation of odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to a substantial number of people. Thus, this impact would be **less than significant**.

The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the affected receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generate citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose a substantial number of people to objectionable odors would be deemed to have a significant impact.

Construction

The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines, as well as emissions associated with paving and the application of architectural coatings may be considered offensive to some individuals. The generation of these odor emissions would vary greatly on a day-to-day basis depending on the type of construction activities. Application of architectural coatings would also be a source of offensive odors from volatile organic compounds. However, because the application of architectural coatings would be required to comply with PCAPCD Rule 218 (Architectural Coatings) that requires VOC limits on coatings used, potential construction odors would be minimized. Minor odors from the use of heavy-duty diesel equipment would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. Existing off-site receptors include residences located approximately 150 feet to the east and 300 feet to the south of the project site. Given the temporary nature of construction activities and the distance of the sensitive receptors from the project site, project construction is not anticipated to result in an odor-related impact during the construction phases of the project. Thus, the impact would be **less than significant.**

Long-Term Operations

Operational odor sources typically include landfills, wastewater treatment facilities, chemical manufacturing, rendering plants, and petroleum refineries, among others. Operation of the project would result in diesel-fueled delivery trucks and TRUs. These would be moving in and out of the facility and would not be idling for a long period of time (i.e., not longer than 5 minutes). Also, Mitigation Measures 3.4-2a and 3.4-2b would require the trucks to plug in electric power outlets which would restrict the diesel-powered vehicles from running for more than 5 minutes. Thus, the odors generated from trucks would be temporary and would dissipate rapidly from the source. Operational activities would also include use of on-site diesel-fueled generators. The diesel generator would only run for a maximum of 100 hours per year as per PCAPCD Rule 502 – New Source Review. Hence, the odor impact from these sources would be intermittent and would dissipate rapidly with distance from the source. Thus, the impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

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3.5 GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

This section presents a summary of regulations applicable to greenhouse gas (GHG) emissions; a summary of climate change science and GHG sources in California; quantification of project generated GHGs; and an assessment of their contribution to global climate change. In addition, mitigation measures are recommended to reduce the project's contribution to climate change where necessary.

No comment letters regarding GHGs or climate change were received in response to the notice of preparation (see Appendix A).

3.5.1 Regulatory Setting

FEDERAL

Supreme Court Ruling

In *Massachusetts et al. v. Environmental Protection Agency et al.*, 549 US. 497 (2007), the Supreme Court of the United States ruled that carbon dioxide (CO_2) is an air pollutant as defined under the federal Clean Air Act and that the US Environmental Protection Agency (EPA) has the authority to regulate GHG emissions.

In 2010, EPA started to address GHG emissions from stationary sources through its New Source Review permitting program, including operating permits for "major sources" issued under Title V of the federal Clean Air Act.

Regulations for Greenhouse Gas Emissions from Passenger Cars and Trucks and Corporate Average Fuel Economy Standards

The Safer Affordable Fuel-Efficient Vehicles Rule (SAFE Rule), promulgated by National Highway Traffic Safety Administration (NHTSA) and EPA in 2020, set new CAFE standards for passenger cars and light duty trucks, model years 2021–2026 (NHTSA 2020). This rule also revoked a waiver granted by EPA to the State of California under Section 209 of the Clean Air Act to enforce more stringent emission standards for motor vehicles than those required by EPA for the explicit purpose of greenhouse gas emission reduction, and indirectly, criteria air pollutant and ozone precursor emission reduction (NHTSA 2020). Details of each part follow below.

- Part One, "One National Program" (84 FR 51310), revoked a waiver granted by EPA to the State of California under Section 209 of the CAA. This revocation became effective on November 26, 2019, restricting the ability of the California Air Resources Board (CARB) to enforce more stringent GHG emission standards for new vehicles and set zero emission vehicle mandates in California. CARB has estimated the vehicle tailpipe and evaporative emissions impacts to criteria air pollutants and precursors from SAFE Rule Part One and has provided off-model adjustment factors to adjust emission outputs from CARB's Emission Factor (EMFAC2017) model. EMFAC2017 is CARB's most recent version of the EMFAC model series and considers effects of known policy implementation and economic forecasts, such as the implementation of the CAFE standards and Advanced Clean Cars program, on GHG and criteria pollutant emissions.
- Part Two, "Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks" (85 FR 24174) addresses CAFE standards for passenger cars and light trucks for model years 2021 to 2026 and became effective on June 29, 2020. This rulemaking sets new CAFE standards for model years 2022 through 2026 and amends existing CAFE standards for model year 2021. The rule retains the model year 2020 standards through model year 2026, but comment is sought on a range of alternatives discussed throughout the rule that would affect tailpipe emissions, including CO_2. Under the relaxed SAFE Rule, the estimated GHG and CAFE requirements for cars and trucks combined reach 202 gallons per mile (g/mile) of CO_2 and 40.4 miles per gallon (mpg), respectively, in model year 2026.

Clean Power Plan

In 2015, EPA unveiled the Clean Power Plan. The purpose of the plan was to reduce CO_2 emissions from electrical power generation by 32 percent relative to 2005 levels within 25 years. EPA is proposing to repeal the Clean Power Plan because of a change to the legal interpretation of Section 111(d) of the federal Clean Air Act, on which the Clean Power Plan was based. The comment period on the proposed repeal closed April 26, 2018. A final ruling by EPA has not yet been issued.

STATE

Plans, policies, regulations, and laws established by the state agencies are generally presented in the order they were established.

Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the executive order established total GHG emission targets for the state. Specifically, statewide emissions are to be reduced to 2000 levels by 2010, 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

This executive order was the subject of a California Appellate Court decision, Cleveland National Forest Foundation v. San Diego Association of Governments (SANDAG) (November 24, 2014) 231 Cal.App.4th 1056, which was reviewed by the California Supreme Court in January 2017. The case addressed the adequacy of the GHG analysis in the EIR SANDAG prepared for its 2011 Regional Transportation Plan. The Supreme Court decided a singular question in its decision, which was released on July 13, 2017. The California Supreme Court ruled that SANDAG did not abuse its discretion by declining "to adopt the 2050 goal as a measure of significance in light of the fact that the Executive Order does not specify any plan or implementation measures to achieve its goal."

In addition to concluding that an EIR need not use this executive order's goal for determining significance, the Court described several principles relevant to CEQA review of GHG impacts, including: (1) EIRs should "reasonably evaluate" the "long-range GHG emission impacts for the year 2050;" (2) the 2050 target is "grounded in sound science" in that it is "based on the scientifically supported level of emissions reduction needed to avoid significant disruption of the climate;" (3) in the case of the SANDAG plan, the increase in long-range GHG emissions by 2050, which would be substantially greater than 2010 levels, was appropriately determined to be significant and unavoidable; (4) the reasoning that a project's role in achieving a long-range emission reduction target is "likely small" is not valid for rejecting a target; and (5) "as more and better data become available," analysis of proposed plan impacts will likely improve, such that "CEQA analysis stays in step with evolving scientific knowledge and state regulatory schemes." The Court also ruled that "an EIR's designation of a particular adverse environmental effect as 'significant' does not excuse the EIR's failure to reasonably describe the nature and magnitude of the adverse effect." The Court also recognized that the 40 percent reduction in 1990 GHG levels by 2030 is "widely acknowledged" as a "necessary interim target to ensure that California meets its longer-range goal of reducing greenhouse gas emission 80 percent below 1990 levels by the year 2050." Senate Bill (SB) 32 has since defined the 2030 goal in statute (discussed below).

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, Governor Schwarzenegger signed the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32. 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 greenhouse gas emissions limit shall remain in effect unless otherwise amended or repealed. (b) It is the intent of the Legislature that the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020. (c) The California Air Resources Board (CARB) shall make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2020." [California Health and Safety Code, Division 25.5, Part 3, Section 38551]

Statewide GHG Emission Targets and the Climate Change Scoping Plan

Reducing GHG emissions in California has been the focus of the state government for approximately two decades (State of California 2018). GHG emission targets established by the state legislature include reducing statewide GHG emissions to 1990 levels by 2020 (AB 32 of 2006) and reducing them to 40 percent below 1990 levels by 2030 (SB 32 of 2016). Executive Order S-3-05 calls for statewide GHG emissions to be reduced to 80 percent below 1990 levels by 2050. Executive Order B-55-18 calls for California to achieve carbon neutrality by 2045 and achieve and maintain net negative GHG emissions thereafter. These targets are in line with the scientifically established levels needed in the United States to limit the rise in global temperature to no more than 2 degrees Celsius, the warming threshold at which major climate disruptions, such as super droughts and rising sea levels, are projected; these targets also pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (United Nations 2015:3).

California's 2017 Climate Change Scoping Plan, prepared by CARB, outlines the main strategies California will implement to achieve the legislated GHG emission target for 2030 and "substantially advance toward our 2050 climate goals" (CARB 2017: 1, 3, 5, 20, 25–26). It identifies the reductions needed by each GHG emission sector (e.g., transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste). CARB and other state agencies are currently developing a Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal of EO B-55-18. The latest 2022 Scoping Plan Update aims to assess progress towards achieving the SB 32 2030 target and lay out a path to achieve carbon neutrality by no later than 2045.

The State has also passed more detailed legislation addressing GHG emissions associated with industrial sources, transportation, electricity generation, and energy consumption, as summarized below.

Cap-and-Trade Program

CARB administers the state's cap-and-trade program, which covers GHG emission sources that emit more than 25,000 metric tons of carbon dioxide equivalent per year ($MTCO_2e$/year), such as refineries, power plants, and industrial facilities. This market-based approach to reducing GHG emissions provides economic incentives for achieving GHG emission reductions.

Transportation-Related Standards and Regulations

As part of its Advanced Clean Cars program, CARB established more stringent GHG emission standards and fuel efficiency standards for fossil fuel–powered on-road vehicles. In addition, the program's zero-emission vehicle (ZEV) regulation requires battery, fuel cell, and plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025 (CARB 2016a: 15). By 2025, when the rules will be fully implemented, GHG emissions from the statewide fleet of new cars and light-duty trucks will be reduced by 34 percent and cars will emit 75 percent less smog-forming pollution than the statewide fleet in 2016 (CARB 2016b: 1).

Executive Order B-48-18, signed into law in January 2018, requires all state entities to work with the private sector to have at least 5 million ZEVs on the road by 2030, as well as 200 hydrogen fueling stations and 250,000 electric vehicle–charging stations installed by 2025. It specifies that 10,000 of these charging stations must be direct-current fast chargers.

CARB adopted the Low Carbon Fuel Standard (LCFS) in 2007 to reduce the carbon intensity of California's transportation fuels. The LCFS applies to fuels used by on-road motor vehicles and by off-road vehicles, including construction equipment (Wade, pers. comm., 2017).

In addition to regulations that address tailpipe emissions and transportation fuels, the state legislature has passed regulations to address the amount of driving by on-road vehicles. Since passage of SB 375 in 2008, CARB requires metropolitan planning organizations (MPOs) to adopt plans showing reductions in GHG emissions from passenger cars and light trucks in their respective regions for 2020 and 2035 (CARB 2018: 1). These plans link land use and housing allocation to transportation planning and related mobile-source emissions. The Sacramento Area Council of Governments (SACOG) serves as the MPO for Sacramento, Placer, El Dorado, Yuba, Sutter, and Yolo Counties, excluding those lands located in the Tahoe Basin. The project site is in Placer County. Under SB 375, SACOG adopted its most recent *Metropolitan Transportation Plan/Sustainable Communities Strategy 2035* (MTP/SCS) in 2020. SACOG

was tasked by CARB to achieve a 7-percent per capita reduction compared to 2012 emissions by 2020 and a 16-percent per capita reduction by 2035, both of which CARB confirmed the region would achieve by implementing the MTP/SCS (SACOG 2016: 172; CARB 2018: 1). In March 2018, CARB promulgated revised targets tasking SACOG to achieve a 7-percent and a 19-percent per capita reduction by 2020 and 2035, respectively (CARB 2018: 1). SACOG is required to complete an updated MTP/SCS by February 2020. SACOG also plans to finalize a blueprint by 2024 which is planned to build a connected region that includes transportation options for residents, affordable housing for the region's growing population, and equitable investments that give all community members access to a safe and healthy region.

Legislation Associated with Electricity Generation

The State has passed legislation requiring the increasing use of renewables to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011); 52 percent by 2027 (SB 100 of 2018); 60 percent by 2030 (also SB 100 of 2018); and 100 percent by 2045 (also SB 100 of 2018).

Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Commission (CEC) updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions. The current California Energy Code (2016) is scheduled to be replaced by the 2019 standards on January 1, 2020. The 2019 California Energy Code will require builders to use more energy-efficient building technologies for compliance with increased restrictions on allowable energy use. Additionally, new residential units will be required to include solar panels, sized to offset the estimated electrical requirements of each unit (California Code of Regulations, Title 24, Part 6, Section 150.1[c]14). CEC estimates that the combination of required energy-efficiency features and mandatory solar panels in the 2019 California Energy Code will result in new residential buildings that use 53 percent less energy than those designed to meet the 2016 California Energy Code. CEC also estimates that the 2019 California Energy Code will result in new commercial buildings that use 30 percent less energy than those designed to meet the 2016 standards, primarily through the transition to high-efficacy lighting (CEC 2018a).

LOCAL

Placer County Air Pollution Control District

The Placer County Air Pollution Control District (PCAPCD) has issued guidance on the analysis of GHG emissions in Chapter 5 of the District's CEQA Air Quality Handbook (PCAPCD 2017). The chapter outlines expectations and methodologies for the analysis of GHG emissions generated by a proposed project, and guidance on determining the significance of impacts and appropriate mitigation. PCAPCD recommends that both construction and operations related GHG emissions be quantified for a proposed project, and that the significance of GHG emissions be determined in a manner based on whether such emissions are cumulatively considerable.

As explained below in Section 3.5.3 under "Thresholds of Significance," PCAPCD participated with other local air districts within the greater Sacramento region in development of a GHG threshold of significance for CEQA.

City of Roseville General Plan 2035

The City of Roseville General Plan 2035 contains a number of policies applicable to the proposed project that address air quality and climate change (City of Roseville 2020). Key provisions from the Air Quality and Climate Change Elements are summarized below. Numerous other General Plan elements also address sustainability and the reduction of GHG emissions, including the Circulation Element, Land Use Element, and Public Facilities Element.

Air Quality and Climate Change Element Policies

- **Policy AQ1.6** Require new development and City projects to reduce greenhouse gas emissions sources in the Planning Area consistent with the State's legislative framework, to the greatest degree feasible.
- **Policy AQ1.7** The City will participate in and support regional greenhouse gas reduction and adaptation programs that are consistent with the General Plan and have available funding.
- **Policy AQ1.8** Use the Multi-Hazard Mitigation Plan and regional collaborations to guide implementation of adaptation and resilience strategies associated with the anticipated local impacts of climate change.
- **Policy AQ1.10** Improve overall health and sustainability of the community by reducing emissions of greenhouse gases that contribute to climate change.
- **Policy AQ1.11** Promote local purchase and use of electric vehicles through incentives and strategic expansion of charging infrastructure.
- **Policy AQ1.17** Conserve energy and reduce air pollutant emissions by encouraging energy efficient building designs and transportation systems and promoting energy efficiency retrofits of existing structures.
- **Policy AQ1.19** Encourage energy efficiency by identifying potential cost savings, resource, and health benefits.

General Plan Implementation Measures

Appendix A of the General Plan identifies the General Plan's implementation measures, which are proactive activities designed to implement General Plan polices. The following may apply to the project:

Air Quality and Climate Change Mitigation Strategies - Area and Stationary Sources (Ongoing)

Require area and stationary source projects that generate significant amounts of air pollutants to incorporate air quality mitigation in their design, including the use of best available control technology for stationary industrial sources; clean fuel sources for heating and cooling; clean fuel technology at fueling stations; and other strategies, in consultation with PCAPCD.

Air Quality and Climate Change Mitigation Strategies - Mobile Sources (Ongoing)

Implement mitigation strategies to reduce air pollutant and greenhouse gas emissions from motor vehicles. These strategies, which may consist of improvements and refinements to the transportation and circulation infrastructure, may include, but are not limited to:

- Promote commercial/industrial project proponent sponsorship of van pools or club buses;
- Encourage commercial/industrial project day care and employee services at the employment site;
- Encourage the provision of transit, especially for employment-intensive uses;
- Provide incentives for the use of transportation alternatives; and
- Locate point sources, such as manufacturing and extracting facilities, in areas designated for industrial development and separated from residential areas and other sensitive receptors (e.g., homes, schools, and hospitals).

Air Quality and Climate Change Mitigation Strategies - Land Use (Ongoing)

Encourage development to be located and designed to minimize greenhouse gas and air pollutant emissions and avoid exposure to substantial pollutant concentrations by doing the following:

- Locate point sources, such as manufacturing and extracting facilities, in areas designated for industrial development and separated from residential areas and other sensitive receptors (e.g., homes, schools, and hospitals);
- Provide separation between sources of substantial air pollutant emissions and sensitive receptors and/or provide landscaping using plant species that are shown to reduce pollutant exposure; and
- Provide for mixed-use and transit-supportive development that reduces the length and frequency of vehicle trips or reduces the need for vehicle trips by providing practical pedestrian, bicycle, and transit options.

City of Roseville Communitywide Sustainability Action Plan

The Roseville Communitywide Sustainability Action Plan (SAP) sets forth a comprehensive strategy to reduce GHG emissions, as well as to promote economic growth based on clean technology and sustainable practices (City of Roseville 2010). While the 2035 General Plan includes goals and policies that guide the City's approach to addressing sustainability and climate change, the SAP serves as a more detailed strategy to implement the City's sustainability and climate change policies.

The SAP contains the City's GHG emissions baseline inventory and sets a GHG emissions reduction target of reducing emissions from the baseline level conducted in 2008 of 7.5 $MTCO_2e$ per service population to 6.0 $MTCO_2e$ per service population by 2020 (City of Roseville 2009). The inventory is summarized in Table 3.5-3 and GHG reduction measures are summarized in Table 3.5-1.

Table 3.5-1 Roseville Sustainability Action Plan Strategies and GHG Emission Reductions

Sustainable Action Strategy	Summary of Measures	Total Estimated GHG Emission Reductions	Percent of Total GHG Reductions Required to Meet Target
Transportation	Rideshare and Carpooling Transit Expansion Bike and Pedestrian Enhancements Alternative Fuel Infrastructure Intelligent Transportation Systems	49,130 $MTCO_2e$	66%
Land Use and Green Building	Urban Forestry Numerous supporting measures related to alternative transportation modes	NA	2%
Energy	Retrofits of Existing Residential Buildings Retrofits of Existing Commercial Buildings New Residential Building Energy Efficiency New Commercial Building Energy Efficiency	19,460 $MTCO_2e$	26%
Solid Waste	Food Waste to Energy	1,090 $MTCO_2e$	1%
Water	Reduce Water Use 20% Per Capita	3,520 $MTCO_2e$	5%
Marketing and Education	Community-Based Social Marketing Promote sustainable lifestyles	NA	NA

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent; NA = not available. Totals may not be exact due to rounding.

Source: City of Roseville 2010; adapted and compiled by Ascent in 2021.

3.5.2 Environmental Setting

THE PHYSICAL SCIENTIFIC BASIS OF GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcing (IPCC 2014: 5).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent are estimated to be sequestered through ocean and land uptake every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remain stored in the atmosphere (IPCC 2013: 467).

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

GREENHOUSE GAS EMISSION SOURCES

As discussed previously, GHG emissions are attributable in large part to human activities. The total GHG inventory for California in 2019 was 418 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) (CARB 2021). This is less than the 2020 target of 431 $MMTCO_2e$ (CARB 2021). Table 3.5-2 summarizes the statewide GHG inventory for California.

Table 3.5-2 Statewide GHG Emissions by Economic Sector

Sector	Percent	Total Emissions ($MMTCO2_e$)[1]
Transportation	41	171
Industrial	24	100
Electricity generation (in state)	9	38
Electricity generation (imports)	5	21
Agriculture	8	29
Residential	8	33
Commercial	6	25

Notes: $MMTCO2_e$ = million metric tons of carbon dioxide equivalent.

[1] Total emission are approximate value based on 2019 total California emissions.

Source: CARB 2021.

As shown in Table 3.5-2, transportation, industry, and electricity generation are the largest GHG emission sectors. Emissions of CO_2 are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution (CO_2 dissolving into the water), respectively, two of the most common processes for removing CO_2 from the atmosphere.

The City of Roseville conducted a GHG baseline inventory for the year 2008 as part of the SAP. Table 3.5-3 summarizes the projected GHG inventory for 2020.

Table 3.5-3 City of Roseville Communitywide GHG Emissions Projection 2020

Sector	Emissions ($MTCO_2e$)
On-Road Mobile Sources	530,088
Commercial/Industrial Energy Use	53,827
Residential Energy Use	156,267
Residential Natural Gas Use	102,996
Commercial/Industrial Natural Gas Use	53,827
Wastewater Treatment	39,068
Solid Waste	13,110
Water Use	14,298
Total	1,202,383

Notes: $MTCO_2e$ = million metric tons of carbon dioxide equivalent.

Source: City of Roseville 2010.

EFFECTS OF CLIMATE CHANGE ON THE ENVIRONMENT

According to the Intergovernmental Panel on Climate Change, which was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, global average temperature will increase by 3.7 to 4.8 degrees Celsius (°C) (6.7 to 8.6 degrees Fahrenheit [°F]) by the end of the century unless additional efforts to reduce GHG emissions are made (IPCC 2014: 10). According to CEC, temperatures in California will warm by approximately 2.7°F above 2000 averages by 2050 and by 4.1°F to 8.6°F by 2100, depending on emission levels (CEC 2012: 2).

Other environmental resources could be indirectly affected by the accumulation of GHG emissions and the resulting rise in global average temperature. In recent years, California has been marked by extreme weather and its effects. According to the California Natural Resources Agency's *Safeguarding California Plan: 2018 Update*, California experienced the driest 4-year statewide precipitation on record from 2012 through 2015; the warmest years on average in 2014, 2015, and 2016; and the smallest and second smallest Sierra snowpack on record in 2015 and 2014 (CNRA 2018: 55). In contrast, the northern Sierra Nevada experienced its wettest year on record during the 2016-2017 water year (CNRA 2018: 64). The changes in precipitation exacerbate wildfires throughout California, increasing their frequency, size, and devastation. As temperatures increase, the amount of precipitation falling as rain rather than snow also increases, which could lead to increased flooding because water that would normally be held in the snowpack of the Sierra Nevada and Cascade Range until spring would flow into the Central Valley during winter rainstorm events. This scenario would place more pressure on California's levee/flood control system (CNRA 2018: 190–192). Furthermore, in the extreme scenario involving the rapid loss of the Antarctic ice sheet, the sea level along California's coastline could rise up to 10 feet by 2100, which is approximately 30–40 times faster than the sea-level rise experienced over the last century (CNRA 2017: 102). Changes in temperature, precipitation patterns, extreme weather events, wildfires, and sea-level rise have the potential to threaten transportation and energy infrastructure and crop production (CNRA 2018: 64, 116–117, 127).

Placer County experienced an annual average high temperature of 75.1°F between 1950 and 2005. Under the Representative Concentration Pathways (RCP) 4.5 scenario, the county's annual average high temperature is projected to increase by 3.3°F to 78.4°F by 2050 and increase an additional 1.3°F to 79.7°F by 2099 (CEC 2018b). Under the RCP 8.5 scenario, the county's annual average high temperature is projected to increase by 3.9°F to 79°F by 2050 and increase an additional 4°F to 83°F by 2099 (CEC 2018b).

Placer County experienced an average precipitation of 22.7 inches per year between 1950 and 2005. Under the RCP 4.5 scenario, the county is projected to experience an increase of 2.1 inches to 24.8 inches per year by 2050 and decrease to 24.1 inches per year by 2099 (CEC 2018b). Under the RCP 8.5 scenario, the county is projected to experience an increase of 1.3 inches to 24 inches per year by 2050 and increase to 24.7 inches per year by 2099 (CEC 2018b).

3.5.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

GHG emissions associated with the project would be generated during project construction and during operations after the project is built. Estimated levels of construction- and operation-related GHGs are presented below. The project is evaluated for its consistency with adopted regulations, plans, and policies aimed at reducing GHG emissions, including the 2017 Scoping Plan, City of Roseville General Plan, communitywide Sustainability Action Plan, and PCAPCD's adopted thresholds of significance.

Construction-Related Greenhouse Gas Emissions

Short-term construction generated GHG emissions were calculated using the California Emissions Estimator Model (CalEEMod), Version 2020.4.0 (CAPCOA 2021), as recommended by PCAPCD and other air districts in California. Modeling was based on project-specific information (e.g., size of the buildings, duration of construction, construction phasing.) where available; assumptions based on typical construction activities; and default values in CalEEMod that are based on the project location and land use type proposed. As described in Chapter 2, "Project Description," the project would be developed in four phases. Phase 1 is anticipated to begin construction in late fall 2023 and be complete in 2024. Full operations for Phase 1 are projected to occur in early 2025. The timing of future phases will be determined based on market readiness and tenant demand. For the purposes of this analysis, all phases (1, 2, 3 and 4) were assumed to be constructed by 2029. The full buildout year is expected to be 2030. Further, it should be noted that individual construction activities (e.g., site preparation, grading, building construction) that would occur during each phase of the project could potentially overlap in time as one activity wraps up and the next ramps up. This potential overlap in on-site construction activities is accounted for within the emissions modeling, resulting in maximum daily and annual emissions estimate for each phase of the project.

Operational Greenhouse Gas Emissions

Operations-related emissions of GHGs were estimated for the following sources: area sources (e.g., landscape maintenance and offroad equipment), energy use (i.e., electricity and natural gas consumption), water use, solid waste generated, and mobile sources. Operation-related mobile-source GHG emissions were modeled based on the estimated level of vehicle miles traveled (VMT) by employees and vendors making deliveries. VMT estimates were derived from data generated during the traffic impact analysis conducted for the project (see Section 3.3, "Transportation and Circulation"). Mobile-source emissions were calculated using CalEEMod. Based on the nature of proposed uses, mobile source emissions would result from vehicle miles generated by both heavy-duty trucks as well as light-duty vehicles. For this analysis, 14 percent of the total vehicle miles were assumed to be heavy-duty trucks and 86 percent of the total vehicle miles as light-duty trucks. This assumption was made using the industrial parks data from the Trip Generation Manual (ITE 2021). The area sources include diesel generators, and on-site emissions include operation of forklifts, truck idling, and yard trucks. Specific model assumptions and inputs for these calculations can be found in Appendix D of this Draft EIR.

Indirect emissions associated with electricity were estimated using GHG intensity factors, which were derived from the utility serving the project, Roseville Electric's energy mix, and scaling it using Renewables Portfolio Standards (RPS) program's target of 100 percent renewable by 2045. The project's level of electricity and natural gas use was based on 2019 Title 24-adjusted consumption rates provided by CalEEMod for an Industrial Park land use type. Detailed model assumptions and inputs for these calculations are presented in Appendix D.

THRESHOLDS OF SIGNIFICANCE

The issue of global climate change is inherently a cumulative issue because the GHG emissions of individual projects cannot be shown to have any material effect on global climate. Thus, the project's impact on climate change is addressed only as a cumulative impact.

State CEQA Guidelines Section 15064 and relevant portions of Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Under Appendix G of the State CEQA Guidelines, implementing a project would result in a cumulatively considerable contribution to climate change if it would:

- generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or
- conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

PCAPCD developed recommended thresholds of significance for evaluating construction- and operation-related GHG emissions for proposed land use and stationary development projects in their jurisdiction as follows:

- De Minimis Level for the operational phases of 1,100 metric tons of CO_2e per year. This only applies to the operational phase of land use projects. Projects that exceed this level must conduct further analysis and apply thresholds below, as discussed herein.
- Efficiency Matrix, which gives per unit (capita or 1,000 square feet) threshold for different residential and non-residential projects, for the operational phase of land use development projects only when emissions exceed the De Minimis Level but do not exceed the Bright-line threshold. This approach is only applicable to land use projects with residential and/or commercial components.
- Bright-line Threshold of 10,000 metric tons of carbon dioxide equivalent per year ($MTCO_2e$/year) applies to the construction and operational phase of land use development projects as well as to operational emissions of stationary project. This threshold is applied when the De Minimis level is exceed and the Efficiency Matrix doesn't apply.

Thus, based on the project type and available thresholds of significance, the project would result in a significant impact related to climate change, if it would result in:

- construction-related emissions that exceed 10,000 $MTCO_2e$/year; or
- operational-related emissions that exceed 10,000 $MTCO_2e$/year.

ISSUES NOT DISCUSSED FURTHER

All issues pertaining to GHG emissions are discussed below.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.5-1: Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment

The project is estimated to generate a total of 3,934 $MTCO_2e$ and maximum annual emissions of 1,159 $MTCO_2e$ from construction activities and 25,059 $MTCO_2e$/year during full buildout in 2030. Annual maximum construction emissions of 1,159 $MTCO_2e$ would not exceed PCAPCD's bright line threshold of 10,000 $MTCO_2e$/year; however, operational emissions of 25,059 MTCO2e/year would exceed PCAPCD's Bright-Line Threshold of 10,000 $MTCO_2e$/year and would result in a considerable contribution to cumulative emissions related to global climate change. This impact would be **significant.**

GHG emissions associated with the project would be generated during both construction and operational activities. Project-related construction activities would result in GHG emissions from the use of heavy-duty off-road construction equipment, delivery trucks associated with materials transport, and vehicle use during worker commute.

Construction

Construction activities are anticipated to occur over a six-year timeframe in four phases, which would be built out over years but also largely driven by market demand. These phases are not expected to overlap. Phase 1 is anticipated to begin construction in late fall 2023 and be complete in 2024. Occupancy for Phase 1 is projected to occur in early 2025. Phasing information was available for phase 1 but because specific phasing information was not available for subsequent phases, buildout timing was based on a combination of anticipated construction for Phase 1 and supplemented by model defaults. Table 3.5-4 provides a summary of the total construction-related emissions that would occur as a result of the project.

Table 3.5-4 Project-Generated Construction Greenhouse Gas Emissions

Construction Year	GHG Emissions ($MTCO_2e$)
Phase 1	
2023	115
2024	884
Phase 2	
2024	144
2025	807
Phase 3	
2026	1,159
2027	7
Phase 4	
2028	820
2029	5
Total	3,934

Notes: Totals may not add due to rounding; GHG = greenhouse gas; MTCO2e = metric tons of carbon dioxide equivalent.

Source: Modeled by Ascent Environmental in 2022.

As shown in Table 3.5-5, the maximum level of GHG emissions generated by the project in a single year of construction between the years 2023 and 2029 would be 1,159 MTCO2e in 2026. (The project would generate total construction emissions up to 3,934 $MTCO_2e$ over the entire construction for all phases.) This would not exceed PCAPCD's bright-line threshold of 10,000 $MTCO_2e$/year.

Operations

Operation of the project would result in mobile-source GHG emissions associated with vehicle trips to and from the project site, area-source emissions from the operation of landscape maintenance equipment, consumer products and architectural coatings, energy-source emissions from the consumption of electricity and natural gas, water-related energy consumption associated with water use and the conveyance and treatment of wastewater, and waste-generated emissions from the transport and disposal of solid waste. Refer to Section 3.4, "Air Quality," for detailed methodology. Modeling results are shown in Table 3.5-5.

Table 3.5-5 Project-Generated Operational Greenhouse Gas Emissions

Emissions Source	GHG Emissions ($MTCO_2e$/year)
Area	<0.1
Energy	5,264
Mobile – Passenger Vehicles	7,449
Mobile - Heavy duty Vehicles	8,972
Offroad	694
Waste	1,510

Emissions Source	GHG Emissions ($MTCO_2e$/year)
Water	1,170
Total Operational GHG Emissions	**25,059**
Bright-Line Threshold of Significance	**10,000**
Exceeds Threshold of Significance?	**Yes**

Notes: Totals may not add due to rounding; GHG = greenhouse gas; MTCO2e/year = metric tons of carbon dioxide equivalent per year.

[1] Construction emissions include both project construction and off-site roadway improvements.

Source: Modeled by Ascent Environmental in 2022.

As shown in Table 3.5-5, project operational activities would generate GHG emissions of 25,059 $MTCO_2e$/year. This would exceed the de minims threshold of 1,100 $MTCO_2e$/year and the 10,000 $MTCO_2e$/year Bright-Line threshold, used as a basis of significance in this analysis. Because the project would result in an increase in GHG emissions exceeding the applicable thresholds, the project would result in a considerable contribution to global climate change, and this impact would be **significant**.

Mitigation Measures

Mitigation Measure 3.5-1a: On-site GHG Reduction Measures

The project applicant shall reduce operational GHG emissions with on-site mitigation measures. Specific measures shall be designed to consider any potential physical site constraints (e.g., solar is more effective when not obstructed by trees). The following measures shall be implemented on-site, to reduce operational GHG emissions and apply to all buildings of all phases of development.

Transportation

- Implement Mitigation Measure 3.4-2a in Section 3.4, "Air Quality," which requires that 10 percent of onsite loading docks be equipment with 110/208-volt power outlets, capable of charging transportation refrigeration units (TRUs), as well as prohibition of diesel engine idling.
- Implement Mitigation Measure 3.4-2a in Section 3.4, "Air Quality," which requires the provision of electric vehicle-charging stations for automobiles and/or light-duty vehicles, as well as parking spaces that are capable (i.e., EV-ready) of supporting future electric vehicle supply equipment (EVSE) charging locations that can support on-site heavy-duty electric or hybrid trucks.

Building Energy

- All buildings shall eliminate the use of natural gas, through the installation of on-site solar or other available renewable energy sources such that all natural gas demand is supplemented by renewable sources. Based on the modeling conducted, the project would require a total of 39,472,080 kilo-British thermal unit per year (kBtu/year) of natural gas. To meet this demand, approximately 11,567 megawatt-hour per year (MWh/year) electrical energy would be required, and this could be met by 9-megawatt (MW) capacity of solar panel system, which would require approximately 12 acres of space. Accordingly, all appliances (water heating, building cooling/heating systems) shall be electric-powered. To demonstrate compliance, electric infrastructure, energy systems, and appliances shall be depicted on the building plans submitted to the City, prior to issuance of building permits. Refer to Appendix D for detailed calculations related to mitigation measures.
- High-efficiency air-conditioning with smart thermostats shall be installed in all buildings.
- Use of Energy Star® exit lighting or exit signage shall be installed in all buildings.
- Low-flow faucets shall be installed that comply with CALGreen non-residential measures. Below are the recommended flowrates,
    - For kitchen faucets, maximum flow rate not to exceed 1.8 gallons per minute at 60 pounds per square inch [psi].

- For bathroom faucets, maximum flow rate not to exceed 0.5 gallon per minute at 60 psi.
- For toilets, maximum flush volume not to exceed 1.28 gallons per flush.
- For urinals, maximum flush volume not to exceed 0.5 gallon per flush.

Mitigation Measure 3.5-1b: Off-site GHG Reduction Measures

Implementation of Mitigation Measure 3.5-1a would result in the reduction of GHG emissions of up to 2,709 $MTCO_2e$/year (see Table 3.5-6). To compensate for emissions in excess of 10,000 $MTCO_2e$ for a single year, an additional reduction of 12,350 $MTCO_2e$ of emissions would be required. To achieve this reduction, the applicant shall compensate by purchasing off-site GHG reduction credits for the remaining mass emissions associated with operations to PCAPCD's adopted threshold of 10,000 $MTCO_2e$ (for one year) after implementation of on-site GHG reductions associated with Mitigation Measure 3.5-1a. The level of GHG offsets needed to achieve the threshold may be re-calculated prior to approval of final construction drawings, so long as GHG estimates are prepared by a qualified GHG specialist retained by the City and based on substantial evidence. Further, to comply with this measure, any GHG offset purchased shall comply with the following parameters.

The GHG reductions achieved through an offset or through the purchase of a carbon credit must meet the following criteria:

- Real: They represent reductions actually achieved (not based on maximum permit levels).
- Additional/surplus: They are not already planned or required by regulation or policy (i.e., not double counted).
- Quantifiable: They are readily accounted for through process information and other reliable data.
- Enforceable: They are acquired through legally binding commitments/agreements.
- Validated: They are verified through the accurate means by a reliable third party.
- Permanent: They will remain as GHG reductions in perpetuity.

The purchase of GHG offsets shall prioritize implementation of offsets generated within or as close to Placer County as possible but may also include offsets from the rest of California and from other states with offset validity laws at least as strict as California's, in order of preference. All carbon offsets must be purchased from programs verified by a major third-party registry; examples include, but are not limited to, Climate Action Reserve (CAR), American Carbon Registry, and Verra (formally the Verified Carbon Standard). The purchase and retirement of the GHG offset must be demonstrated to the City, prior to issuance of any building permits.

Significance after Mitigation

Implementation of the on-site GHG reduction measures required by Mitigation Measure 3.5-1a would reduce GHG emissions associated with building energy and transportation, as shown in Table 3.5-6.

Table 3.5-6 Mitigation Measures applied to the Project-Generated GHG Emissions

Mitigation Measure	GHG Emissions ($MTCO_2e$/year)
Installation of Solar Panel System to Offset Building Natural Gas Demand	- 2,119
Installation of EV charging stations (10 percent of total)	-195
Loading Dock Electrification	-395
Total GHG Reduction	**-2,709**
Total GHG emissions from Operational Activities	**25,059**
Total GHG Emission after mitigation	**22,350**
Additional Mitigation Obligation	**12,350 $MTCO_2e$**

Notes: GHG = greenhouse gas; $MTCO_2e$/year = metric tons of carbon dioxide equivalent per year.

Source: Modeled by Ascent Environmental in 2022.

Implementation of Mitigation Measure 3.5-1b would further reduce GHG emissions and could offset a single year of operation-related GHG emissions but would not reduce emissions for the life of the project below PCAPCD thresholds. Additionally, because of the long-term buildout of the project, the availability and affordability of purchasing GHG offset credits in the future is unknown. Thus, the contribution of GHG emissions associated with the project to cumulative GHG emissions would not be reduced to a less-than-significant level and could substantially contribute to a significant cumulative impact. The impact would be **significant and unavoidable.**

Impact 3.5-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

The project would generate emissions that would exceed PCAPCD thresholds, and therefore, would be cumulatively considerable. This would result in an inconsistency with the state's GHG reduction targets. Mitigation measures would reduce emissions to the extent feasible but would not reduce emissions below the applicable thresholds for the life of the project. This impact would be **significant**

The project was evaluated qualitatively, for consistency with applicable local and State plans that were developed with the intent of reducing GHG emissions. Each applicable plan is discussed separately below.

Consistency with the 2017 Scoping Plan

The 2017 Scoping Plan lays out the framework for achieving the 2030 statewide GHG reduction target of 40 percent below 1990 levels and progress toward additional reductions. Appendix B of the 2017 Scoping Plan includes detailed GHG reduction measures and local actions that land use development projects can implement to support the statewide goal. For CEQA analyses, the 2017 Scoping Plan states that projects should implement feasible mitigation, preferably measures that can be implemented on-site. The project would require implementation of Mitigation Measure 3.5-1a, which would include building electrification and on-site solar. The mitigation measure would also promote the use of clean fuels for transportation by installing EV chargers and electrification of loading docks for TRU idling. In addition, Mitigation Measure 3.5-1b would require the purchase of GHG offsets to achieve further GHG reductions. However, the level of annual emissions that would be generated by the project, even considering on-site mitigation measures (i.e., 18,105 $MTCO_2e$/year) and the purchase of GHG offsets would still be considerable and would not be reduced to below the 1,100 $MTCO_2e$/year threshold for the life of the project; thus, emissions would be considered cumulatively significant. Further, considering that the primary source of emissions from the project would be from mobile sources, and would not be VMT-efficient, the project would conflict with the intent of the 2017 Scoping Plan.

City of Roseville General Plan 2035

As specified under Impact 3.5-1, the project would result in GHG emissions of 25,059 $MTCO_2e$/year. This would exceed the threshold of significance of 1,100 $MTCO_2e$/year and the impact would be significant. Mitigation Measure 3.5-1a would reduce the on-site emissions to the extent feasible and Mitigation Measure 3.5-1b would reduce emissions to the threshold for a single year but would not reduce emissions for the life of the project. Thus, the project's contribution to climate change would be considered cumulatively significant and inconsistent with the City's General Plan.

City of Roseville Communitywide Sustainability Action Plan

The City of Roseville's SAP sets detailed strategies to attain the City's sustainability and climate change policies. The SAP was developed with the intent of reducing GHG emissions, in line with the State's GHG reduction targets for the year 2020. The project would be developed well beyond the target year of the SAP and, therefore, the GHG reduction targets in the SAP would not be applicable to the project. Nonetheless, the incorporation of electric infrastructure and increased renewable energy would be consistent with measures in the SAP. However, considering that the project would generate mass emission levels considered significant by PCAPCD and considering that the SAP does not contain emissions reduction targets applicable to the project, a consistency analysis with this plan would not provide meaningful information relating to the project's ability to meet the City of Roseville's 2030 and 2050 GHG goals.

Summary

The project would generate emissions that exceed PCAPCD thresholds and, therefore, would be cumulatively considerable. This impact would be **significant.**

Mitigation Measures

Mitigation Measure 3.5-2: Implement Mitigation Measures 3.5-1a and 3.5-1b

The project applicant shall implement Mitigation Measures 3.5-1a and 3.5-1b.

Significance after Mitigation

Implementation of Mitigation Measures 3.5-1a and 3.5-1b would reduce GHG emissions to the extent feasible but would not reduce emissions for the life of the project below thresholds. Thus, the contribution of GHG emissions associated with the project to cumulative GHG emissions would not be reduced to a less-than-significant level and could substantially contribute to a significant cumulative impact. The impact would be **significant and unavoidable.**

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3.6 NOISE AND VIBRATION

This section includes a summary of applicable regulations related to noise and vibration, a description of ambient-noise conditions, and an analysis of potential short-term construction and long-term operational-source noise impacts associated with the Roseville Industrial Park Project. Mitigation measures are recommended as necessary to reduce significant noise impacts. Additional data is provided in Appendix E.

No comment letters regarding noise were received in response to the notice of preparation (see Appendix A).

3.6.1 Regulatory Setting

COMMON NOISE DESCRIPTORS

Prior to providing the regulatory and environmental setting, some fundamental definitions of commonly used noise terms are provided in this section. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used throughout this section.

Equivalent Continuous Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013b: 2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq}, is the energy average of sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by the California Department of Transportation (Caltrans) and the Federal Transit Administration (FTA) (Caltrans 2013b: 2-47; FTA 2018).

Maximum Sound Level (L_{max}): L_{max} is the highest instantaneous sound level measured during a specified period (Caltrans 2013b: 2-48; FTA 2018).

Day-Night Level (L_{dn}): L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB "penalty" applied to sound levels occurring during nighttime hours between 10 p.m. and 7 a.m. (Caltrans 2013b: 2-48; FTA 2018).

Community Noise Equivalent Level (CNEL): CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m. and a 5-dB penalty applied to the sound levels occurring during evening hours between 7 p.m. and 10 p.m. (Caltrans 2013b: 2-48).

Vibration Decibels (VdB): VdB is the vibration velocity level in decibel scale (FTA 2018: Table 5-1).

Peak Particle Velocity (PPV): PPV is the peak signal value of an oscillating vibration waveform. Usually expressed in inches/second (FTA 2018: Table 5-1).

FEDERAL

US Environmental Protection Agency Office of Noise Abatement and Control

The US Environmental Protection Agency (EPA) Office of Noise Abatement and Control was originally established to coordinate Federal noise control activities. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more local levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. However, documents and research completed by the EPA Office of Noise Abatement and Control continue to provide value in the analysis of noise effects.

Federal Transit Administration

To address the human response to ground vibration, FTA has set forth guidelines for maximum-acceptable vibration criteria for different types of land uses. These guidelines are presented in Table 3.6-1.

Table 3.6-1 Ground-Borne Vibration (GBV) Impact Criteria for General Assessment

Land Use Category	GVB Impact Levels (VdB re 1 micro-inch/second)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations.	65 [4]	65 [4]	65 [4]
Category 2: Residences and buildings where people normally sleep.	72	75	80
Category 3: Institutional land uses with primarily daytime uses.	75	78	83

Notes: VdB = vibration decibels referenced to 1 µ inch/second and based on the root mean square (RMS) velocity amplitude.

[1] "Frequent Events" is defined as more than 70 vibration events of the same source per day.

[2] "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

[3] "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

[4] This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define acceptable vibration levels.

Source: FTA 2006.

STATE

California Department of Transportation

In 2013, Caltrans published the Transportation and Construction Vibration Manual (Caltrans 2013a). The manual provides general guidance on vibration issues associated with construction and operation of projects in relation to human perception and structural damage. Table 3.6-2 presents recommendations for levels of vibration that could result in damage to structures exposed to continuous vibration.

Table 3.6-2 Caltrans Recommendations Regarding Levels of Vibration Exposure

PPV (in/sec)	Effect on Buildings
0.4-0.6	Architectural damage and possible minor structural damage
0.2	Risk of architectural damage to normal dwelling houses
0.1	Virtually no risk of architectural damage to normal buildings
0.08	Recommended upper limit of vibration to which ruins and ancient monuments should be subjected
0.006-0.019	Vibration unlikely to cause damage of any type

Notes: PPV= Peak Particle Velocity; in/sec = inches per second.

Source: Caltrans 2013a.

LOCAL

City of Roseville General Plan 2035

The Noise Element in the City of Roseville General Plan outlines policies and implementation measures to achieve the City's goals of protecting Roseville residents from the harmful and annoying effects of exposure to excessive noise and establishes separate acceptable noise level criteria for land uses affected by either fixed noise sources or transportation-related noise sources (City of Roseville 2020).

The following policies would apply to the proposed project:

- **Policy N1.1:** The City's exterior noise compatibility standards for uses affected by transportation noise sources are included as Table IX-1 of the General Plan 2035 (Table 3.6-3 below). Exterior noise levels shall be mitigated to the extent feasible using site planning, building orientation, and/or other construction techniques or design features. Noise barriers should only be used after other feasible noise reduction strategies are exhausted, and not where they would interrupt existing or future community pedestrian or bicycle connectivity.
- **Policy N1.2:** The City's interior noise compatibility standards for uses affected by transportation noise sources are 45 dBA L_{dn} for noise-sensitive uses such as residences, lodging, hospitals, assisted living facilities, and other places where people normally sleep. For noise-sensitive uses where people do not sleep, such as offices, schools, and uses with similar noise sensitivity, noise levels should be no greater than 45 dBA L_{eq}. Proposed projects should incorporate noise reduction strategies, if necessary, to achieve these interior noise levels.
- **Policy N1.3:** The City's exterior noise compatibility standards for uses affected by non-transportation-related noise are defined within the City's Noise Ordinance, and should be applied consistent with the Noise Ordinance.
- **Policy N1.4:** The City will require new transportation improvement projects to be designed to limit noise impacts consistent with the standards contained in Table IX-1 of the General Plan 2035, to the extent feasible, through the use of appropriate attenuation techniques.
- **Policy N1.5:** If existing noise levels exceed the noise compatibility standards in Table IX-1 or Policy N1.2 of the General Plan 2035, then feasible methods of reducing noise to levels consistent with standards should be considered, but are not required. However if existing noise levels exceed noise compatibility standards and a project results in a significant increase in noise (as defined below), then feasible methods of reducing noise to avoid a significant noise increase should be applied. In no case should a project result in a Clearly Unacceptable noise level according to Table IX-1 of the Noise Element.
  - Where existing exterior noise is less than 60 dB, a ≥ 5 dBA increase in noise is significant.
  - Where existing exterior noise is between 60 and 65 dBA, a ≥ 3 dB increase in noise is significant.
  - Where existing exterior noise is greater than 65 dB a ≥ 1.5 dBA increase in noise is significant.
- **Policy N1.9:** Construction-related noise that is consistent with the City's Noise Ordinance is exempt from the noise standards outlined in this Element.

Table 3.6-3 Exterior Noise Compatibility Standards for Uses Affected by Transportation Noise

Land Use Category	Community Noise Exposure (LdN or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential	50-60	60-65	65-70	70-80
Lodging-Motels, Hotels	50-65	65-70	70-75	75-80
Schools, Libraries, Places of Worship, Hospitals, Assisted Living	50-65	65-70	70-75	75-80
Auditoriums, Concert Halls, Amphitheaters	NA	50-70	NA	70-80
Sports Arena, Outdoor Spectator Sports	NA	50-70	NA	70-80
Playgrounds, Neighborhood Parks	50-65	65-70	70-75	75-80
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	NA	70-75	75-80
Office Buildings	50-65	65-70	70-75	75-80

Notes: dBA = A-weighted decibel; L_{dn} = day-night average noise level; CNEL = Community Equivalent Noise Level.

Source: City of Roseville 2020.

City of Roseville Municipal Code

The City of Roseville has a Noise Ordinance (Chapter 9.24 of the City Code) that is designed to prohibit unnecessary, excessive, and annoying sound levels from all sources. Key provisions of the ordinance that may be applicable to the proposed project include:

- Section 9.24.030 provides exemptions for certain activities, including but not limited to: sound sources typically associated with residential uses (e.g., children at play, air conditioning and similar equipment, but not including barking dogs); property maintenance activities between the hours of 8:00 a.m. and 9:00 p.m.; and private construction between the hours of 7:00 a.m. and 7:00 p.m. Monday-Friday, and between 8:00 a.m. and 8:00 p.m. on Saturdays and Sundays, provided that all construction equipment is fitted with factory installed muffling devices and maintained in good working order (City of Roseville 2014).
- Section 9.24.100 establishes specific sound level standards by which exposure of sensitive receptors to noise is regulated for area-wide sources, including fixed sources, non-transportation sources, and amplified music.
- Section 9.24.140 exempts City activities from the provisions of Chapter 9.24.

3.6.2 Environmental Setting

ACOUSTIC FUNDAMENTALS

Prior to discussing the noise setting for the project, background information about sound, noise, and vibration, and is needed to provide context and a better understanding of the technical terms referenced throughout this section.

Sound, Noise, and Acoustics

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a human ear. Noise is defined as loud, unexpected, annoying, or unwanted sound.

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. The field of acoustics deals primarily with the propagation and control of sound.

Frequency

Continuous sound can be described by frequency (pitch) and amplitude (loudness). A low-frequency sound is perceived as low in pitch. Frequency is expressed in terms of cycles per second, or hertz (Hz) (e.g., a frequency of 250 cycles per second is referred to as 250 Hz). High frequencies are sometimes more conveniently expressed in kilohertz, or thousands of hertz. The audible frequency range for humans is generally between 20 Hz and 20,000 Hz.

Sound Pressure Levels and Decibels

The amplitude of pressure waves generated by a sound source determines the loudness of that source. Sound pressure amplitude is measured in micro-Pascals (mPa). One mPa is approximately one hundred billionth (0.00000000001) of normal atmospheric pressure. Sound pressure amplitudes for different kinds of noise environments can range from less than 100 to 100,000,000 mPa. Because of this large range of values, sound is rarely expressed in terms of mPa. Instead, a logarithmic scale is used to describe sound pressure level (SPL) in terms of decibels (dB).

Addition of Decibels

Because decibels are logarithmic units, SPLs cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In other words, when two identical sources are each producing sound of the same loudness at the same time, the resulting sound level at a given distance would

be 3 dB higher than if only one of the sound sources was producing sound under the same conditions. For example, if one idling truck generates an SPL of 70 dB, two trucks idling simultaneously would not produce 140 dB; rather, they would combine to produce 73 dB. Under the decibel scale, three sources of equal loudness together produce a sound level approximately 5 dB louder than one source.

A-Weighted Decibels

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

Human hearing is limited in the range of audible frequencies as well as in the way it perceives the SPL in that range. In general, people are most sensitive to the frequency range of 1,000–8,000 Hz and perceive sounds within this range better than sounds of the same amplitude with frequencies outside of this range. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of A-weighted decibels) can be computed based on this information.

The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgment correlates well with the A-scale sound levels of those sounds. Thus, noise levels are typically reported in terms of A-weighted decibels. All sound levels discussed in this section are expressed in A-weighted decibels. Table 3.6-4 describes typical A-weighted noise levels for various noise sources.

Table 3.6-4 Typical A-Weighted Noise Levels

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
	— 110 —	Rock band
Jet fly-over at 1,000 feet	— 100 —	
Gas lawn mower at 3 feet	— 90 —	
Diesel truck at 50 feet at 50 miles per hour	— 80 —	Food blender at 3 feet, Garbage disposal at 3 feet
Noisy urban area, daytime, Gas lawn mower at 100 feet	— 70 —	Vacuum cleaner at 10 feet, Normal speech at 3 feet
Commercial area, Heavy traffic at 300 feet	— 60 —	
Quiet urban daytime	— 50 —	Large business office, Dishwasher next room
Quiet urban nighttime	— 40 —	Theater, large conference room (background)
Quiet suburban nighttime	— 30 —	Library, Bedroom at night
Quiet rural nighttime	— 20 —	
	— 10 —	Broadcast/recording studio
Lowest threshold of human hearing	— 0 —	Lowest threshold of human hearing

Notes: dB = decibel.

Source: Caltrans 2013b: Table 2-5.

Human Response to Changes in Noise Levels

The doubling of sound energy results in a 3-dB increase in the sound level. However, given a sound level change measured with precise instrumentation, the subjective human perception of a doubling of loudness will usually be different from what is measured.

Under controlled conditions in an acoustical laboratory, the trained, healthy human ear can discern 1-dB changes in sound levels when exposed to steady, single-frequency ("pure-tone") signals in the mid-frequency (1,000–8,000 Hz) range. In general, the healthy human ear is most sensitive to sounds between 1,000 and 5,000 Hz and perceives both

higher and lower frequency sounds of the same magnitude with less intensity (Caltrans 2013b: 2-18). In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013b). Therefore, a doubling of sound energy (e.g., doubling the volume of traffic on a highway) that would result in a 3-dB increase in sound would generally be perceived as barely detectable.

Vibration

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Sources of vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions). Vibration levels can be depicted in terms of amplitude and frequency, relative to displacement, velocity, or acceleration.

Vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV and RMS vibration velocity are normally described in inches per second (in/sec) or in millimeters per second. PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is typically used in the monitoring of transient and impact vibration and has been found to correlate well to the stresses experienced by buildings (FTA 2018: 110; Caltrans 2020: 6).

Although PPV is appropriate for evaluating the potential for building damage, it is not always suitable for evaluating human response. It takes some time for the human body to respond to vibration signals. In a sense, the human body responds to average vibration amplitude. The RMS of a signal is the average of the squared amplitude of the signal, typically calculated over a 1-second period. As with airborne sound, the RMS velocity is often expressed in decibel notation as vibration decibels (VdB), which serves to compress the range of numbers required to describe vibration (FTA 2018: 110, 199; Caltrans 2013a: 7). This is based on a reference value of 1 micro inch per second.

The typical background vibration-velocity level in residential areas is approximately 50 VdB. Ground vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels (FTA 2018: 120; Caltrans 2013a: 27).

Typical outdoor sources of perceptible ground vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur to fragile buildings. Construction activities can generate sufficient ground vibrations to pose a risk to nearby structures. Constant or transient vibrations can weaken structures, crack facades, and disturb occupants (FTA 2018: 113).

Vibrations generated by construction activity can be transient, random, or continuous. Transient construction vibrations are generated by blasting, impact pile driving, and wrecking balls. Continuous vibrations are generated by vibratory pile drivers, large pumps, and compressors. Random vibration can result from jackhammers, pavement breakers, and heavy construction equipment.

Table 3.6-5 summarizes the general human response to different ground vibration-velocity levels.

Table 3.6-5 Human Response to Different Levels of Ground Noise and Vibration

Vibration-Velocity Level	Human Reaction
65 VdB	Approximate threshold of perception.
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration at this level is unacceptable.
85 VdB	Vibration acceptable only if there are an infrequent number of events per day.

Notes: VdB = vibration decibels referenced to 1 μ inch/second and based on the root mean square (RMS) velocity amplitude.

Source: FTA 2018.

Sound Propagation

When sound propagates over a distance, it changes in level and frequency content. The manner in which a noise level decreases with distance depends on the following factors:

Geometric Spreading

Sound from a localized source (i.e., a point source) propagates uniformly outward in a spherical pattern. The sound level attenuates (or decreases) at a rate of 6 dB for each doubling of distance from a point source. Roads and highways consist of several localized noise sources on a defined path and hence can be treated as a line source, which approximates the effect of several point sources, thus propagating at a slower rate in comparison to a point source. Noise from a line source propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of 3 dB for each doubling of distance from a line source.

Ground Absorption

The propagation path of noise from a source to a receiver is usually very close to the ground. Noise attenuation from ground absorption and reflective-wave canceling provides additional attenuation associated with geometric spreading. Traditionally, this additional attenuation has also been expressed in terms of attenuation per doubling of distance. This approximation is usually sufficiently accurate for distances of less than 200 feet. For acoustically hard sites (i.e., sites with a reflective surface between the source and the receiver, such as a parking lot or body of water), no excess ground attenuation is assumed. For acoustically absorptive or soft sites (i.e., those sites with an absorptive ground surface between the source and the receiver, such as soft dirt, grass, or scattered bushes and trees), additional ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. When added to the attenuate rate associated with cylindrical spreading, the additional ground attenuation results in an overall drop-off rate of 4.5 dB per doubling of distance. This would hold true for point sources, resulting in an overall drop-off rate of up to 7.5 dB per doubling of distance.

Atmospheric Effects

Receivers located downwind from a source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels, as wind can carry sound. Sound levels can be increased over large distances (e.g., more than 500 feet) from the source because of atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also affect sound attenuation.

Shielding by Natural or Human-Made Features

A large object or barrier in the path between a noise source and a receiver attenuate noise levels at the receiver. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction (Caltrans 2013b: 2-41; FTA 2018: 42). Barriers higher than the line of sight provide increased noise reduction (FTA 2018: 16). Vegetation between the source and receiver is rarely effective in reducing noise because it does not create a solid barrier unless there are multiple rows of vegetation (FTA 2018: 15).

EXISTING NOISE ENVIRONMENT

Existing Noise- and Vibration-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because of the potential for nighttime noise to result in sleep disruption. Additional land uses such as schools, transient lodging, historic sites, cemeteries, and places of worship are also generally considered sensitive to increases in noise levels. These land use types are also considered vibration-

sensitive land uses in addition to commercial and industrial buildings where vibration would interfere with operations within the building, including levels that may be well below those associated with human annoyance.

The closest existing residences to the project site are located approximately 150 feet to the east in the Creekview Specific Plan area and approximately 750 feet to the south in the West Roseville Specific Plan area. It should be noted that these areas surrounding the east and south of the project site are planned for substantial additional development. The Creekview Specific Plan area to the east is planned to accommodate 2,011 residential units at buildout. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area (adopted by the city in 2004), which is 60 percent built out, and will include 9,496 residential units, parks, open space, and commercial and industrial uses.

The predominant noise source in the project area is vehicle traffic on the surrounding roadway network (e.g., Pleasant Grove Boulevard, Blue Oaks Boulevard, Philip Road, Westbrook Boulevard). Existing traffic noise levels on roadway segments in the project area were modeled using calculation methods consistent with Federal Highway Administration (FHWA) Traffic Noise Model, Version 2.5 (FHWA 2004) and using average daily traffic (ADT) volumes provided in the traffic analysis conducted by Fehr & Peers and summarized in Section 3.3, "Transportation and Circulation." Table 3.6-6 summarizes the modeled existing traffic noise levels at 100 feet from the centerline of each roadway segment, and lists distances from each roadway centerline to the 70, 65, and 60 CNEL traffic noise contours. For further details on traffic-noise modeling inputs and parameters, refer to Appendix E.

Table 3.6-6 Summary of Modeled Existing Traffic Noise Levels

Roadway Segment/Segment Description	CNEL at 100 feet from Roadway Centerline	Distance (feet) from Roadway Centerline to CNEL Contour		
		70 dBA	65 dBA	60 dBA
Phillip Road from Project Site to Westbrook Boulevard	46.2	-	1	4
Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway	61.2	16	50	157
Blue Oaks Boulevard from North Hayden Parkway to Fiddyment Road	62.1	19	61	193
Westbrook Boulevard from Blue Oaks Blvd to Pleasant Grove Boulevard	60.3	13	41	131
Pleasant Grove Boulevard from Westbrook Boulevard to Market Street	63.3	29	91	289
Pleasant Grove Boulevard from Market Street to Fiddyment Road	65.6	49	156	492

Notes: dBA = A-weighted decibels; CNEL = Community Noise Equivalent Level.

All modeling assumes average pavement, level roadways (less than 1.5 percent grade), constant traffic flow, and does not account for shielding of any type or finite roadway adjustments. All noise levels are reported as A-weighted noise levels. For additional details, refer to Appendix E for detailed traffic data, and traffic-noise modeling input data and output results.

Source: Data modeled by Ascent Environmental in 2022.

3.6.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Construction Noise and Vibration

To assess potential short-term (construction-related) noise and vibration impacts, sensitive receptors and their relative exposure were identified. Project-generated construction source noise and vibration levels were determined based on methodologies, reference emission levels, and usage factors from FTA's *Guide on Transit Noise and Vibration Impact*

Assessment methodology (FTA 2018) and FHWA's *Roadway Construction Noise Model User's Guide* (FHWA 2006). Reference levels for noise and vibration emissions for specific equipment or activity types are well documented and the usage thereof is common practice in the field of acoustics.

Operational Noise and Vibration

With respect to non-transportation noise sources (e.g., stationary) associated with project implementation, the assessment of long-term (operational-related) impacts was based on reference noise emission levels of activities and equipment associated with project operation (e.g., heating, ventilation and air conditioning [HVAC] units, delivery docks), and standard attenuation rates and modeling techniques.

To assess potential long-term (operation-related) noise impacts due to project-generated increases in traffic, noise levels were estimated using calculations consistent with the FHWAs Traffic Noise Model Version 2.5 (FHWA 2004) and project-specific traffic data (Appendix B). The analysis is based on the reference noise emission levels for automobiles, medium trucks, and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and ground attenuation factors. Truck usage and vehicle speeds on area roadways were estimated from the project-specific traffic data. Note that the modeling conducted does not account for any natural or human-made shielding (e.g., the presence of walls or buildings) or reflection off building surfaces.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines, noise policies and standards in the City of Roseville 2035 General Plan and City of Roseville Municipal Code, and Caltrans and FTA vibration standards. The proposed project would have a significant impact related to noise or vibration if it would:

- generate substantial construction noise occurring outside of the City's daytime noise exemptions between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, and between the hours of 8:00 a.m. and 8:00 p.m. Saturday and Sunday that exceeds 50 dB L_{eq} and 70 dB L_{max} for daytime (7:00 a.m. to 10:00 p.m.) and 45 dB L_{eq} and 65 dB L_{max} for nighttime (10:00 p.m. to 7:00 a.m.);
- generate substantial permanent increase in ambient noise in the vicinity of the project in excess of the following City of Roseville noise standards:
  - Transportation noise levels that exceed 60 dBA CNEL for residential land uses. In addition, and consistent with Policy N1.5, the following additional standards apply:
    - Where existing exterior noise is less than 60 dB, a ≥ 5 dB increase in noise is significant.
    - Where existing exterior noise is between 60 and 65 dB, a ≥ 3 dB increase in noise is significant.
    - Where existing exterior noise is greater than 65 dB a ≥ 1.5 dB increase in noise is significant.
  - Non-Transportation noise standards are established by Section 9.24.120 of the Roseville Municipal Code for industrial zones where an industrial land use shares a common property line with a sensitive receptor or is separated from a sensitive receptor by a roadway, which are applicable to the proposed project. Based on this code, the applicable standards applied to non-transportation stationary sources are:
    - Daytime (7:00 a.m. to 10:00 p.m.) noise limits of 57 dBA L_{eq} and 77 dBA $L_{max.}$
    - Nighttime (10:00 p.m. to 7:00 am) noise limits of 52 dBA L_{eq} and 72 dBA $L_{max.}$
- result in construction-generated vibration levels exceeding Caltrans's recommended standards with respect to the prevention of structural building damage (0.2 and 0.08 in/sec PPV for normal and historical buildings, respectively) or FTA's maximum-acceptable-vibration standard with respect to human response (80 VdB for residential uses) at nearby existing vibration-sensitive land uses; 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, expose people residing or working in the project area to excessive noise levels.

ISSUES NOT DISCUSSED FURTHER

Vibration

The nearest noise-sensitive receptor would be located approximately 150 feet from where construction activities would occur. At this distance, the use of typical construction equipment and activities would not result in potential vibration impacts. Additionally, project operation would not result in new major sources of noise vibration such as transit, rail, highways, and would not locate any new sensitive receptors near existing major sources of vibration. Therefore, the project would not result in excessive vibration or vibration levels such that any receptors would be adversely affected, and vibration-related impacts are not discussed further.

Airport Noise

The project is not located within an airport land use plan, or within two miles of a public airport or public use airport. Additionally, the project is not located within two miles of a private airstrip; Lincoln Regional Airport is the closest airport and is located approximately eight miles northeast of the project site. Thus, the project would not result in noise impacts related to the exposure of people residing or working in the project area to excessive aircraft-related noise levels. This issue is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.6-1: Construction-Generated Noise

Short-term construction-generated noise levels associated with the project would expose nearby noise-sensitive receptors to noise levels that would not exceed applicable local standards. These activities would be temporary in nature and would also be exempt from the local noise standards according to the City of Roseville's Municipal Code. Thus, this impact would be **less than significant**.

Construction of the proposed project would involve noise-generating activities. Short-term construction noise levels on and near the project site would fluctuate depending on the type, number, and duration of usage for the varying types of heavy-duty equipment. The effects of construction noise largely depend on the type of construction activities being performed, noise levels generated by those activities, distances to noise-sensitive receptors, the relative locations of noise attenuating features such as vegetation and existing structures, and existing ambient noise levels.

Construction noise would be temporary in nature and would include noise from activities such as site preparation, truck hauling of material, pouring of concrete, paving, and construction of buildings. It is not anticipated that pile-driving or rock blasting would occur as part of construction; therefore, this analysis evaluates potential construction noise associated with typical construction activities/equipment use (e.g., loaders, dozers, excavators, cranes). Construction noise typically occurs intermittently and varies depending on the nature of the construction activities being performed. Noise is generated by construction equipment, including excavation equipment, material handlers, and portable generators. Thus, existing noise-sensitive land uses located near areas of potential construction activity could be exposed to construction noise within the project area, or from off-site construction activity associated with infrastructure improvements along nearby roadways.

Noise-generating activities occurring during the more noise-sensitive evening and nighttime hours are of increased concern. Because exterior ambient noise levels typically decrease during the late evening and nighttime hours as typical levels of community activities (e.g., industrial activities, vehicle traffic) decrease, construction activities performed during the more noise-sensitive evening and nighttime hours could result in increased annoyance and potential sleep disruption for occupants of nearby residential land uses.

Based on the types of construction activities assumed for the project (e.g., paving, earth moving, trenching, structure erection), it is expected that the primary sources of noise would include backhoes, dozers, graders, excavators, dump trucks, pavers, and various trucks (e.g., job trucks, water trucks, fuel trucks). Noise levels generated by common types of construction equipment are shown in Table 3.6-7.

Table 3.6-7 Noise Emission Levels from Construction Equipment

Equipment Type	Typical Noise Level (dB) @ 50 feet
Dump Truck	76
Drill Rig Truck	79
Concrete Mixer	85
Crane	85
Dozer	85
Grader	85
Excavator	85
Front End Loader/Backhoe	80
Paver	89
Roller	85
Scraper	89

Notes: dB = decibel. Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacturer-specified noise levels for each piece of heavy construction equipment.

Source: FTA 2018.

As described in Chapter 2, "Project Description," construction of the project would occur in four phases with construction of Phase 1 beginning in fall of 2023 and ending in 2024. The timing of future phases will be determined based on market readiness and tenant demand. Because specific timing of individual buildings and construction phases is unknown at this time, construction noise modeling was based on the anticipated use of typical construction equipment as well as the simultaneous use of numerous pieces of equipment; thus, modeled noise levels represent a reasonably conservative construction noise scenario. Construction hours would be 7:00 a.m. to 7:00 p.m. Monday through Friday. Construction could also occur 8:00 a.m. to 8:00 p.m. on Saturdays and Sundays on an as-needed basis. There would not be any construction during nighttime.

The construction-noise evaluation conservatively assumed that three of the highest noise-generating pieces of equipment could operate simultaneously near each other and near the boundaries of the project site. Based on the reference noise levels listed in Table 3.6-7 and accounting for typical usage factors of individual pieces of equipment, on-site construction-related activities could generate a combined hourly average noise level of approximately 87 dB L_{eq} and a maximum noise level as high as 91 dB L_{max} at 50 feet from the construction activity. Detailed inputs and parameters for the estimated construction noise exposure levels are provided in Appendix E.

The nearest noise-sensitive receptors that could be adversely affected by construction noise are existing and planned future residences to the east, immediately adjacent to the project site, which is anticipated to accommodate 2,011 residential units at buildout. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area (adopted by the City in 2004), which is 60 percent built out, and will include 9,496 residential units, parks, open space, and commercial and industrial uses. Table 3.6-7 shows the L_{eq} and L_{max} at these sensitive receptors during daytime construction. These values represent a conservative assessment because the modeling assumes that three of the highest noise-generating pieces of equipment (namely dozers, loaders, and excavators) operate simultaneously near each other in close proximity to the boundaries of the project site. All nearby-sensitive receptors would be located within the City of Roseville; and thus, City of Roseville noise standards would apply. The distance to noise exposure levels at the receptor location was estimated for the closest possible construction activities (at the project boundary) and are also listed in Table 3.6-7. The closest receptor is 150 feet to the east of the project site. Assuming that one dozer, loader, and excavator would be used simultaneously, the construction-generated noise during daytime could be as high as 75 dB L_{eq} and 79 dB L_{max} at the nearest sensitive receptor as shown in Table 3.6-8. Refer to Appendix E for detailed information about the noise modeling.

Table 3.6-8 Noise Exposure at Off-Site Noise-Sensitive Receptors from Typical Construction Activity

Sensitive Receptor	Distance to Project Site (feet)	Daytime Construction Noise Exposure Level at Sensitive Receptor [1]	
		L_{eq} (dB)	L_{max} (dB)
Residence to the East of the Project	150	75	79
Residence to the South of the Project	750	61	65

Notes: dB = decibel; L_{eq} = equivalent continuous sound level; L_{max} = maximum sound level.

[1] Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacture-specified noise levels for each piece of heavy construction equipment.

Source: Data modeled by Ascent Environmental in 2022.

According to the City of Roseville's Municipal Code (Chapter 9.24.030 Exemptions), noise from the construction (e.g., construction, alteration or repair activities) is exempt between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, and between the hours of 8:00 a.m. and 8:00 p.m. Saturday and Sunday provided, however, that all construction equipment is fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order (Ord. 3638 Section 1, 2001.). As described above, all proposed construction activity would occur within the daytime hours, established by the City of Roseville. Thus, construction-generated noise would not exceed maximum noise limits established by the City and would not result in substantial noise levels that could adversely affect nearby receptors. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.6-2: Exposure of Existing Sensitive Receptors to Excessive Traffic Noise Levels

Project operation would result in an increase in traffic volumes along project-affected roadways, resulting in long-term permanent increases in traffic noise. Traffic noise modeling was conducted for the existing and the existing plus project conditions. Based on modeling conducted and applicable City of Roseville allowable noise increase standards, a significant increase in noise would occur on all project-affected roadways. Therefore, this impact would be **significant**.

Vehicle trips associated with operation of the project would result in increased traffic volumes on the local roadway network immediately surrounding the project site and increased noise levels at land uses located along the affected roadway segments. Details about how the project would affect traffic activity are discussed in detail in Section 3.3, "Transportation and Circulation."

To analyze the impact of project-generated operational transportation noise sources, traffic noise levels under existing and existing-plus-project conditions were modeled for affected roadway segments. This was done using the Average Daily Traffic (ADT) estimated in the traffic analysis by Fehr and Peers. Refer to Appendix E for detailed information about the noise modeling.

According to the City of Roseville General Plan 2035 standards, the noise standard at the boundary of any sensitive receptor by transportation noise should not exceed 60 dB (CNEL). However, if existing noise levels exceed noise compatibility standards and a project results in a significant increase in noise (as defined below), then feasible methods of reducing noise to avoid a significant noise increase should be applied. Specifically, Policy N1.5 of the City of Roseville General Plan 2035, states:

- Where existing exterior noise is less than 60 dB, a ≥ 5 dB increase in noise is significant.
- Where existing exterior noise is between 60 and 65 dB, a ≥ 3 dB increase in noise is significant.
- Where existing exterior noise is greater than 65 dB a ≥ 1.5 dB increase in noise is significant.

Table 3.6-9 summarizes the modeled change in traffic noise levels at 100 feet from the roadway centerlines under existing and existing plus project conditions.

Table 3.6-9 Summary of Modeled Traffic Noise Levels under Existing and Existing-Plus-Project Conditions

Segment #	Roadway Segment	Existing[1]	Existing Plus Project[1]	Change (dBA)	Applicable Increase Threshold (dB)
		dBA CNEL			
1	Phillip Road from Project Site to Westbrook Boulevard	46.2	62.8	**16.4**	5
2	Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway	61.2	65.6	**4.3**	3
3	Blue Oaks Boulevard from North Hayden Parkway to Fiddyment Road	62.1	66.1	**3.9**	3
4	Westbrook Boulevard from Blue Oaks Boulevard to Pleasant Grove Boulevard	60.3	63.8.	**3.4**	3
5	Pleasant Grove Boulevard from Westbrook Boulevard to Market Street	63.3	66.0	**2.6**	3
6	Pleasant Grove Boulevard from Market Street to Fiddyment Road	65.6	67.9	**2.2**	1.5

Notes: dB = decibel; dBA = A-weighted decibels; CNEL= community noise equivalent level.

Bolded values represent an increase that exceeds the City of Roseville's noise standards.

[1] The traffic noise levels are modeled 100 feet from the centerline. Refer to Appendix E for detailed traffic noise modeling input data and modeling results.

Source: Noise levels modeled by Ascent Environmental in 2022.

As shown in the Table 3.6-9, considering applicable increase standards based on existing noise levels, traffic noise increases on all modeled segments would exceed the City of Roseville's allowable increase standards. In addition, all segments except for the portion of Phillip Road that is undeveloped, currently exceed the 60 dBA CNEL maximum noise limit at 100 feet from the roadway centerline. Based on the modeling conducted and applying City of Roseville noise standards, a significant noise increase would occur on all project-affected roadways. This impact would be **significant**.

Noise barriers are planned for most of the future residential developments occurring in the vicinity. For example, the West Roseville Specific Plan and Creekview Specific Plan projects include planned noise barriers along portions of Blue Oaks Boulevard; however, these planned noise barriers would not extend along the full length of the project-affected roadways (i.e., Philip Road from the main entry of the project site to Blue Oaks Boulevard Road, and Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway).

Mitigation Measures

Mitigation Measure 3.6-2: Reduce Operational Traffic Noise Levels

To reduce significant noise increases along project-affected roadways, the following measure shall be implemented by the applicant. Before finalizing roadway design for roadway expansion or new roadway construction, a design-level acoustical study shall be prepared by the applicant to identify specific roadway design considerations, which shall be incorporated into final road design and approved by the City. The acoustical study shall include Philip Road, from which the main entry of the project site joins the Blue Oaks Boulevard Road, and Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway. The study shall also determine the required level of noise reduction, based on site-specific noise monitoring, as identified in the City of Roseville Municipal Code. Implementation of the project would result in a substantial increase in noise on these segments identified in Table 3.6-9.

Significance after Mitigation

Even after implementation of Mitigation Measure 3.6-2, which would require preparation of a design-level acoustical study to identify specific roadway design considerations that would reduce traffic noise levels, this impact would remain significant. As described above, noise barriers are planned as part of the West Roseville Specific Plan and Creekview Specific Plan projects; however, these planned noise barriers would not extend along the full length of the project-affected roadways (i.e., Philip Road from the main entry of the project site to Blue Oaks Boulevard Road, and

Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway). Because neither the applicant nor the City has control over the design and construction of sound walls on private property along all affected roadway segments, requiring the installation of noise barriers in project-affected locations where noise barriers are not currently planned (i.e., Philip Road from the main entry of the project site to Blue Oaks Boulevard Road, and Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway) would not be feasible, and this impact would remain **significant and unavoidable**.

Impact 3.6-3: Long-Term Operational Non-Transportation Noise Levels

The proposed project would include non-transportation stationary sources such as HVAC units, noise associated with the use of trucks and loaders/forklifts at loading docks, and noise from backup generators. Based on modeling conducted and reference noise levels for these noise sources, off-site noise-sensitive receptors would experience project-generated operational non-transportation noise levels that exceed the City's daytime and nighttime noise levels standards. This impact would be **significant**.

This impact analyzes potential exposure of existing and future planned sensitive receptors to noise generated by non-transportation aspects of project operation. Based on project site plans, mechanical equipment associated with building operations, such as HVAC equipment, loading dock activities, and the emergency backup generators, would result in noise levels that would expose the nearby sensitive receptors to long-term operational noise during both daytime and nighttime. Anticipated noise levels from potential noise sources are described separately below.

Building Mechanical Equipment

Implementation of the project would introduce new stationary noise sources associated with building mechanical equipment, primarily HVAC units. Detailed information regarding the stationary equipment to be installed is not available at this time because future tenants are not known. However, noise levels associated with air conditioning systems can reach levels of up to 78 dB at 3 feet (Lennox 2019). Applying this reference noise level as an hourly average (L_{eq}) and assuming a 50 percent usage rate, would result in a 75 dBA L_{eq} at 3 feet from the source.

Commonly installed building equipment, such as HVAC systems, can be located in the interior of the structure, on rooftops, or in direct line-of-sight to adjacent land uses. Based on the reference noise level for HVAC units of 78 dBA L_{max} and 75 dBA L_{eq} at 3 feet, and assuming typical attenuation rates, from distance alone, noise from HVAC units would reduce to 41 dBA L_{eq} and 44 dBA L_{max} at the nearest receptors located 150 feet away. These levels would not exceed daytime or nighttime L_{eq} or L_{max} standards and noise levels at further distances than 150 feet would be even lower. Refer to Appendix E for detailed calculations.

Loading Dock Activity

Buildings constructed as part of the project may include loading docks or designated areas for receiving shipments by commercial trucks. Noise sources from truck activity associated with delivery areas are usually short-term and can include activities such as vehicle idling, engines revving, and the release of air brakes on heavy trucks. Reference noise levels for these noise-generating activities are summarized in Table 3.6-10.

Table 3.6-10 Noise Levels Generated by Truck Activity at Delivery Areas

Noise-Generating Activity	Noise Level (dB L_{max}) at 50 feet
Idling 18-wheel heavy truck	64–65
Truck with trailer driving at 5 mph	65
Truck with trailer driving at 10 mph	66–68
Truck revving engine	69-80
Truck releasing air brakes at a stop	74–86

Notes: dB = decibel; L_{max} = maximum sound level; mph = miles per hour.

Sources: Measurement data collected by EDAW in August 2006 and presented in the Merced Wal-Mart Distribution Center EIR (City of Merced 2009: 4.8-21).

The noise-generating activities listed in Table 3.6-9 last for a period ranging from a few seconds (e.g., release of air brakes) to a few minutes (e.g., idling) and can reoccur multiple times during a single truck visit. As shown in Table 3.6-10, the loudest reference truck-related noise is the release of a truck's air brakes after it comes to a stop, which generates noise levels as high as 86 dB L_{max} at 50 feet.

Due to the short-term nature of loading dock and corporation yard truck noise, the City's daytime and nighttime L_{max} standards for residential land uses are applied in this analysis (i.e., 77 dBA L_{max} for daytime and 72 dBA L_{max} for nighttime). Based on the reference noise level of 86 dB L_{max} at 50 feet for a truck loading/unloading and applying typical attenuation factors from distance alone, noise levels at the nearest receptors would attenuate to 77 dB L_{max} at 150 feet and 63 dB L_{max} at 750 feet. Considering the closest receptor distance of 150 feet and the predicted noise level of 77 dBA L_{max} at this location, daytime noise standards of 77 dBA L_{max} would not be exceeded but nighttime standards of 72 dBA L_{max} would be exceeded by 5 dB. Considering that the receptor distance of 750 feet away and the predicted noise levels of 63 dBA L_{max} at this location, neither daytime L_{max} nor nighttime L_{max} standards (i.e., 77 dBA and 72 dBA, respectively) would be exceeded.

Diesel Generators

Backup diesel generators would be used to supply necessary power requirements to vital systems within the proposed buildings and would generally only be used on a temporary basis during emergency power outages or during routine maintenance.

A reference noise level for a generator is 82 dBA L_{max} at 50 feet and considering that when a generator is in use to provide backup power it would be operating continuously, this level can also be applied as an L_{eq} (FTA 2018). Applying this reference noise level and typical attenuation rates, at the nearest sensitive receptor, noise would attenuate to 72.5 dBA L_{eq} and 72.5 dBA L_{max}, exceeding the City's daytime L_{eq} standard of 57 dBA but not the L_{max} standard of 77 dBA. In addition, these levels would exceed both the City's nighttime standards of 52 dBA L_{eq} and 72 dBA L_{max}. Noise from a generator would attenuate to below the daytime standards at beyond 900 feet and below the nighttime standards at beyond 1,600 feet. Because generators could operate during both day and nighttime hours and noise levels are anticipated to exceed both day and nighttime standards, noise from generators could result in a substantial permanent increase in noise.

Summary

Operational stationary noise sources would include HVAC equipment, noise at loading docks, and backup generators. As discussed above, noise from HVAC units would attenuate to below both day and nighttime thresholds at the nearest receptors, located 150 feet from the project site and, therefore, would not expose nearby or other receptors to noise levels in exceedance of applicable noise standards. Noise from loading activities could result in noise levels of up to 77 dBA L_{max}, exceeding the nighttime standards of 72 dBA L_{max} when operations occur between the nighttime hours of 10:00 p.m. to 7:00 a.m. Daytime noise standards would not be exceeded but because some loading activities could occur at night, these noise levels could result in exceedance of noise standards at nearby receptors. The nighttime threshold of 72 dBA L_{max} would be exceeded at all receptors located within 250 feet of loading activities but beyond this distance, none of the thresholds would be exceeded. Regarding noise from generators, the City's daytime L_{eq} standard of 57 dBA would be exceeded but not the L_{max} standard of 77 dBA. In addition, generators would exceed both the City's nighttime standards of 52 dBA L_{eq} and 72 dBA L_{max}. Noise from a generator would attenuate to below the daytime standards at beyond 900 feet and below the nighttime standards at beyond 1,600 feet. Because loading activities could exceed nighttime standards and backup generators could operate during both day and nighttime hours and noise levels are anticipated to exceed both day and nighttime standards, noise from on-site loading activities and generators could result in a substantial permanent increase in noise. This impact would be **significant.**

Mitigation Measures

Mitigation Measure 3.6-3: Reduce Stationary Noise Exposure

The applicant shall hire a qualified acoustical specialist to prepare a noise minimization plan before approval of construction drawings that will identify design strategies and noise attenuation features to reduce noise generated by the proposed project to below daytime noise (i.e., 57 dB L_{eq} and 77 dB L_{max}) and nighttime noise (i.e., 52 dB L_{eq} and 72 dB L_{max}) standards required by the Municipal Code for residential land uses in the vicinity of the project. The noise minimization plan shall include, but not be limited to, a combination of the following measures (or other measures demonstrated to be equally effective) to reduce the effect of noise levels generated by on-site operational noise sources to levels that are below the City's noise standards.

- Design the buildings such that the structure serves as a barrier protecting off-site receptors to noise generated by on-site operational equipment including forklifts, diesel generators, pickup trucks, yard trucks, and delivery trucks including Transportation Refrigeration Units (TRUs). The typical sound level reduction a building could provide ranges from 12 dB with windows open to 27 dB with windows closed (EPA 1978: 11) and additional reduction is achievable if masonry exterior walls are used in the building's construction (Caltrans 2002: 7-37).
- Enclose the area where operational equipment would operate with one or more walls. Generally, a barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction.
- Design the proposed wall between the project and adjacent residential uses, such that it serves as a sound barrier between all adjacent sensitive receptors and the facility. The wall must be constructed of solid material (e.g., brick, concrete). Scenic quality factors shall be taken into account during design and the barriers shall be designed to blend into the landscape on the project site, to the extent feasible. Generally, a barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB of noise reduction. Taller barriers provide increased noise reduction.
- If necessary to meet the noise standards (after implementing the above siting and enclosure measures), install acoustic enclosures for backup generators, which would reduce the noise levels up to 10 db.

Measures identified in the noise minimization plan shall be incorporated into the project design and identified on the site plan. The City shall verify that these measures are included in the site plan before approval of the final site plan.

Significance after Mitigation

Regarding on-site loading activities, the use of building design to block noise sources from off-site receptors can readily achieve a 20-dB noise reduction and a sound wall that is tall enough to block the line-of-sight to a receiver (e.g., 5 feet tall), alone can readily achieve a 5-dB noise reduction, but a 10-db reduction is also attainable. Thus, considering on-site design measures and a sound barrier combination, up to a 30-dB noise reduction can be achieved. Regarding loading docks, a 10-dB reduction in noise would result in L_{max} levels of 66.5 dBA at 150 feet, which would be below both the day and night L_{max} standards of 77 dBA L_{max} and 72 dBA L_{max}, respectively. Backup generators that are completely enclosed can easily achieve a 10-dB reduction. Further, in combination with a sound wall or on-site buildings obstructing the line-of-sight between generators and off-site receptors, another 10-20 dB reduction could be achieved, which would be sufficient to achieve daytime and nighttime L_{eq} standards of 57 dBA L_{eq} and 52 dBA L_{eq}, respectively. Thus, implementing Mitigation Measure 3.6-3, which would require the preparation of a site-specific acoustical study based on the specific specifications of the proposed stationary equipment, site design and building configuration, as well as proposed sound barriers, all stationary noise sources can be reduced to below day and night noise standards. This impact would be reduced to a **less-than-significant** level.

3.7 BIOLOGICAL RESOURCES

This section addresses biological resources known or with potential to occur on or near the project site and describes potential effects of implementation of the project on those resources. Analysis provided in this section is based on:

- results of California Natural Diversity Database (CNDDB) record search of the Nicolaus, Sheridan, Lincoln, Verona, Pleasant Grove, Roseville, Taylor Monument, Rio Linda, and Citrus Heights US Geological Survey (USGS) 7.5-minute quadrangles (CNDDB 2021);
- results of California Native Plant Society (CNPS), Inventory of Rare and Endangered Plants of California search of the Nicolaus, Sheridan, Lincoln, Verona, Pleasant Grove, Roseville, Taylor Monument, Rio Linda, and Citrus Heights USGS 7.5-minue quadrangles (CNPS 2021);
- preliminary Arborist Report and Tree Inventory (California Tree and Landscape Consulting, Inc. 2021);
- 6382 Phillip Rd., Roseville CA Bio/Wetland Resources Constrains Analysis (Barnett Environmental 2021);
- reconnaissance-level survey of the project site by an Ascent Environmental wildlife biologist on August 6, 2021; and
- aerial photographs of the project site and region.

One comment letter regarding biological resources was received in response to the notice of preparation (see Appendix A). The California Department of Fish and Wildlife (CDFW) requested that the EIR include a complete project description that identifies any areas that would be temporarily affected and a reasonable range of feasible alternatives; these issues are addressed in Chapter 2, "Project Description," and Chapter 6, "Alternatives." Regarding the regional setting for biological resources, CDFW requested that the EIR include an assessment of all habitat types located within the project footprint; a general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present on or adjacent to the project site; a complete and recent inventory of rare, threatened, endangered, and other sensitive species located within the project footprint and within offsite areas that could be affected; a thorough, recent (within the last 2 years), floristic-based assessment of special-status plants and natural communities; and information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region. Regarding the analysis of biological resources impacts, CDFW requested that the EIR include thresholds of significance and a discussion of potential direct, indirect, and cumulative impacts. CDFW noted that the EIR should identify appropriate and adequate avoidance, minimization, and/or mitigation measures for all significant impacts. Finally, CDFW provided information related to potential permits and approvals that may be needed for the project, including compliance with the California Endangered Species Act, Native Plant Protection Act, and Lake and Streambed Alteration Program. These issues are addressed in this section.

3.7.1 Regulatory Setting

FEDERAL

Federal Endangered Species Act

Pursuant to the federal Endangered Species Act (ESA) (16 US Code Section 1531 et seq.), the US Fish and Wildlife Service (USFWS) regulates the taking of species listed in the ESA as threatened or endangered. In general, persons subject to ESA (including private parties) are prohibited from "taking" endangered or threatened fish and wildlife species on private property, and from "taking" endangered or threatened plants in areas under federal jurisdiction or in violation of state law. Under Section 9 of the ESA, the definition of "take" is to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has also interpreted the definition of "harm" to include significant habitat modification that could result in take.

Section 10 of the ESA applies if a non-federal agency is the lead agency for an action that results in take and no other federal agencies are involved in permitting the action. Section 7 of the ESA applies if a federal discretionary action is required (e.g., a federal agency must issue a permit), in which case the involved federal agency consults with USFWS.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA), first enacted in 1918, provides for protection of international migratory birds and authorizes the Secretary of the Interior to regulate the taking of migratory birds. The MBTA provides that it will be unlawful, except as permitted by regulations, to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. Under the MBTA, "take" is defined as "to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities." A take does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof. The current list of species protected by the MBTA can be found in Title 50 of the Code of Federal Regulations (CFR), Section 10.13 (50 CFR 10.13). The list includes nearly all birds native to the United States.

Clean Water Act

Section 404 of the Clean Water Act (CWA) requires project applicants to obtain a permit from US Army Corps of Engineers (USACE) before performing any activity that involves any discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters of the United States, interstate waters, tidally influenced waters, and all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Many surface waters and wetlands in California meet the criteria for waters of the United States.

In accordance with Section 401 of the CWA, projects that apply for a USACE permit for discharge of dredged or fill material must obtain water quality certification from the appropriate Regional Water Quality Control Board (RWQCB) indicating that the action would uphold state water quality standards.

STATE

California Fish and Game Code Section 1602—Streambed Alteration

All diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake in California that supports fish or wildlife resources are subject to regulation by CDFW under Section 1602 of the California Fish and Game Code. Under Section 1602, it is unlawful for any person, governmental agency, or public utility to do any of the following without first notifying CDFW:

- substantially divert or obstruct the natural flow of, or 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.

The regulatory definition of a stream is a body of water that flows at least periodically or intermittently through a bed or channel that has banks and supports fish or other aquatic life. This definition includes watercourses with a surface or subsurface flow that supports or has supported riparian vegetation (California Code of Regulations Title 14, Section 1.72). CDFW jurisdiction over altered or artificial waterways is based on the value of those waterways to fish and wildlife. A streambed alteration agreement must be obtained for any diversion or alteration that would substantially adversely affect a fish or wildlife resource in a river, stream, or lake. A substantial change or use of material from bed, bank, or channel includes the alteration or removal of riparian vegetation associated with a lake or stream.

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Act, waters of the state fall under the jurisdiction of the appropriate RWQCB. The project site is within the Central Valley RWQCB. The RWQCB must prepare and periodically update water quality control plans (basin plans). Each basin plan sets forth water quality standards for surface water and groundwater, as well as

actions to control point and nonpoint sources of pollution to achieve and maintain these standards. The RWQCB's jurisdiction includes federally protected waters as well as areas that meet the definition of "waters of the state." Waters of the state are defined as any surface water or groundwater, including saline waters, within the boundaries of the state. The state definition of a wetland is an area that, under normal circumstances, (1) has continuous or recurrent saturation of the upper substrate caused by groundwater or shallow surface water or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and; (3) the area either lacks vegetation or the vegetation is dominated by hydrophytes (i.e., wetland plants). In addition to water quality certifications under Section 401 of the federal CWA, discharges to waters of the state, including wetlands, must meet the RWQCB waste discharge requirements. RWQCB has the discretion to take jurisdiction over areas not federally protected under Section 401 of the CWA provided they meet the definition of waters of the state or the state definition of a wetland. The California Water Code generally regulates more substances contained in discharges and defines discharges to receiving waters more broadly than does the CWA. Waste discharge requirements are addressed comprehensively in Section 3.12, "Hydrology and Water Quality," as well as herein with respect to biological resources. Requirements related to fill or discharge to waters of the state subject to the Porter-Cologne Act are described in the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (California Water Boards 2019).

California Endangered Species Act

Pursuant to the California Endangered Species Act (CESA), a permit from CDFW is required for projects that could result in the "take" of a plant or animal species that is listed by the state as threatened or endangered. Under CESA, "take" is defined as an activity that would directly or indirectly kill an individual of a species, but does not include "harm" or "harass," as does the federal definition. As a result, the threshold for take is higher under CESA than under the federal ESA. Authorization for take of state-listed species can be obtained through a California Fish and Game Code Section 2081 incidental take permit.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) (California Fish and Game Code Section 1900 et seq.) allows the California Fish and Game Commission to designate plants as rare or endangered. Sixty-four species, subspecies, and varieties of plants are protected as rare under the NPPA. The act prohibits take of endangered or rare native plants but includes exceptions for agricultural and nursery operations; for emergencies; and, after proper notification of CDFW, for vegetation removal from canals, roads, and other building sites, changes in land use, and other situations.

California Fish and Game Code Sections 3503 and 3503.5

Section 3503 of the Fish and Game Code states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Section 3503.5 of the California Fish and Game Code states that it is unlawful to take, possess, or destroy any raptors (i.e., species in the orders *Falconiformes* and *Strigiformes*), including their nests or eggs. Typical violations include destruction of active nests as a result of tree removal or disturbance caused by project construction or other activities that cause the adults to abandon the nest, resulting in loss of eggs or young.

Fully Protected Species

Sections 3511, 4700, 5050, and 5515 of the California Fish and Game Code prohibit take of fully protected birds, mammals, reptiles and amphibians, and fish. Species listed under these statutes may not be taken or possessed at any time and no incidental take permits can be issued for these species except for scientific research purposes, for relocation to protect livestock, or as part of a Natural Community Conservation Plan (NCCP).

LOCAL

City of Roseville General Plan 2035

The Open Space and Conservation Element of the City of Roseville General Plan 2035 contains the following policies related to biological resources that may be relevant to the project (City of Roseville 2020):

- **Policy OS2.1** Incorporate existing trees into development projects with an emphasis on avoiding the removal of groupings or groves of trees. Where preservation is not feasible, continue to require mitigation for the loss of removed trees.
- **Policy OS2.2** Preserve and restore continuous riparian corridors and adjacent habitat along the City's creeks and waterways.
- **Policy OS2.4** Require preservation of contiguous areas in excess of the City's Regulatory Floodplain, as defined in the Safety Element, as merited by special resources or circumstances. Special circumstances may include, but are not limited to, sensitive wildlife or vegetation, wetland habitat, oak woodland areas, grassland connections in association with other habitat areas, slope or topographical considerations, recreation opportunities, and maintenance access requirements.
- **Policy OS2.6** Provide for the protection and enhancement of native fishery resources, as informed by continued coordination with the California Department of Fish and Wildlife.
- **Policy OS2.7** Require consistency with the City of Roseville Open Space Preserve Overarching Management Plan for dedication and management of on-site wetland mitigation as part of new development.
- **Policy OS2.8** Consider off-site mitigation for federally non-regulated wetlands, provided that such mitigation will provide comparable habitat values.
- **Policy OS2.11** Habitat preservation and mitigation for woodlands, creeks, riparian, and seasonal wetland areas should occur within the defined boundaries of the impacting projects where long-term resource viability is feasible and desirable, consistent with applicable state and federal permits.
- **Policy OS2.12** Consider the use of City property for habitat preservation and mitigation requirements resulting from new development proposals when such efforts do not conflict with existing resources, recreational opportunities, or other City goals, policies, or programs.
- **Policy OS2.13** Work with adjacent jurisdictions, regulatory agencies, and community organizations to explore opportunities for regional mitigation banking.

City of Roseville Municipal Code

Chapter 19.66 of the City of Roseville Municipal Code, "Tree Preservation," contains requirements for projects that would remove protected trees (i.e., native oak trees equal to or greater than six inches diameter at beast height (dbh) measured as a total of a single trunk or multiple trunks). A total of 324 protected trees are present on the project site, including blue oaks (*Quercus douglasii*), interior live oaks (*Quercus wislizeni*), and valley oaks (*Quercus lobata*) (California Tree and Landscape Consulting, Inc. 2021). Project applicants shall not harm, destroy, kill, or remove any protected tree or conduct project activities within the protected zone (i.e., a circle equal to the largest radius of a protected tree's dripline plus one foot) unless authorized by a Tree Permit. Applications for Tree Permits would be included as part of the land use permit for a discretionary project. The application would include a site plan map, tree locations, protected zones of protected trees, and an arborist report and may be accompanied by an application fee required by City Council.

Protected trees that would be retained on a project site would be subject to tree preservation measures as outlined in the code, including protective fencing, signing, and modified ground disturbance activities (e.g., trenching with hand tools). If project implementation would include removal of protected trees, mitigation for loss of the trees would be required, and would include one of the following four methods: replacement of trees, relocation of trees, revegetation, or in-lieu mitigation fees. The City Planning Manager may allow removal of a protected tree which has been certified by an arborist to be a dead tree without any replacement or mitigation requirements.

3.7.2 Environmental Setting

HABITATS

The project site is located in an undeveloped portion of the City of Roseville and is surrounded by agricultural land uses, undeveloped areas containing vernal pool-grassland complexes, and residential development (Figure 3.7-1). The project site contains agricultural land that has been designated as hay fields/row crops in the City of Roseville General Plan 2035 (City of Roseville 2020). A segment of Pleasant Grove Creek that runs east to west bisects the project site and a channelized, intermittent tributary to Pleasant Grove Creek, known as Pleasant Grove Creek First North Tributary, is present on the northern boundary of the project site (Figure 3.7-1). Valley oak riparian woodland habitat is present on the project site associated with the Pleasant Grove Creek and the tributary as well as oak woodland in the center of the project site (Figure 3.7-1). A human-made flood channel called the Pleasant Grove Creek Bypass Channel is present near the center of the project site along the south side of Pleasant Grove Creek (Figure 3.7-1). Total acreage of each habitat present on the project site is summarized in Table 3.7-1, and detailed descriptions of each habitat and Pleasant Grove Creek are included below.

Table 3.7-1 Habitats on the Project Site

Habitat	Area or Length
Agricultural (Hay Fields/Row Crops)	217.8 acres
Riverine	
Pleasant Grove Creek	*0.38 mile*
Pleasant Grove Creek First North Tributary	*0.25 mile*
Valley Oak Riparian Woodland	8.7 acres
Oak Woodland	3.7 acres
Pleasant Grove Creek Bypass Channel	5.1 acres

Source: Compiled by Ascent Environmental in 2021.

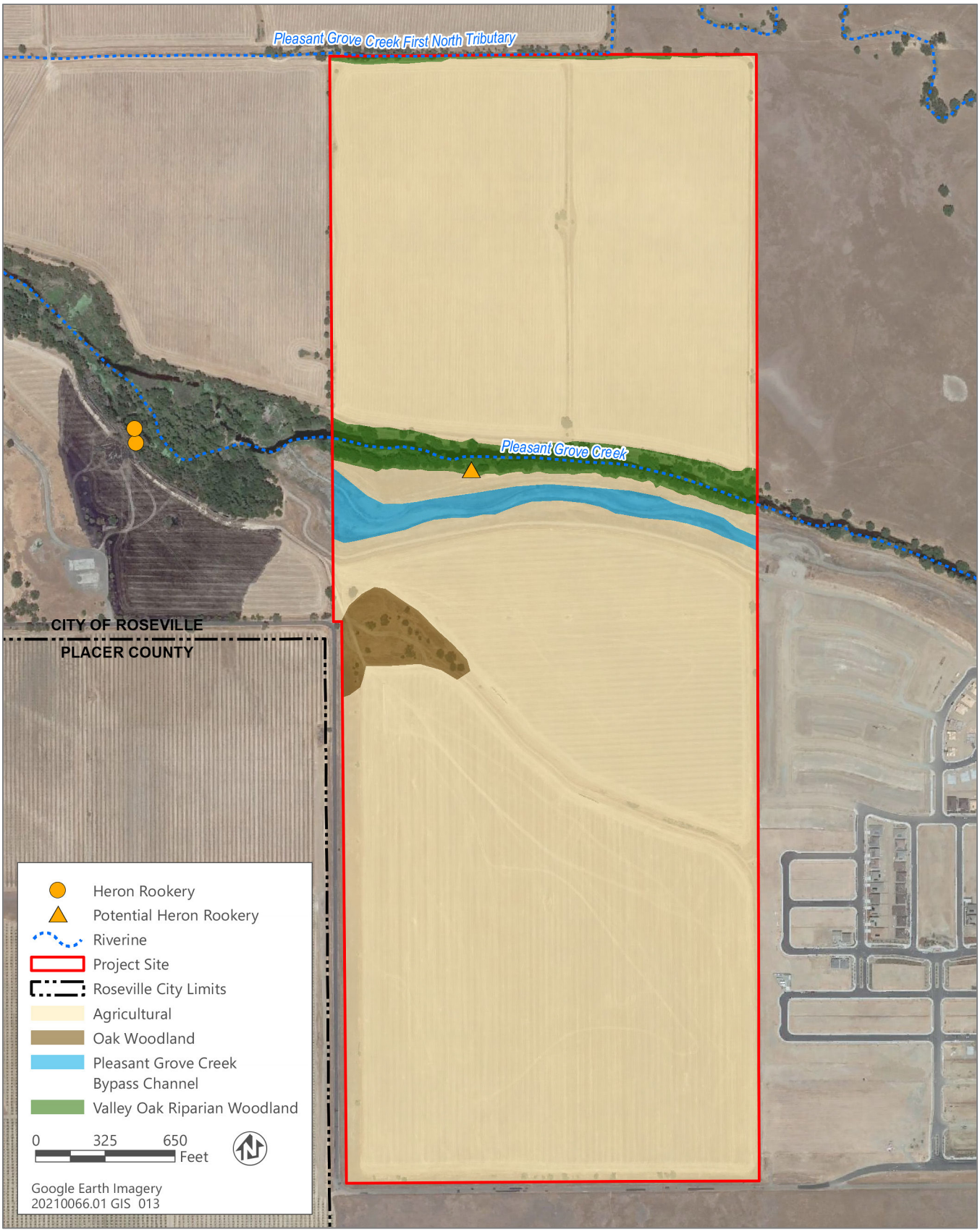
Agricultural (Hay Fields/Row Crops)

Approximately 218 acres of agricultural land is present on the project site (Table 3.7-1, Figure 3.7-1). This land was designated as hay fields/row crops in the City of Roseville General Plan 2035; however, the project site is not currently in agricultural production. The parcel was originally planted during the 1950s, was maintained in rice production through the 1990s, and has been planted in irrigated crops until the present day. The agricultural land is regularly disked every 2 years and is currently characterized by remnant cultivated grain species and sparse, ruderal, nonnative plant species, including yellow star thistle (*Centaurea solstitialis*) and chicory (*Cichorium intybus*). Individual trees are present along the borders of the agricultural land, including valley oak, Pacific willow (*Salix lucida*), and Fremont cottonwood (*Populus fremontii*) (California Tree and Landscape Consulting, Inc. 2021). Earthen berms are present along the edges of the agricultural land, some of which contain California ground squirrel (*Otospermophilus beecheyi*) burrows.

Riverine

Pleasant Grove Creek

An approximately 0.4-mile segment of Pleasant Grove Creek extends east to west through the project site, bisecting the site (Table 3.7-1, Figure 3.7-1). Pleasant Grove Creek is a third order perennial stream and typically contains water year-round. During the reconnaissance-level survey on August 6, 2021, the creek was flowing slowly with some stagnant areas (i.e., low or no flow, green algae accumulation), and contained pools of various sizes. Beaver (*Castor canadensis*) dams are present in the creek, modifying flow in some areas. Some reaches of the creek have exposed muddy banks with dense cattails (*Typha* sp.) and some reaches have very little exposed bank habitat with dense vegetation (e.g., willows [*Salix* spp.]) present to the water line. Valley oak riparian woodland habitat is present along the north and south banks of the creek, which is described in more detail below.



Source: Adapted by Ascent in 2021.

Figure 3.7-1 Habitat Site

Pleasant Grove Creek First North Tributary

An approximately 0.4-mile segment of an intermittent stream/irrigation canal called the Pleasant Grove Creek First North Tributary extends east to west along the northern boundary of the project site (Table 3.7-1, Figure 3.7-1). The tributary is a realigned, channelized segment of a natural tributary of Pleasant Grove Creek. This feature did not contain water during the August 6, 2021 reconnaissance-level survey; however, water is present during wet periods of the year based on a previous site assessment (Barnett Environmental 2021). The stream/canal contains some remnants of concrete irrigation infrastructure. Valley oak riparian woodland habitat is present along the banks of the stream/canal, which is described in more detail below. Presence of riparian vegetation along the banks of this tributary indicates that it has a groundwater source and does not flow just in direct response to rainfall.

Valley Oak Riparian Woodland

Approximately 9 acres of valley oak riparian woodland habitat is present in association with riverine habitat on the project site (Table 3.7-1, Figure 3.7-1). This habitat is dominated by valley oak and also contains Fremont cottonwood, willow, and interior live oak. Understory plant species included Himalayan blackberry (*Rubus armeniacus*), cattails, and nonnative grasses dominated by wild oat (*Avena fatua*).

Oak Woodland

Approximately 3.7 acres of oak woodland habitat is present within the agricultural land on the project site (Table 3.7-1, Figure 3.7-1). This grove of trees in the middle of the project site includes valley oak, blue oak, and Arizona ash (*Fraxinus velutina*) (California Tree and Landscape Consulting, Inc. 2021).

Pleasant Grove Creek Bypass Channel

Approximately 5 acres of the project site directly south of Pleasant Grove Creek contains the Pleasant Grove Creek Bypass Channel, a human-constructed flood channel that directs runoff from the project site and surrounding residential areas into Pleasant Grove Creek (Table 3.7-1, Figure 3.7-1). The channel was constructed in uplands (agricultural crops) in 2019 and flows parallel to Pleasant Grove Creek from east to west, converging with Pleasant Grove Creek approximately 250 feet west of the project site. The channel contained different vegetation than the surrounding agricultural land that can be associated with wetlands, including curly dock (*Rumex crispus*) and sedges (*Carex* spp.).

SENSITIVE BIOLOGICAL RESOURCES

Special-status species are defined as species that are legally protected or that are otherwise considered sensitive by federal, state, or local resource agencies. Special-status species are species, subspecies, or varieties that fall into one or more of the following categories, regardless of their legal or protection status:

- officially listed by California under the CESA or the federal government under ESA as endangered, threatened, or rare;
- a candidate for state or federal listing as endangered, threatened, or rare under CESA or ESA;
- taxa (i.e., taxonomic category or group) that meet the criteria for listing, even if not currently included on any list, as described in Section 15380 of the State CEQA Guidelines;
- species identified by CDFW as Species of Special Concern;
- species listed as Fully Protected under the California Fish and Game Code;
- species afforded protection under local planning documents; and
- taxa considered by the CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR) of 1, or 2. The CDFW system includes rarity and endangerment ranks for categorizing plant species of concern, and ranks 1 and 2 are summarized as follows:
  - CRPR 1A - Plants presumed to be extinct in California;
  - CRPR 1B - Plants that are rare, threatened, or endangered in California and elsewhere;

- CRPR 2A - Plants presumed to be extinct in California but common elsewhere; and
- CRPR 2B - Plants that are rare, threatened, or endangered in California but more common elsewhere.

The term "California species of special concern" is applied by CDFW to animals not listed under ESA or CESA, but that are considered to be declining at a rate that could result in listing, or that historically occurred in low numbers and known threats to their persistence currently exist. CDFW's fully protected status was California's first attempt to identify and protect animals that were rare or facing extinction. Most species listed as fully protected were eventually listed as threatened or endangered under CESA; however, some species remain listed as fully protected but do not have simultaneous listing under CESA. Fully protected species may not be taken or possessed at any time and no take permits can be issued for these species except for scientific research purposes, for relocation to protect livestock, or as part of an NCCP.

Of the 10 special-status plant species that are known to occur within the nine US Geological Survey (USGS) 7.5-minute quadrangles including and surrounding the project site, one species was determined to have potential to occur on the project site based on the presence of habitat suitable for the species (CNDDB 2021; CNPS 2021; Table 3.7-1). Of the 49 special-status wildlife species that could occur within the nine USGS quadrangles, 14 species were determined to have potential to occur on the project site based on the presence of habitat suitable for the species (CNDDB 2021, Table 3.7-2). The tables describe the species' regulatory status, habitat, and potential for occurrence on the project site.

Table 3.7-1 Special-Status Plant Species Known to Occur in the Vicinity of the Project Site and Potential for Occurrence on the Project Site

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence
Big-scale balsamroot *Balsamorhiza macrolepis*	–	–	1B.2	Chaparral, valley and foothill grassland, cismontane woodland. Sometimes on serpentine. 115–4,806 feet in elevation. Blooms March–June.	Not expected to occur. The project site does not contain valley and foothill grassland habitat suitable for this species.
Hispid salty bird's-beak *Chloropyron molle* ssp. *hispidum*	–	–	1B.1	In damp alkaline soils, especially in alkaline meadows and alkali sinks with *Distichlis*. 3–509 feet in elevation. Blooms June–September.	Not expected to occur. The project site does not contain alkaline meadows or sinks.
Dwarf downingia *Downingia pusilla*	–	–	2B.2	Vernal lake and pool margins with a variety of associates. In several types of vernal pools. 3–1,608 feet in elevation. Blooms March–May.	Not expected to occur. The project site does not contain vernal pool habitat.
Boggs Lake hedge-hyssop *Gratiola heterosepala*	–	SE	1B.2	Clay soils; usually in vernal pools, sometimes on lake margins. 33–7,792 feet in elevation. Blooms April–August.	Not expected to occur. The project site does not contain vernal pool or lake margin habitat.
Woolly rose-mallow *Hibiscus lasiocarpos* var. *occidentalis*	–	–	1B.2	Moist, freshwater-soaked riverbanks and low peat islands in sloughs of the Delta, Central Valley, and Cascade Range foothills; can also occur on riprap and levees. 0–509 feet in elevation. Blooms June–September.	Not expected to occur. The project site is outside the known range of this species.
Ahart's dwarf rush *Juncus leiospermus* var. *ahartii*	–	–	1B.2	Restricted to the edges of vernal pools in grassland. 98–328 feet in elevation. Blooms March–May.	Not expected to occur. The project site does not contain vernal pool habitat.
Red Bluff dwarf rush *Juncus leiospermus* var. *leiospermus*	–	–	1B.1	Vernally mesic sites. Sometimes on edges of vernal pools. 98–3,363 feet in elevation. Blooms March–June.	Not expected to occur. The project site does not contain vernal pool habitat.
Legenere *Legenere limosa*	–	–	1B.1	In beds of vernal pools. 3–2,887 feet in elevation. Blooms April–June.	Not expected to occur. The project site does not contain vernal pool habitat.

Species	Listing Status[1] Federal	Listing Status[1] State	CRPR	Habitat	Potential for Occurrence
Pincushion navarretia *Navarretia myersii* ssp. *myersii*	–	–	1B.1	Vernal pools in clay soils within non-native grassland. 148–328 feet in elevation. Blooms April–May.	Not expected to occur. The project site does not contain vernal pool habitat.
Sanford's arrowhead *Sagittaria sanfordii*	–	–	1B.2	In standing or slow-moving freshwater ponds, marshes, and ditches. 0–2,133 feet in elevation. Blooms May–October.	May occur. The portion of Pleasant Grove Creek on the project site may provide habitat suitable for this species.

Notes: CRPR = California Rare Plant Rank; CEQA = California Environmental Quality Act; ESA = Endangered Species Act.

1 Legal Status Definitions

State:

SE State Listed as Endangered (legally protected by CESA)

California Rare Plant Ranks (CRPR):

1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

CRPR Threat Ranks:

0.1 Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)

Sources: CNDDB 2021; CNPS 2021.

Table 3.7-2 Special-Status Wildlife Species Known to Occur in the Vicinity of the Project Site and Potential for Occurrence on the Project Site

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence
Amphibians and Reptiles				
Coast horned lizard *Phrynosoma blainvillii*	–	SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low shrubs. Open areas for sunning, shrubs for cover, patches of loose soil for burial, and abundant supply of native ants and other insects.	Not expected to occur. The project site does not contain shrub habitat or loose, sandy soil suitable for this species.
Giant gartersnake *Thamnophis gigas*	FT	ST	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches. This is the most aquatic of the garter snakes in California.	Not expected to occur. The project site is outside of the current known range of this species.
Western pond turtle *Actinemys marmorata*	–	SSC	An aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.3 mile from water for egg-laying.	May occur. The segments of Pleasant Grove Creek and the Pleasant Grove Creek First North Tributary that run through the project site contain aquatic habitat potentially suitable for western pond turtle, and upland habitat along these features may provide upland nesting habitat suitable for the species.
Western spadefoot *Spea hammondii*	–	SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not expected to occur. The project site does not contain vernal pool habitat suitable for this species.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence
Birds				
American peregrine falcon *Falco peregrinus anatum*	FD	SD FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not expected to occur. The project site does not contain natural or human-made nesting habitat suitable for this species. While American peregrine falcons may forage on the project site occasionally, the site does not contain high-quality foraging habitat for this species.
American white pelican *Pelecanus erythrorhynchos*	–	SSC	Colonial nester on large interior lakes. Nests on large lakes, providing safe roosting and breeding places in the form of well-sequestered islets.	Not expected to occur. The project site does not contain lake nesting habitat suitable for this species.
Bald eagle *Haliaeetus leucocephalus*	FD	SE FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	Not expected to occur. The project site does not contain nesting habitat (i.e., large trees near open water) suitable for this species.
Bank swallow *Riparia riparia*	–	ST	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks or cliffs with fine-textured or sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not expected to occur. The banks of Pleasant Grove Creek are not vertical with sandy soils, and do not provide nesting habitat suitable for bank swallows.
Black tern *Chlidonias niger*	–	SSC	Freshwater lakes, ponds, marshes and flooded agricultural fields. At coastal lagoons and estuaries during migration. Breeding range reduced. Breeds primarily in Modoc Plateau region, with some breeding in Sacramento and San Joaquin valleys	Not expected to occur. The project site does not contain lake, pond, or marsh habitat or flooded agricultural fields.
Burrowing owl *Athene cunicularia*	–	SSC	Open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	May occur. The project site contains earthen berms that may provide burrow habitat suitable for this species.
California black rail *Laterallus jamaicensis coturniculus*	–	ST FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Not expected to occur. The project site does not contain freshwater or saltwater marsh habitat.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence
Golden eagle *Aquila chrysaetos*	–	FP	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Not expected to occur. The project site does not contain nesting habitat (i.e., large trees in open areas) suitable for this species.
Grasshopper sparrow *Ammodramus savannarum*	–	SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Not expected to occur. The project site does not contain grassland habitat suitable for this species.
Loggerhead shrike *Lanius ludovicianus*	–	SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	May occur. The project site contains scattered woodland and some shrubs that may provide nesting habitat suitable for loggerhead shrike.
Long-eared owl *Asio otus*	–	SSC	Riparian bottomlands containing tall willows and cottonwoods and belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Not expected to occur. The project site is outside of the known breeding range of this species.
Northern harrier *Circus hudsonius*	–	SSC	Nest and forage in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas.	May occur. The herbaceous understory associated with riparian vegetation adjacent to Pleasant Grove Creek may provide nesting habitat suitable for this species.
Olive-sided flycatcher *Contopus cooperi*	–	SSC	Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir, and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain.	Not expected to occur. The project site does not contain montane conifer forest habitat.
Purple martin *Progne subis*	–	SSC	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly, also in human-made structures. Nest often located in tall, isolated tree or snag.	Not expected to occur. The project site does not contain coniferous forest habitat or human-made structures suitable for nesting purple martins.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence
Redhead *Aythya americana*	–	SSC	Overwater nests constructed in relatively tall, dense emergent vegetation of deeper semipermanent and permanent marshes. Modoc county to Mono County in lacustrine waters, Central Valley and central California foothills and coastal lowlands, and along the coast from Monterey county south to Ventura county and along the Colorado river.	Not expected to occur. The project site does not contain open water or marsh habitat suitable for this species.
Song sparrow ("Modesto" population) *Melospiza melodia*	–	SSC	Emergent freshwater marshes, riparian willow thickets, riparian forests of valley oak, and vegetated irrigation canals and levees.	May occur. The riparian habitat adjacent to Pleasant Grove Creek may provide nesting habitat suitable for this species.
Swainson's hawk *Buteo swainsoni*	–	ST	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	May occur. Trees on the project site, especially trees within the riparian corridors along Pleasant Grove Creek and the tributary on the northern edge of the project site, provide nesting habitat suitable for Swainson's hawk.
Tricolored blackbird *Agelaius tricolor*	–	ST SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	May occur. Riparian vegetation (e.g., cattails, Himalayan blackberry) adjacent to Pleasant Grove Creek may provide nesting habitat suitable for tricolored blackbirds.
Vaux's swift *Chaetura vauxi*	–	SSC	Redwood, Douglas-fir, and other coniferous forests. Nests in large hollow trees and snags. Often nests in flocks. Forages over most terrains and habitats but shows a preference for foraging over rivers and lakes.	Not expected to occur. The project site does not contain coniferous forest habitat.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	FT	SE	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	May occur. Riparian vegetation (e.g., cottonwoods, willows) adjacent to Pleasant Grove Creek may provide nesting habitat suitable for western yellow-billed cuckoo.
White-tailed kite *Elanus leucurus*	–	FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	May occur. Trees on the project site, especially trees within the riparian corridors along Pleasant Grove Creek and the tributary on the northern edge of the project site, provide nesting habitat suitable for white-tailed kite.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence
Willow flycatcher *Empidonax traillii*	–	SE	Inhabits extensive thickets of low, dense willows on edges of wet meadows, ponds, or backwaters; 2,000-8,000 feet elevation Requires dense willow thickets for nesting/roosting. Low, exposed branches are used for singing posts/hunting perches.	Not expected to occur. The riparian habitat adjacent to Pleasant Grove Creek does not provide the habitat components (e.g., meadow, marsh) preferred by this species.
Yellow warbler *Setophaga petechia*	–	SSC	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	Not expected to occur. The project site is outside of the known breeding range of this species.
Yellow-breasted chat *Icteria virens*	–	SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	Not expected to occur. The project site is outside of the known breeding range of this species.
Yellow-headed blackbird *Xanthocephalus xanthocephalus*	–	SSC	Nests in freshwater emergent wetlands with tall, dense, emergent vegetation and deep water. Most commonly along borders of lakes, reservoirs, or ponds. Nests only where large insects such as Odonata are abundant, nesting timed with maximum emergence of aquatic insects. Forages in emergent wetland and moist, open areas, especially cropland and muddy shores of lacustrine habitat.	Not expected to occur. Freshwater marsh wetlands that maintain deep water through the breeding season are not present on the on the project site.
Fish				
Chinook salmon - Central Valley fall / late fall-run ESU *Oncorhynchus tshawytscha* pop. 13	–	SSC	Sacramento/San Joaquin flowing waters. Populations spawning in the Sacramento and San Joaquin rivers and their tributaries.	Not expected to occur. Chinook salmon are not known to occur in Pleasant Grove Creek and the project site is outside of the known range of this ESU. However, Pleasant Grove Creek is hydrologically connected to watercourses occupied by this species.
Chinook salmon - Central Valley spring-run ESU *Oncorhynchus tshawytscha* pop. 6	FT	ST	Sacramento/San Joaquin flowing waters. Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Federal listing refers to populations spawning in Sacramento River and tributaries.	Not expected to occur. Chinook salmon are not known to occur in Pleasant Grove Creek and the project site is outside of the known range of this ESU. However, Pleasant Grove Creek is hydrologically connected to watercourses occupied by this species.
Chinook salmon - Sacramento River winter-run ESU *Oncorhynchus tshawytscha* pop. 7	FE	SE	Sacramento River below Keswick Dam. Spawns in the Sacramento River, but not in tributary streams. Requires clean, cold water over gravel beds for spawning.	Not expected to occur. Chinook salmon are not known to occur in Pleasant Grove Creek and the project site is outside of the known range of this ESU. However, Pleasant Grove Creek is hydrologically connected to watercourses occupied by this species.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence
Delta smelt *Hypomesus transpacificus*	FT	SE	Sacramento-San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait, and San Pablo Bay.	Not expected to occur. The project site does not contain aquatic habitat suitable for this species.
Green sturgeon *Acipenser medirostris*	FT	SSC	The most marine species of sturgeon. Abundance increases northward of Point Conception. Spawns in the Sacramento, Klamath, and Trinity Rivers. Preferred spawning substrate is large cobble, but can range from clean sand to bedrock.	Not expected to occur. Green sturgeon is not known to occur in Pleasant Grove Creek and the project site is outside of the known range of this species. However, Pleasant Grove Creek is hydrologically connected to watercourses occupied by this species.
Hardhead *Mylopharodon conocephalus*	–	SSC	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Clear, deep pools with sand-gravel-boulder bottoms and slow water velocity.	May occur. The portion of Pleasant Grove Creek on the project site may provide habitat suitable for this species.
Longfin smelt *Spirinchus thaleichthys*	FC	SSC	Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Not expected to occur. The project site does not contain aquatic habitat suitable for this species.
Pacific lamprey *Entosphenus tridentatus*	–	SSC	Found in Pacific Coast streams north of San Luis Obispo County, however regular runs in Santa Clara River.	Not expected to occur. Pacific lamprey is not known to occur in Pleasant Grove Creek. However, Pleasant Grove Creek is hydrologically connected to watercourses occupied by this species.
Riffle sculpin *Cottus gulosus*	–	SSC	Found in headwater streams with cold water and rocky or gravelly substrate. Prefer permanent streams.	Not expected to occur. The segment of Pleasant Grove Creek on the project site does not contain rocky or gravelly substrate.
Sacramento hitch *Lavinia exilicauda exilicauda*	–	SSC	Found in slow, warm water, including lakes and quiet stretches of river. Sometimes found in cool, clear, low-gradient streams.	May occur. The portion of Pleasant Grove Creek on the project site may provide habitat suitable for this species.
Sacramento splittail *Pogonichthys macrolepidotus*	–	SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the Delta, Suisun Bay, and associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.	Not expected to occur. The project site is outside of the current known range of this species.
Steelhead - Central Valley DPS *Oncorhynchus mykiss irideus* pop. 11	FT	–	Populations in the Sacramento and San Joaquin rivers and their tributaries.	Not expected to occur. Steelhead are not known to occur in Pleasant Grove Creek. However, Pleasant Grove Creek is hydrologically connected to watercourses occupied by this species.
Western river lamprey *Lampetra ayresii*	–	SSC	Lower Sacramento River, San Joaquin River, and Russian River. May occur in coastal streams north of San Francisco Bay.	Not expected to occur. Western river lamprey is not known to occur in Pleasant Grove Creek. However, Pleasant Grove Creek is hydrologically connected to watercourses occupied by this species.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence
Invertebrates				
Conservancy fairy shrimp *Branchinecta conservatio*	FE	–	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	Not expected to occur. While the project site may have historically contained vernal pool habitat, the original hydrology of the site has been modified over more than 70 years of farming activities, and this habitat is no longer present.
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	FT	–	Riparian scrub. Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus nigra* ssp. *caerulea*). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Not expected to occur. No elderberry shrubs were observed on the project site during the reconnaissance-level survey on August 6. 2021.
Vernal pool fairy shrimp *Branchinecta lynchi*	FT	–	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Not expected to occur. While the project site may have historically contained vernal pool habitat, the original hydrology of the site has been modified over more than 70 years of farming activities, and this habitat is no longer present.
Vernal pool tadpole shrimp *Lepidurus packardi*	FE	–	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.	Not expected to occur. While the project site may have historically contained vernal pool habitat, the original hydrology of the site has been modified over more than 70 years of farming activities, and this habitat is no longer present.
Mammals				
American badger *Taxidea taxus*	–	SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not expected to occur. The land in the vicinity of the project site is composed of a grassland and agricultural complex which likely supports American badgers. However, the agricultural land on the project site is regularly cultivated and disked and it is unlikely that American badgers would establish dens on the project site.
Pallid bat *Antrozous pallidus*	–	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	May occur. The project site contains large valley oak trees that may provide roosting habitat for pallid bats.
Ringtail *Bassariscus astutus*	–	FP	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations.	May occur. Large valley oak trees within the riparian habitat adjacent to Pleasant Grove Creek may provide den habitat suitable for ringtails and this habitat may also act as a movement corridor for the species.

Species	Listing Status[1] Federal	Listing Status[1] State	Habitat	Potential for Occurrence
Western red bat *Lasiurus blossevillii*	–	SSC	Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	May occur. The project site contains large broadleaf trees that may provide roosting habitat for western red bat.

Notes: CNDDB = California Natural Diversity Database; CEQA = California Environmental Quality Act.

1 Legal Status Definitions

Federal:

FE Federally Listed as Endangered (legally protected)
FT Federally Listed as Threatened (legally protected)
FD Federally Delisted

State:

FP Fully protected (legally protected)
SSC Species of special concern (no formal protection other than CEQA consideration)
SE State Listed as Endangered (legally protected)
ST State Listed as Threatened (legally protected)
SC State Candidate for listing (legally protected)
SD State Delisted

Source: CNDDB 2021.

Fisheries

Pleasant Grove Creek and tributaries associated with this creek support warmwater fisheries characterized by introduced species (Wildlands 2005; Placer County 2006). Fish species known to occur in these streams within the vicinity of the project site include bluegill (*Lepomis macrochirus*), pumpkinseed (*Lepomis gibbosus*), redear sunfish (*Lepomis microlophus*), mosquitofish (*Gambusia affinis*), carp (*Cyprinus carpio*), largemouth bass (*Micropterus salmoides*), green sunfish (*Lepomis cyanellus*), yellow shiner (*Notemigonus crysoleucas*), and channel catfish (*Ictalurus punctatus*) (Wildlands 2005). A number of invasive aquatic organisms are also found in these waterways, including Asiatic clam (*Corbicula fluminea*), American bullfrog (*Lithobates catesbeianus*), and crayfish (*Pacifastacus leniusculus*). No portions of Pleasant Grove Creek or its tributaries provide habitat suitable for salmonid species because of warm summer temperatures, high organic content, absence of gravel or cobble substrate, and lack of instream cover. Similarly, assessments by Bailey Environmental (2003) found that the middle and lower reaches of Pleasant Grove Creek were also unsuitable for salmonids because of warm water temperatures and lack of suitable spawning substrates.

Sensitive Natural Communities and Sensitive Habitat Types

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through CEQA, Section 1602 of the California Fish and Game Code, Section 404 of the CWA, and the state's Porter-Cologne Act. Sensitive habitat may be of special concern to agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special-status species.

Sensitive natural communities are those native plant communities defined by CDFW as having limited distribution statewide or within a county or region and that are often vulnerable to environmental effects of projects (CDFW 2018). These communities may or may not contain special-status plants or their habitat (CDFW 2018). In addition to habitats officially identified by CDFW as sensitive natural communities or meeting the definition of waters of the United States or waters of the state, other sensitive habitats include riparian habitats and oak woodlands. CDFW designates sensitive natural communities based on their state rarity and threat ranking using NatureServe's Heritage Methodology. Natural communities with rarity ranks of S1 to S3, where S1 is critically imperiled, S2 is imperiled, and

S3 is vulnerable, are considered sensitive natural communities to be addressed in the environmental review processes of CEQA and its equivalents (CDFW 2018).

Sensitive natural communities are generally identified at the alliance level of vegetation classification hierarchy using the Manual of California Vegetation (Sawyer et al. 2009). Known occurrences of sensitive natural communities are included in the CNDDB; however, no new occurrences have been added to the CNDDB since the mid-1990s when funding was cut for this portion of the CNDDB program. In addition, the sensitive natural communities identified in the CNDDB are classified according to an outdated vegetation classification system no longer used by CDFW to designate sensitive natural communities; however, each of these meet the definition of a sensitive habitat type either because they are state or federally protected wetland habitats, they are riparian habitats that are subject to review pursuant to Section 1602 of the California Fish and Game Code, or they may support vegetation alliances that are designated as Sensitive Natural Communities based on the current Manual of California Vegetation classification system. The six sensitive habitat types identified within the nine USGS quadrangles including and surrounding the project site through a query of the CNDDB are northern hardpan vernal pool, northern claypan vernal pool, northern volcanic mud flow vernal pool, alkali meadow, alkali seep, and great valley mixed riparian forest (CNDDB 2021).

Vernal pool, alkali meadow, and alkali seep habitats are not present on the project site. While the project site is surrounded by vernal pool-grassland complex habitat, continuous cultivation over the past 70 or more years has modified the original hydrology of the project site to effectively remove any native vernal pool wetlands that likely occurred historically (Barnett Environmental 2021). Valley oak riparian woodland habitat on the project site, is the one designated sensitive natural community present on the project site, and it is described below.

Valley Oak Riparian Forest and Woodland

Valley oak is the dominant component of the canopy of the valley oak riparian woodland habitat on the project site. Membership rules for the valley oak woodland and forest sensitive natural community include habitats with over 35 percent relative tree canopy cover composed of valley oak, often with the remainder of the canopy composed of other tree species including Fremont cottonwood (Sawyer et al. 2009). The valley oak riparian woodland habitat on the project site meets these membership rules. This sensitive natural community has a state rarity ranking of S3.

Wildlife Nursery Sites

Nursery sites are locations where fish or wildlife concentrate for hatching and/or raising young, such as nesting rookeries for birds (e.g., herons, egrets), spawning areas for native fish, fawning areas for mule deer (*Odocoileus hemionus*), and maternal roosts for bats. Based on historic aerial imagery, rookeries likely associated with snowy egrets (*Egretta thula*), great egrets (*Ardea alba*), or black-crowned night herons (*Nycticorax nycticorax*) are present in trees within the Al Johnson Wildlife Area approximately 0.17 mile west of the project site (Figure 3.7-1). Large accumulations of heron guano within rookery trees tends to eventually kill the tree. A large, dead tree on the project site may also be currently used or historically used as a heron rookery, and other large trees along Pleasant Grove Creek may be used as rookeries now or in the future (Figure 3.7-1).

Additionally, some large valley oak, blue oak, and Fremont cottonwood trees on the project site contain structural features (e.g., cavities, crevices, sloughing bark) that may provide roosting habitat potentially suitable for common bat species (e.g., big brown bat [*Eptesicus fuscus*], silver-haired bat [*Lasionycteris noctivagans*]).

Wildlife Movement Corridors

A wildlife movement corridor is generally a topographical/landscape feature or movement zone that connects two or more natural habitat areas. Wildlife corridors link areas of suitable wildlife habitat that are separated by variation in vegetation, rugged terrain, human disturbance, and habitat fragmentation, or other biophysical factors. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas, such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range. Therefore, wildlife movement and migration corridors are considered an important ecological resource by CDFW and other agencies and are protected by many local governments in California.

Some of the important areas for habitat connectivity in California were mapped as Essential Connectivity Areas (ECA) for the California Essential Habitat Connectivity Project, which was commissioned by the California Department of Transportation and CDFW with the purpose of making transportation and land-use planning more efficient and less costly, while helping reduce dangerous wildlife-vehicle collisions (Spencer et al. 2010). The ECAs were not developed for the purposes of defining areas subject to specific regulations by CDFW or other agencies. The project site is included in a modeled ECA connecting natural landscape blocks to the north and south (Figure 3.7-2).

As noted above, the project site is surrounded by agricultural land uses and vernal pool-grassland complex habitat. Residential development is present east and southeast of the project site, which likely impedes wildlife movement in the region. The undeveloped nature of the project site likely supports movement of wildlife, including small mammals (e.g., rodents, rabbits) and mule deer (*Odocoileus hemionus*). A large, male mule deer was observed within the Pleasant Grove Creek First North Tributary during the reconnaissance-level survey on August 6, 2021. Pleasant Grove Creek and the valley oak riparian woodland habitat associated with the creek likely function as wildlife movement corridors for fish, amphibians, birds, and small mammals.

Waters of the United States and Waters of the State

Natural aquatic habitat on the project site is limited to Pleasant Grove Creek and the Pleasant Grove Creek First North Tributary. Both of these riverine features would likely be considered waters of the United States due to their connectivity to other waters of the United States. The Pleasant Grove Creek Bypass Channel on the project site contains water during wet periods of the year, and while the channel is human-made, it may be considered a water of the United States because of its connectivity to Pleasant Grove Creek, and ultimate connectivity to Traditional Navigable Waters (i.e., Sacramento River via Pleasant Grove Creek and Cross Canal). All waters of the United States are also waters of the state; however, wetlands and waters disclaimed by USACE may still meet the definition of waters of the state.

3.7.3 Environmental Impacts and Mitigation Measures

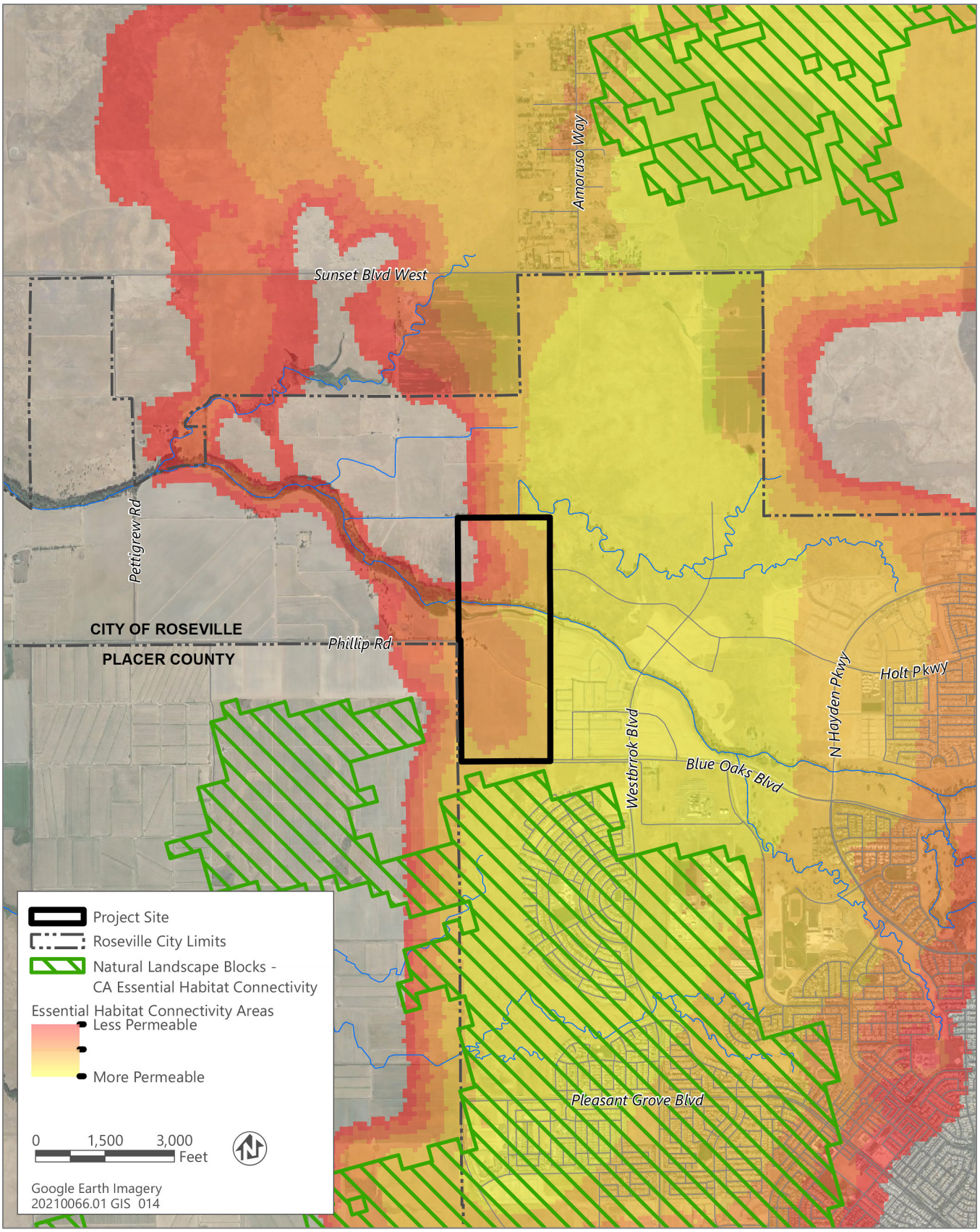
METHODOLOGY

This impact evaluation is based on data collected during a reconnaissance-level field survey conducted on August 6, 2021, review of aerial photographs, review of existing databases that address biological resources in the project vicinity, and review of existing resource reports as described above.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to biological resources if it would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by CDFW or USFWS;
- 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; or
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.



Source: Data downloaded from CDFW in 2014 and 2017

Figure 3.7-2 Essential Connectivity Areas and Natural Landscape Blocks in the Vicinity of the Project Site

ISSUES NOT DISCUSSED FURTHER

The project site is not within the plan area of any adopted Habitat Conservation Plan (HCP) or NCCP. The Western Placer County HCP/NCCP plan area is located nearby (i.e., the project site is adjacent to the Potential Growth area of the Placer County HCP/NCCP to the west and is located approximately 0.5 mile south of the nearest Placer County HCP/NCCP Reserve Acquisition Area); however, the City of Roseville is not a participant in this plan. Therefore, this issue is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.7-1: Result in Disturbance or Loss of Special-Status Plant Species

Project activities within the valley oak riparian woodland habitat on the project site, including ground disturbance, vegetation removal, and construction of a bridge across Pleasant Grove Creek may result in disturbance to or loss of special-status plants if they are present. Because the loss of special-status plants could substantially affect the abundance, distribution, and viability of local and regional populations of these species, this would be a **potentially significant** impact.

One special-status plant species may occur on the project site: Sanford's arrowhead. This species is associated with aquatic habitat and would only occur in Pleasant Grove Creek or the Pleasant Grove Creek First North Tributary.

Most project activities would occur within the agricultural land on the project site and would avoid Pleasant Grove Creek. However, construction of the bridge across Pleasant Grove Creek may result in disturbance of riparian and creek bank habitat adjacent to the creek. Construction activities associated with the bridge across Pleasant Grove Creek may include ground disturbance and vegetation removal. As a result, direct loss of these special-status plants or indirect damage could occur through trampling or damage to root systems of these species, if present. Loss or damage of special-status plants would be a **potentially significant** impact.

Mitigation Measures

Mitigation 3.7-1: Conduct Special-Status Plant Surveys and Implement Avoidance Measures and Mitigation

- Prior to implementation of project activities within valley oak riparian woodland habitat on the project site and during the blooming period for the special-status plant species with potential to occur on the project site (i.e., approximately May to October), a qualified botanist shall conduct protocol-level surveys for special-status plants within the project site following survey methods from CDFW's *Protocols for Surveying and Evaluating Impacts on Special-Status Native Plant Populations and Natural Communities* (CDFW 2018 or most recent version). The qualified botanist shall: (1) be knowledgeable about plant taxonomy, (2) be familiar with plants of the Sacramento Valley region, including special-status plants and sensitive natural communities, (3) have experience conducting floristic botanical field surveys as described in CDFW 2018, (4) be familiar with the *California Manual of Vegetation* (Sawyer et al. 2009 or current version, including updated natural communities data at http://vegetation.cnps.org/), and (5) be familiar with federal and state statutes and regulations related to plants and plant collecting.
- If special-status plants are not found, the botanist shall document the findings in a report to the project applicant and the City of Roseville, and no further mitigation shall be required.
- If special-status plant species are found, the plant shall be avoided completely, if feasible (i.e., project objectives can still be met). This may include establishing a no-disturbance buffer around the plants and demarcation of this buffer by a qualified biologist or botanist using flagging or high-visibility construction fencing. The size of the buffer shall be determined by the qualified biologist or botanist and shall be large enough to avoid direct or indirect impacts on the plant.

- If special-status plants are found during special-status plant surveys and cannot be avoided, the project applicant shall, in consultation with CDFW or USFWS as appropriate depending on the particular species, develop and implement a site-specific mitigation strategy to offset the loss of occupied habitat and individual plants. Mitigation measures shall include, at a minimum, preserving and enhancing existing populations, establishing populations through seed collection or transplantation from the site that is to be affected, and/or restoring or creating habitat in sufficient quantities to achieve no net loss of occupied habitat or individuals. Potential mitigation sites could include suitable locations within or outside of the project site, with a preference for on-site mitigation. Habitat and individual plants lost shall be mitigated at a minimum 1:1 ratio, considering acreage as well as function and value. Success criteria for preserved and compensatory populations shall include:
  - The extent of occupied area and plant density (number of plants per unit area) in compensatory populations shall be equal to or greater than the affected occupied habitat.
  - Compensatory and preserved populations shall be self-producing. Populations shall be considered self-producing when:
    - plants reestablish annually for a minimum of five years with no human intervention such as supplemental seeding; and
    - reestablished and preserved habitats contain an occupied area and flower density comparable to existing occupied habitat areas in similar habitat types in the project vicinity.
    - If off-site mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures shall be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, success criteria such as those listed above and other details, as appropriate to target the preservation of long-term viable populations.
- Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources.

Significance after Mitigation

Implementation of Mitigation Measures 3.7-1 would reduce significant impacts on special-status plants to a **less-than-significant** level by requiring a protocol-level survey for special-status plants for project activities associated with construction of the bridge across Pleasant Grove Creek, and implementation of avoidance measures and compensation for impacts on special-status plants.

Impact 3.7-2: Result in Disturbance to or Loss of Special-Status Wildlife Species and Habitat

Project activities would include ground disturbance, vegetation removal, and construction of a bridge over Pleasant Grove Creek, which could result in disturbance, injury, or mortality of several special-status wildlife species if present, reduced breeding productivity of these species, and loss of species habitat. This would be a **potentially significant** impact.

Table 3.7-3 provides a list of the special-status wildlife species that may occur on the project site. Fourteen wildlife species may occur on the project site: western pond turtle, burrowing owl, northern harrier, song sparrow ("Modesto" population), Swainson's hawk, tricolored blackbird, western yellow-billed cuckoo, white-tailed kite, yellow-breasted chat, hardhead, Sacramento hitch, ringtail, pallid bat, and western red bat. Common native nesting birds protected under California Fish and Game Code and the federal MBTA may also be present on the project site. Additionally, while the project site does not contain aquatic habitat suitable for most special-status fish species, Pleasant Grove Creek is hydrologically connected to watercourses occupied by these species (Table 3.7-3).

WESTERN POND TURTLE

Aquatic habitat suitable for western pond turtle is present in Pleasant Grove Creek and the Pleasant Grove Creek First North Tributary (when water is present). Western pond turtles use upland habitat for basking and egg-laying, sometimes a significant distance from aquatic habitat (i.e., up to 0.3 mile). Stream bank habitat adjacent to the riverine features on the project site as well as uncultivated areas in the understory of the valley oak riparian woodland habitat adjacent to these features may provide upland habitat suitable for western pond turtles. The agricultural land on the project site likely does not provide upland habitat suitable for this species because the land is disturbed and regularly disked.

Most project activities would occur within the agricultural land on the project site and would avoid Pleasant Grove Creek and associated valley oak riparian woodland habitat. However, infrastructure (e.g., parking areas, fencing) associated with Building D, Building I, and Building N may encroach into the valley oak riparian woodland habitat adjacent to both riverine features, and construction of the bridge across Pleasant Grove Creek may result in disturbance of habitat adjacent to Pleasant Grove Creek. Construction activities associated with these project features may include ground disturbance and vegetation removal. As a result, these activities could result in loss of or injury to western pond turtle if present within the project site. Loss or injury of western pond turtles would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.7-2a: Conduct Preconstruction Surveys for Western Pond Turtle, Implement Avoidance Measures, and Relocate Individuals

- Prior to implementation of project activities within valley oak riparian woodland habitat on the project site, a qualified biologist familiar with the life history of western pond turtle and experienced in performing surveys for western pond turtle shall conduct a focused survey of habitat suitable for the species within the project site. If aquatic habitat potentially suitable for the species is present within a project site (e.g., streams, ponds, drainages), upland habitat within approximately 1,600 feet of this aquatic habitat shall also be surveyed. The qualified biologist shall inspect the project site for western pond turtles as well as burrow habitat suitable for the species.
- If western pond turtles are not detected during the focused survey, the qualified biologist shall submit a report summarizing the results of the survey to the project applicant and the City of Roseville, and further mitigation will not be required.
- If western pond turtles are detected, a no-disturbance buffer of at least 100 feet shall be established around any identified nest sites or overwintering sites. A qualified biologist with an appropriate CDFW Scientific Collecting Permit that allows handling of reptiles shall be present during initial ground disturbance activities and shall inspect the project site before initiation of project activities. If western pond turtles are detected, the qualified biologist shall move the turtles downstream and out of harm's way.
- Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-2a would reduce potential impacts on western pond turtle to a **less-than-significant** level by requiring focused surveys for the species, implementation of measures to avoid injury or mortality of western pond turtles if detected, and relocation of individual turtles by a qualified biologist with an appropriate CDFW Scientific Collecting Permit.

BURROWING OWL

The nearest documented occurrence of burrowing owl is approximately 1.4 miles southeast of the project site (CNDDB 2021). The agricultural land on the project site likely does not provide habitat suitable for this species because the land is disturbed and regularly disked. However, the earthen berms along the edges of the agricultural land contain California ground squirrel burrows, which may provide burrow habitat suitable for burrowing owls. While no evidence of burrowing owl occupation (i.e., pellets, scat, prey items) were observed during the August 6, 2021, reconnaissance-level survey, burrowing owls could occupy the project site in the future.

Project implementation would include ground disturbance and vegetation clearing, which would require the use of vehicles and heavy machinery. These activities could result in inadvertent disturbance, injury, or mortality of burrowing owl. If present, burrowing owls could be disturbed due to the presence of equipment and personnel and could be inadvertently injured or killed by heavy machinery or vehicles or could abandon active nests resulting mortality of chicks or eggs. Active burrows could be inadvertently crushed and destroyed, if present, potentially resulting in the loss of eggs or chicks. This would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.7-2b: Conduct Take Avoidance Survey for Burrowing Owl, Implement Avoidance Measures, and Compensate for Loss of Occupied Burrows

- A qualified biologist shall conduct a focused survey for burrowing owls in areas of habitat suitable for the species on and within 1,640 feet (500 meters) of the project site no less than 14 days prior to initiating ground disturbance activities using survey methods described in Appendix D of the CDFW Staff Report (CDFW 2012).
- If no occupied burrows are found, the qualified biologist shall submit a report documenting the survey methods and results to the project applicant and the City of Roseville, and no further mitigation shall be required.
- If an active burrow is found within 1,640 feet of pending construction activities that would occur during the nonbreeding season (September 1 through January 31), the project applicant shall establish and maintain a minimum protection buffer of 164 feet (50 meters) around the occupied burrow throughout construction. The actual buffer size shall be determined by the qualified biologist based on the time of year and level of disturbance in accordance with guidance provided in the CDFW Staff Report on Burrowing Owl Mitigation (CDFW 2012). The protection buffer may be adjusted if, in consultation with CDFW, a qualified biologist determines that an alternative buffer shall not disturb burrowing owl use of the burrow because of particular site features or other buffering measures. If occupied burrows are present that cannot be avoided or adequately protected with a no-disturbance buffer, a burrowing owl exclusion plan shall be developed, as described in Appendix E of the CDFW Staff Report. Burrowing owls shall not be excluded from occupied burrows until the project burrowing owl exclusion plan is approved by CDFW. The exclusion plan shall include a compensatory habitat mitigation plan (see below).
- If an active burrow is found during the breeding season (February 1 through August 31), occupied burrows shall not be disturbed and shall be provided with a protective buffer at a minimum of 164 feet unless a qualified biologist verifies through noninvasive means that either: (1) the birds have not begun egg laying, or (2) juveniles from the occupied burrows are foraging independently and are capable of independent survival. The size of the buffer may be adjusted depending on the time of year and level of disturbance as outlined in the CDFW Staff Report. The size of the buffer may be reduced if a broad-scale, long-term, monitoring program acceptable to CDFW is implemented so that burrowing owls are not adversely affected. Once the fledglings are capable of independent survival, the owls can be evicted, and the burrow can be destroyed per the terms of a CDFW-approved burrowing owl exclusion plan developed in accordance with Appendix E of CDFW Staff Report.
- If burrowing owls are evicted from burrows and the burrows are destroyed by implementation of project activities, the project applicant shall mitigate the loss of occupied habitat in accordance with guidance provided in the CDFW Staff Report, which states that permanent impacts on nesting, occupied and satellite burrows, and burrowing owl habitat (i.e., grassland habitat with suitable burrows) shall be mitigated such that habitat acreage

and number of burrows are replaced through permanent conservation of comparable or better habitat with similar vegetation communities and burrowing mammals (e.g., ground squirrels) present to provide for nesting, foraging, wintering, and dispersal. The project applicant shall retain a qualified biologist to develop a burrowing owl mitigation and management plan that incorporates the following goals and standards:

- Mitigation lands shall be selected based on comparison of the habitat lost to the compensatory habitat, including type and structure of habitat, disturbance levels, potential for conflicts with humans, pets, and other wildlife, density of burrowing owls, and relative importance of the habitat to the species throughout its range.
- If feasible, mitigation lands shall be provided adjacent or proximate to the project site so that displaced owls can relocate with reduced risk of injury or mortality. Feasibility of providing mitigation adjacent or proximate to the project site depends on availability of sufficient habitat to support displaced owls that may be preserved in perpetuity.
- If habitat suitable for burrowing owl is not available for conservation adjacent or proximate to the project site, mitigation lands can be secured off-site and shall aim to consolidate and enlarge conservation areas outside of planned development areas and within foraging distance of other conservation lands. Mitigation may be also accomplished through purchase of mitigation credits at a CDFW-approved mitigation bank, if available. Alternative mitigation sites and acreages may also be determined in consultation with CDFW.
- If burrowing owl habitat mitigation is completed through permittee-responsible conservation lands, the mitigation plan shall include mitigation objectives, site selection factors, site management roles and responsibilities, vegetation management goals, financial assurances and funding mechanisms, performance standards and success criteria, monitoring and reporting protocols, and adaptive management measures. Success shall be based on the number of adult burrowing owls and pairs using the site and if the numbers are maintained over time. Measures of success, as suggested in the CDFW Staff Report, shall include site tenacity, number of adult owls present and reproducing, colonization by burrowing owls from elsewhere, changes in distribution, and trends in stressors.

- Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-2b would reduce potential impacts on burrowing owl to a **less-than-significant** level by requiring a take avoidance survey for burrowing owl, implementation of measures to avoid injury or mortality of burrowing owls and destruction of active burrows if detected, and compensation if burrows cannot be avoided.

SPECIAL-STATUS BIRDS, COMMON RAPTORS, AND OTHER COMMON NATIVE BIRDS

Seven special-status birds have potential to occur on the project site: loggerhead shrike, northern harrier, song sparrow ("Modesto" population), Swainson's hawk, tricolored blackbird, western yellow-billed cuckoo, and white-tailed kite. Nesting habitat for most of these special-status bird species is only present within the valley oak riparian woodland habitat on the project site; however, Swainson's hawks could also nest within other large trees elsewhere on the project site. Other common raptor species could also nest in trees on the project site, including red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), great horned owl (*Bubo virginianus*), and Cooper's hawk (*Accipiter cooperi*). Other common native birds could also nest on the project site within trees, shrubs, brambles (e.g., Himalayan blackberry), or on the ground (i.e., within the valley oak riparian woodland habitat). While not

special-status species, common raptors and other common native birds and their nests are protected under California Fish and Game Code and the federal MBTA.

Most project activities would occur within the agricultural land on the project site and would avoid the valley oak riparian woodland habitat. However, infrastructure (e.g., parking areas, fencing) associated with Building D, Building I, and Building N may encroach into the valley oak riparian woodland habitat on the project site, and construction of the bridge across Pleasant Grove Creek may result in disturbance of this habitat adjacent to Pleasant Grove Creek. Project implementation elsewhere on the project site would include ground disturbance, vegetation clearing, and tree removal which would require the use of equipment, vehicles, and heavy machinery. These activities could result in inadvertent disturbance, injury, or mortality of special-status and common native birds. If present, special-status and common native birds could be disturbed due to the presence of equipment and personnel potentially leading to nest abandonment. Active nests could be inadvertently removed and destroyed during vegetation and tree removal activities, if present, potentially resulting in the loss of eggs or chicks. This would be a **potentially significant** impact

Mitigation Measures

Mitigation Measure 3.7-2c: Conduct Focused Surveys for Special-Status Birds, Nesting Raptors, and Other Native Nesting Birds and Implement Protective Buffers

- To minimize the potential for loss of special-status bird species, raptors, and other native birds, project construction activities (e.g., tree removal, vegetation clearing, ground disturbance, staging) shall be conducted during the nonbreeding season (approximately September 1-January 31, as determined by a qualified biologist), if feasible. If project construction activities are conducted during the nonbreeding season, no further mitigation shall be required.
- Within 14 days before the onset of project construction activities during the breeding season (approximately February 1 through August 31, as determined by a qualified biologist), a qualified biologist familiar with birds of California and with experience conducting nesting bird surveys shall conduct focused surveys for special-status birds, other nesting raptors, and other native birds. Surveys shall be conducted within 0.25 mile of the project site for Swainson's hawk; within 500 feet of the project site for other special-status birds and common raptors; and within 50 feet of the project site for non-raptor common native bird nests.
- Because the nests of riparian-nesting birds (i.e., song sparrow ("Modesto" population), tricolored blackbird, and western yellow-billed cuckoo) are small and difficult to find, occupancy of habitat suitable for these species (i.e., riparian woodland) shall be determined by a qualified biologist familiar with the life history of these species and with experience identifying the calls of these species. If special-status riparian-nesting birds are observed calling, exhibiting territorial displays, carrying nest materials, carrying prey, or other signs of breeding behavior, the habitat shall be considered occupied.
- If no nests are found, the qualified biologist shall submit a report documenting the survey methods and results to the project applicant and the City of Roseville, and no further mitigation shall be required.
- Impacts on nesting birds shall be avoided by establishing appropriate buffers around active nest sites identified during focused surveys to prevent disturbance to the nest. Project construction activity shall not commence within the buffer areas until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer will not likely result in nest abandonment. An avoidance buffer of a minimum of 0.25 mile shall be implemented for Swainson's hawk in consultation with CDFW. An avoidance buffer of a minimum of 500 feet shall be implemented for western yellow-billed cuckoo in consultation with USFWS and CDFW and for tricolored blackbird in consultation with CDFW. For other species, a qualified biologist shall determine the size of the buffer for non-raptor nests after a site- and nest-specific analysis. Buffers typically will be 500 feet for other special-status birds and common raptors. Buffer size for non-raptor common bird species shall be determined by a qualified biologist. Factors to be considered for determining buffer size will include presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and proposed project construction activities. Generally, buffer size for these species will be at least 20 feet. The size of the buffer may be adjusted if a qualified biologist, determines

that such an adjustment would not be likely to adversely affect the nest. Any buffer reduction for a special-status species shall require consultation with CDFW. Periodic monitoring of the nest by a qualified biologist during project construction activities shall be required if the activity has potential to adversely affect the nest, the buffer has been reduced, or if birds within active nests are showing behavioral signs of agitation (e.g., standing up from a brooding position, flying off the nest) during project construction activities, as determined by the qualified biologist.

- If egret or night heron rookeries are found within trees on the project site, an avoidance buffer shall be implemented, the size of which will be determined by a qualified biologist. Buffer size for large rookeries will likely be larger than for single nests due to the number of birds and nests within the rookery. Rookery trees identified on the project site shall be retained permanently.
- Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-2c would reduce potential impacts on special-status birds, raptors, and other common native nesting birds to a **less-than-significant** level by requiring focused surveys for nesting birds and implementation of measures to avoid disturbance, injury, or mortality of the species if nests are detected.

SPECIAL-STATUS FISH

Two special-status fish species—hardhead and Sacramento hitch—may occur within Pleasant Grove Creek. Additionally, while the project site does not contain aquatic habitat suitable for most special-status fish species, Pleasant Grove Creek, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary are hydrologically connected to watercourses occupied by these species (Table 3.7-3). Most project activities would occur a sufficient distance from these features; however, the project would also include construction of a bridge across Pleasant Grove Creek and the Pleasant Grove Creek Bypass Channel to connect the north and south parcels, which would include in-water work. As described in Section 3.12, "Hydrology and Water Quality," the project applicant would be required to develop and implement a stormwater pollution prevention plan (SWPPP) and best management practices (BMPs) and comply with the City's Urban Stormwater Quality Management and Discharge Control Ordinance, West Placer Storm Water Quality Design Manual, Placer County Flood Control and Water Conservation District's Stormwater Management Manual, and Section 16.20.040 of the Roseville Municipal Code that include measures to control, prevent, remove, or reduce pollution. These measures would reduce project impacts on water quality.

Bridge construction would include installation of 24-inch diameter bridge supports within the Pleasant Grove Creek channel, within the Pleasant Grove Creek Bypass Channel, within the valley oak riparian habitat on the south side of Pleasant Grove Creek, and in other upland areas adjacent to Pleasant Grove Creek. Additional ground disturbance would occur on either side of Pleasant Grove Creek, including within the valley oak riparian habitat on the north side of Pleasant Grove Creek. Installation of bridge supports could result in direct injury or mortality of special-status fish, if present. Ground disturbance associated with construction of the bridge or other construction activities could result in discharge of silt into Pleasant Grove Creek, the Pleasant Grove Creek Bypass Channel, or the Pleasant Grove Creek First North Tributary, which could result in adverse effects on survival of special-status fish, if present. Additionally, discharge of silt into these features may temporarily affect in-stream water quality and habitat, which could potentially result in indirect downstream effects on special-status fish otherwise not expected to occur on the project site (i.e., salmonids). Project construction and operation that may affect in-stream water quality and habitat could potentially result in indirect effects on steelhead and Chinook salmon habitat downstream of the project site. The stream and its water quality could be indirectly affected by grading, trenching, and creation of impervious surfaces

proposed for adjacent uplands and encroachment of developed land uses. Direct and indirect adverse effects on special-status fish would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.7-2d: Implement Protection Measures for Special-Status Fish

The project applicant shall implement the following protection measures before and during project construction, including construction of the bridge over Pleasant Grove Creek:

- In-channel construction activities within Pleasant Grove creek shall take place outside of the salmonid migration season (November 1 through December 31).
- In-channel construction activities within Pleasant Grove Creek shall be limited to daylight hours during weekdays, leaving a nighttime and weekend period of passage for special-status fish species.
- Silt curtains shall be implemented for all in-channel construction activities.
- Water quality shall be evaluated during and after all in-channel construction activities. The performance criteria shall be no degradation of downstream water quality compared to upstream water quality. Water quality shall be evaluated by a qualified environmental monitor using appropriate qualitative or quantitative measurements, including turbidity and temperature. Remedial measures shall be implemented if downstream water quality is degraded. Remedial measures shall include the following:
  - modification or suspension of in-water construction activities as appropriate;
  - installation of additional sediment control devices; and
  - additional monitoring to evaluate the water quality after measures are implemented.
- Silt fencing shall be installed as appropriate along the edges of the Pleasant Grove Creek riparian corridor, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary to prevent excess fill from entering the water. All silt fences shall be maintained and checked for efficacy as necessary, but not less frequently than once per week.
- Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek shall be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-2d would reduce potential direct and indirect (i.e., downstream) impacts on special-status fish to a **less-than-significant** level by requiring implementation of protection measures to reduce direct effects on special-status fish and to prevent discharge of silt into Pleasant Grove Creek during project construction, including construction of the bridge over Pleasant Grove Creek.

RINGTAIL

Large trees within the valley oak riparian woodland habitat on the project site may provide den habitat suitable for ringtail (i.e., large cavities). Most project activities would occur within the agricultural land on the project site and would avoid Pleasant Grove Creek and associated valley oak riparian woodland habitat. However, construction of the bridge across Pleasant Grove Creek may result in disturbance of this habitat adjacent to Pleasant Grove Creek and potential removal of trees. While project activities are not expected to result in significant modification of the valley oak riparian woodland habitat such that the habitat is no longer suitable for ringtail, removal of trees could result in

direct loss of an active den and potential injury or mortality of ringtail kits. This would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.7-2e: Conduct Focused Surveys for Ringtail Dens and Implement Avoidance Measures

- To minimize the potential for loss of ringtail and active ringtail dens, tree removal within the valley oak riparian woodland habitat on the project site shall be conducted outside of the ringtail breeding season (not well defined, but likely approximately March 1 to July 31), if feasible.
- Within seven days before initiation of tree removal within the valley oak riparian woodland habitat during the ringtail breeding season, a qualified biologist with familiarity with ringtail shall conduct a focused survey for potential ringtail dens (e.g., hollow trees, snags, rock crevices) within the trees planned for removal. The qualified biologist shall identify sightings of individual ringtails, as well as potential dens.
- If individuals or potential or occupied dens are not found, the qualified biologist shall submit a report summarizing the results of the survey to the project applicant and the City of Roseville, and further mitigation shall not be required.
- If ringtails are identified or if potential dens are located in the trees planned for removal, an appropriate method, based on current professional standards, shall be used by the qualified wildlife biologist to confirm whether a ringtail is occupying the den. This may include use of remote field cameras, track plates, or hair snares. Other devices, such as a fiber optic scope, may be utilized to determine occupancy.
  - If no ringtail occupies the potential den, the tree may be removed.
  - If a den is found to be occupied by a ringtail, the tree may not be removed, and a no-disturbance buffer shall be established around the occupied den. The no-disturbance buffer shall include the den tree plus a suitable buffer as determined by the biologist in coordination with CDFW. Project activities in the no-disturbance buffer shall be avoided until the den is unoccupied as determined by the qualified wildlife biologist in coordination with CDFW.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-2e would reduce potential impacts on ringtail to a **less-than-significant** level by requiring focused surveys for ringtail dens prior to tree removal in valley oak riparian woodland habitat and implementation of no-disturbance buffers around active dens in consultation with CDFW.

PALLID BAT AND WESTERN RED BAT

Large trees within the valley oak riparian woodland habitat and in small groves elsewhere on the project site may provide roost habitat suitable for pallid bat and western red bat (i.e., large cavities, foliage). Most project activities would occur within the agricultural land on the project site and would avoid Pleasant Grove Creek and associated valley oak riparian woodland habitat. However, construction of the bridge across Pleasant Grove Creek may result in disturbance of this habitat adjacent to Pleasant Grove Creek and potential removal of trees. Additionally, other large trees on the project site may be removed during construction of buildings. Removal of trees could result in disturbance, injury, or mortality of pallid bats and western red bats if roosts are present. This would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.7-2f: Conduct Focused Bat Surveys and Implement Avoidance Measures

- Prior to tree removal activities, a qualified biologist with familiarity with bats and bat ecology and experienced in conducting bat surveys shall conduct surveys for bat roosts in large trees on the project site.

- If no evidence of bat roosts is found, the qualified biologist shall submit a report summarizing the results of the survey to the project applicant and the City of Roseville, and no further study will be required.
- If evidence of bat roosts is observed, the species and number of bats using the roost shall be determined. Bat detectors shall be used if deemed necessary to supplement survey efforts by the qualified biologist.
- A no-disturbance buffer of 250 feet shall be established around active pallid bat or western red bat roosts, and project construction activities shall not occur within this buffer until after the roosts are unoccupied as determined by a qualified biologist.
- If roosts of pallid bat or western red bat are determined to be present and must be removed, the bats shall be excluded from the roosting site before the tree is removed. A program addressing compensation, exclusion methods, and roost removal procedures shall be developed in consultation with CDFW before implementation. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young). The loss of each roost (if any) shall be replaced in consultation with CDFW and may require construction and installation of bat boxes suitable to the bat species and colony size excluded from the original roosting site. If determined necessary during consultation with CDFW, replacement roosts shall be implemented before bats are excluded from the original roost sites. Once the replacement roosts are constructed and it is confirmed that bats are not present in the original roost site by a qualified biologist, the roost tree may be removed.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-2f would reduce potential impacts on pallid bat and western red bat to a **less-than-significant** level by requiring focused surveys for bat roosts, implementation of no-disturbance buffers around active special-status bat roosts, and consultation with CDFW if special-status bat roosts would be removed.

Impact 3.7-3: Result in Degradation or Loss of Riparian Habitat or Other Sensitive Natural Communities

Project implementation may include ground disturbance, vegetation removal, and direct removal of riparian habitat adjacent to Pleasant Grove Creek and the Pleasant Grove Creek First North Tributary, which could result in the degradation or loss of riparian habitat. This would be a **potentially significant** impact.

The project site contains approximately 8.7 acres of valley oak riparian woodland habitat associated with Pleasant Grove Creek and the Pleasant Grove Creek First North Tributary. In addition to being riparian habitat, valley oak riparian forest and woodland is a CDFW-designated sensitive natural community. Most project activities would occur within the agricultural land on the project site and would avoid the valley oak riparian woodland habitat. However, construction of the bridge across Pleasant Grove Creek may result in removal or disturbance of riparian habitat adjacent to Pleasant Grove Creek. Additionally, construction of infrastructure (e.g., parking areas, fencing) associated with Building D, Building I, and Building N may include ground disturbance and vegetation removal, and may encroach into the valley oak riparian woodland habitat adjacent to both riverine features. Degradation (e.g., reduction of vegetation cover, trampling, alteration of root structure, anthropogenic noise and light, human trespass) or removal of the valley oak riparian woodland habitat on the project site would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.7-3: Provide Stream Setbacks, Best Management Practices, and Compensate for Unavoidable Loss of Riparian Habitat

The project applicant shall implement the following protection measures prior to implementation of project activities (e.g., construction, staging) within 50 feet of valley oak riparian woodland habitat on the project site, including construction of the bridge over Pleasant Grove Creek:

- Setbacks shall be established around all valley oak riparian woodland habitat on the project site and shall be flagged or fenced with brightly visible construction flagging and/or fencing under the direction of the qualified

biologist and no project activities (e.g., vegetation removal, ground disturbance, staging) shall occur within these areas. Setback distances shall be determined by a qualified biologist in consultation with the appropriate agency (e.g., CDFW), but will generally be a minimum of 50 feet. Foot traffic by personnel shall also be limited in these areas to prevent the introduction of invasive or weedy species or inadvertent crushing of plants and soil compaction. Periodic inspections during construction shall be conducted by a qualified biologist to maintain the integrity of exclusion fencing/flagging throughout the period of construction involving ground disturbance.

- If project implementation cannot avoid and thus may adversely affect the bed, bank, channel, or associated riparian habitat subject to CDFW jurisdiction under California Fish and Game Code Section 1602, the following measures shall apply.
  - A Streambed Alteration Notification shall be submitted to CDFW, pursuant to Section 1602 of the California Fish and Game Code. If proposed project activities are determined to be subject to CDFW jurisdiction, the project applicant shall abide by the measures to protect fish and wildlife resources required by any executed agreement prior to any vegetation removal or activity that may affect the resource. Measures to protect fish and wildlife resources shall include, at a minimum, a combination of the following mitigation.
    - The project applicant shall compensate for the loss of riparian habitat and habitat function and value of this habitat by:
      - restoring riparian habitat function and value within the project site;
      - restoring degraded riparian habitat outside of the project site;
      - purchasing riparian habitat credits at a CDFW-approved mitigation bank; or
      - preserving existing riparian habitat of equal or better value to the affected riparian habitat through a conservation easement at a sufficient ratio to offset the loss of riparian habitat function (at least 1:1).
  - The project applicant shall prepare and implement a Compensatory Mitigation Plan that will include the following:
    - For preserving existing riparian habitat outside of the project site in perpetuity, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands (e.g., the number and type of credits, location of mitigation bank or easement), parties responsible for the long-term management of the land, and the legal and funding mechanism for long-term conservation (e.g., holder of conservation easement or fee title). The project applicant will provide evidence in the plan that the necessary mitigation has been implemented or that the project applicant has entered into a legal agreement to implement it and that compensatory habitat will be preserved in perpetuity.
    - For restoring or enhancing riparian habitat within the project site or outside of the project site, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored or enhanced habitat.
    - Compensatory mitigation may be satisfied through compliance with permit conditions, or other authorizations obtained by the project applicant (e.g., Lake and Streambed Alteration Agreement), if these requirements are equally or more effective than the mitigation identified above.
- Fencing and signage shall be installed between the development footprint and the riparian habitat associated with Pleasant Grove Creek and the Pleasant Grove Creek First North Tributary to discourage trespassing into stream and riparian habitat. Fencing design shall be at the discretion of the project applicant and may include permeable, symbolic fencing (e.g., post and cable).
- Future maintenance activities (i.e., activities to maintain functional and structural integrity) associated with the bridge crossing Pleasant Grove Creek would be subject to the City of Roseville's existing Streambed Alteration Agreement with CDFW for routine maintenance activities, which requires CDFW notification prior to

implementation of maintenance activities, pre-activity surveys for special-status species, biological monitoring, limits to vegetation removal within and adjacent to waterways, and other avoidance measures to reduce impacts on natural resources.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-3 would reduce potential impacts on valley oak riparian woodland habitat to a **less-than-significant** level by requiring implementation of avoidance measures, compensation for permanent loss of these to offset the loss with a minimum 1:1 ratio, potentially including a streambed alteration agreement with CDFW, and installation of fencing and signage to prevent trespassing into this habitat after project construction is completed.

Impact 3.7-4: Result in Degradation or Loss of State or Federally Protected Wetlands

Project implementation would include ground disturbance, vegetation removal, and direct removal of riparian habitat adjacent to Pleasant Grove Creek, which could result in inadvertent discharge of silt into Pleasant Grove Creek, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary. Discharge of silt into these features may result in adverse effects on water quality in the creek, which would be a **potentially significant** impact.

Aquatic habitat on the project site is limited to Pleasant Grove Creek, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary. These riverine features would likely be considered waters of the United States and waters of the state. Project implementation would include construction of a bridge over Pleasant Grove Creek and the Pleasant Grove Creek Bypass Channel.

Bridge construction would include installation of 24-inch diameter bridge supports within the Pleasant Grove Creek channel, within the Pleasant Grove Creek Bypass Channel, within the valley oak riparian habitat on the south side of Pleasant Grove Creek, and in other upland areas adjacent to Pleasant Grove Creek. Additional ground disturbance would occur on either side of Pleasant Grove Creek, including within the valley oak riparian habitat on the north side of Pleasant Grove Creek. Installation of bridge supports and ground disturbance adjacent to Pleasant Grove Creek and the Pleasant Grove Creek Bypass Channel during bridge construction could result in modification of the bed, bank, or channel of these features or discharge silt into these features, which could result in adverse effects on water quality. Ground disturbance associated with other construction activities near Pleasant Grove Creek, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary could also result in discharge of silt into the creek, which could result in adverse effects on water quality. Modifications to the bed, bank, or channel of Pleasant Grove Creek and the Pleasant Grove Bypass Channel, and discharge of silt into these features or the Pleasant Grove Creek First North Tributary would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.7-4a: Implement Mitigation Measures 3.7-2d and 3.7-3

The project applicant shall implement Mitigation Measures 3.7-2d and 3.7-3.

Mitigation Measure 3.7-4b: Identify State or Federally Protected Wetlands, Implement Avoidance Measures, and Obtain Permits for Unavoidable Impacts on Wetlands

The following measures shall be implemented prior to initiation of bridge construction activities:

- The project applicant shall retain a qualified biologist, hydrologist, or wetland ecologist to prepare a formal delineation of the boundaries of state or federally protected wetlands and other waters within the project site according to methods established in the USACE wetlands delineation manual (Environmental Laboratory 1987) and the Arid West regional supplement (USACE 2008). The qualified biologist shall also delineate the boundaries of wetlands that may not meet the definition of waters of the United States, but would qualify as waters of the state, according to the state wetland procedures (SWRCB 2019). This delineation report shall be submitted to USACE, and a preliminary jurisdictional determination shall be requested.

- Where state or federally protected wetlands can be avoided, the boundary of the delineated ordinary high-water mark shall be demarcated with high-visibility flagging, fencing, stakes, or clear, existing landscape demarcations (e.g., edge of a roadway). Project activities (e.g., ground disturbance, vegetation removal, staging) shall be prohibited within the established boundary. A qualified biologist shall periodically inspect the materials demarcating the buffer to confirm that they are intact and visible, and wetland impacts are being avoided.
- Authorization for fill of waters of the United States associated with bridge construction (e.g., constructing bridge support structures) shall be secured from USACE through the Section 404 permitting process. Any state or federally protected wetlands that would be affected by the project shall be replaced or restored on a no-net-loss basis in accordance with the applicable USACE mitigation guidelines in place at the time of construction. In association with the Section 404 permit (if applicable) and prior to the issuance of any grading permit, Section 401 Water Quality Certification from the Central Valley RWQCB shall be obtained. For any activity that may result in discharges of dredged or fill material to waters of the state that may not be covered by the 401 Water Quality Certification, Panattoni shall secure a permit from the Central Valley RWQCB and provide compensatory mitigation for permanent loss of any waters of the state in accordance with *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (California Water Boards 2019), such that the project would not result in a net loss of overall abundance, diversity, and condition of aquatic resources within the affected watershed based on a watershed assessment using an assessment method approved by the permitting authority (e.g., Central Valley RWQCB or California Water Resources Control Board).
- The project applicant shall comply with waste discharge requirements as described in Section 3.12, "Hydrology and Water Quality."
- The project applicant shall notify CDFW before commencing activity that may divert the natural flow or otherwise alter the bed, bank, or riparian corridor of any stream protected pursuant to Section 1602 of the Fish and Game Code. If project activities trigger the need for a Streambed Alteration Agreement, the proponent shall obtain an agreement from CDFW before the activity commences. The applicant shall conduct project construction activities in accordance with the agreement, including implementing reasonable measures in the agreement necessary to protect the fish and wildlife resources, when working within the bed or bank of waterways or in riparian habitats associated with those waterways. These measures may include but not be limited to demarcation of the construction area, biological monitoring, environmental awareness training for construction crews, and compensatory measures (e.g., restoration, long-term habitat management). Compensatory mitigation for impacts to state or federally protected wetlands, described in the prior bullet, may count towards compensation for loss of fish and wildlife resources protected pursuant to CDFW's jurisdiction pursuant to Section 1602 of the Fish and Game Code.

Significance after Mitigation

Implementation of Mitigation Measures 3.7-4a and 3.7-4b would reduce potential direct and indirect (i.e., downstream) impacts on Pleasant Grove Creek, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary to a **less-than-significant** level by requiring protection measures to prevent discharge of silt into these features during construction of the bridge and other project features, by requiring implementation of avoidance measures for impacts on riparian habitat along Pleasant Grove Creek, delineation of wetlands on the project site, and permitting for unavoidable impacts.

Impact 3.7-5: Interfere with Wildlife Movement Corridors or Impede the Use of Wildlife Nurseries

Project implementation could result in permanent and temporary impacts on wildlife movement from construction of a bridge across Pleasant Grove Creek, including in-channel work and discharge of silt into Pleasant Grove Creek, and/or removal of egret or heron rookery trees, which would be a **potentially significant** impact.

The project site is included in a modeled ECA connecting natural landscape blocks to the north and south (Figure 3.7-2). The modeled ECA within the project site is considered "less permeable" than adjacent ECAs in uncultivated, vernal pool grassland complex habitats, meaning that the area may not function as a high-quality wildlife movement

corridor for some wildlife species (Figure 3.7-2, Spencer et al. 2010). The undeveloped nature of the project site likely supports movement of wildlife; especially Pleasant Grove Creek and the valley oak riparian woodland habitat associated with the creek. While wildlife species likely move through the agricultural land on the project site, this land is considered lower quality wildlife habitat than Pleasant Grove Creek.

Project implementation would include construction of a bridge across Pleasant Grove Creek. Bridge construction would include installation of 24-inch diameter bridge supports within the Pleasant Grove Creek channel, within the Pleasant Grove Creek Bypass Channel, within the valley oak riparian habitat on the south side of Pleasant Grove Creek, and in other upland areas adjacent to Pleasant Grove Creek. Additional ground disturbance would occur on either side of Pleasant Grove Creek, including within the valley oak riparian habitat on the north side of Pleasant Grove Creek. Construction of the bridge and installation of the bridge supports would result in a new, permanent feature within Pleasant Grove Creek.

While bridge supports within the creek may impede or change the movement patterns of some wildlife species (e.g., fish, waterfowl), construction of the bridge would not constitute an impassible barrier to wildlife movement along Pleasant Grove Creek, eliminate the corridor, or cause the habitat to become isolated or unusable. Construction of the bridge may also result in temporary impacts on wildlife movement during construction, including in-channel work and discharge of silt into the creek, which could result in adverse effects on water quality. This would be a **potentially significant** impact.

Based on historic aerial imagery, rookeries likely associated with snowy egrets, great egrets, or black-crowned night herons are present in trees within the Al Johnson Wildlife Area approximately 0.17 mile west of the project site and may be present within trees in the valley oak riparian woodland habitat on the project site (Figure 3.7-1). Most project activities would occur within the agricultural land on the project site and would avoid the valley oak riparian woodland habitat. However, infrastructure (e.g., parking areas, fencing) associated with Building D, Building I, and Building N may encroach into the valley oak riparian woodland habitat on the project site, and construction of the bridge across Pleasant Grove Creek may result in disturbance of this habitat adjacent to Pleasant Grove Creek, or could result in removal of rookery trees. These activities could result in inadvertent disturbance to, injury, or mortality of birds in egret or night heron rookeries. If present, these rookeries could be disturbed due to the presence of equipment and personnel potentially leading to abandonment of the rookery. Active egret or night heron nests could be inadvertently removed and destroyed during vegetation and tree removal activities, if present, potentially resulting in the loss of eggs or chicks. This would be a **potentially significant** impact

Mitigation Measures

Mitigation Measure 3.7-5a: Implement Mitigation Measures 3.7-2c, 3.7-2d, and 3.7-3

The project applicant shall implement Mitigation Measures 3.7-2c, 3.7-2d and 3.7-3.

Mitigation Measure 3.7-5b: Utilize Wildlife-Friendly Building and Fencing Designs

In addition to lighting standards described in Chapter 2, "Project Description," the project applicant shall implement the following measures:

- Buildings and other permanent structures shall be designed to minimize impacts on wildlife, including disruption to wildlife movement, bird strikes, and wildlife entanglement.
  - Building design shall utilize guidelines regarding building height, materials, external lighting, and landscaping provided in the American Bird Conservancy's "Bird Friendly Building Design" (American Bird Conservancy 2015).
  - Fencing associated with new development shall utilize wildlife-friendly fencing design to minimize the risk of entanglement or impalement of wildlife. The fencing design shall meet, but not be limited to the following standards:

- Minimize the chance of wildlife entanglement by avoiding barbed wire, loose or broken wires, or any material that could impale, snag, or entrap a leaping animal (e.g., wrought iron fencing with spikes).
- Allow wildlife to jump over easily without injury. Typically, fences should be no more than 40 inches high on flat ground to allow adult deer to jump over. The determination of appropriate fence height will consider slope, as steep slopes are more difficult for wildlife to pass.
- Allow smaller wildlife to pass under easily without injury or entrapment.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-2c would reduce significant impacts on native wildlife nursery sites (i.e., egret or night heron rookeries) to a **less-than-significant** level by requiring focused surveys for nesting birds, implementation of avoidance buffers, and retention of rookery trees. Implementation of Mitigation Measures 3.7-2d and 3.7-3 would reduce potential direct and indirect (i.e., downstream) impacts on Pleasant Grove Creek, the Pleasant Grove Creek Bypass Channel, and the Pleasant Grove Creek First North Tributary to a **less-than-significant** level by requiring implementation of protection measures to reduce direct effects on special-status fish and to prevent discharge of silt into Pleasant Grove Creek during project construction (including construction of the bridge) and by requiring implementation of avoidance measures for impacts on riparian habitat along Pleasant Grove Creek. Implementation of Mitigation Measure 3.7-5b would reduce significant impacts on wildlife movement corridors to a **less-than-significant** level by requiring wildlife-friendly building, lighting, and fencing design to reduce disruption of wildlife movement and wildlife behavior adjacent to the project site.

Impact 3.7-6: Conflict with Local Policies and Ordinances

The Chapter 19.66 of the City of Roseville Municipal Code, "Tree Preservation," contains requirements for projects that would remove protected trees. Implementation of the project would result in the direct removal or disturbance of trees that may be considered protected under the City of Roseville Municipal Code. This impact would be **potentially significant.**

Project implementation would involve removal of trees that may qualify as protected trees (see the discussion of the City of Roseville Municipal Code in Section 3.7.1, "*Regulatory Setting*"). In accordance with tree preservation requirements under the City of Roseville Municipal Code, the project applicant obtained an arborist report, and a qualified arborist determined that a total of 324 protected trees are present on the project site (California Tree and Landscape Consulting, Inc. 2021). During project construction, protected trees may be removed from small, isolated groves on the project site and from the valley oak riparian woodland habitat adjacent to Pleasant Grove Creek. Removal of or disturbance of protected trees would conflict with tree preservation requirements in the City of Roseville Municipal Code. This impact would be **potentially significant**.

Mitigation Measures

Mitigation 3.7-6: Remove and Replace Protected Trees Consistent with the Chapter 19.66 of the City of Roseville Municipal Code, "Tree Preservation"

- Prior to the start of construction activities (i.e., ground disturbance, tree removal, staging), the project applicant shall submit an application for a Tree Permit to the City of Roseville as part of the land use permit and/or subdivision application for the discretionary project. The application shall include the arborist report and a site plan map with information as deemed necessary by the City Planning Manager. The site plan map shall include physical characteristics of the project (e.g., property lines, existing and proposed buildings and structures, existing and proposed grades), tree locations, and the location of the protected zone of each protected tree.
- The number, location, species, health, and sizes of all protected trees to be removed, relocated, or replaced shall be identified. This information shall also be provided on a map/design drawing to be included in the project plans.

- Protected trees that would be retained on a project site would be subject to tree preservation measures as outlined in the code, including protective fencing, signing, and modified ground disturbance activities (e.g., trenching with hand tools).
- Protected trees that would be removed would be subject to mitigation. The project applicant shall mitigate for loss of protected trees using one of the following four methods, as approved by the City Planning Manager: replacement of trees, relocation of trees, revegetation, or in-lieu mitigation fees.
- The City Planning Manager may allow removal of a protected tree which has been certified by an arborist to be a dead tree without any replacement or mitigation requirements.

Significance after Mitigation

Implementation of Mitigation Measure 3.7-6 would reduce potential impacts related to conflicts with the City of Roseville Municipal Code to a **less-than-significant** level by requiring a Tree Permit from the City of Roseville, implementation of tree preservation measures for protected trees that would be retained on the project site, and compensatory mitigation for removal of protected trees.

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3.8 CULTURAL RESOURCES

This section evaluates the potential impacts of the project on known and unknown cultural resources. Impacts associated with Tribal cultural resources are discussed in Section 3.15, "Tribal Cultural Resources."

Cultural resources include districts, sites, buildings, structures, or objects generally older than 50 years and considered to be important to a culture, subculture, or community for scientific, traditional, religious, or other reasons. They include prehistoric resources and historic-period resources. Archaeological resources are locations where human activity has measurably altered the earth or left deposits of prehistoric or historic-period physical remains (e.g., stone tools, bottles, former roads, house foundations). Historical (or built environment) resources include standing buildings (e.g., houses, barns, outbuildings, cabins) and intact structures (e.g., dams, bridges, roads, districts), or landscapes. A cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

No comment letters regarding cultural resources were received in response to the notice of preparation (see Appendix A).

3.8.1 Regulatory Setting

FEDERAL

National Register of Historic Places

The National Register of Historic Places (NRHP) is the nation's master inventory of known historic properties. It is administered by the National Park Service and includes listings of buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, state, or local level.

The formal criteria (36 Code of Federal Regulations [CFR] 60.4) for determining NRHP eligibility are as follows:

1. The property is at least 50 years old (however, properties under 50 years of age that are of exceptional importance or are contributors to a district can also be included in the NRHP);
2. It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
3. It possesses at least one of the following characteristics:

   Criterion A Is associated with events that have made a significant contribution to the broad patterns of history (events).

   Criterion B Is associated with the lives of persons significant in the past (persons).

   Criterion C Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction (architecture).

   Criterion D Has yielded, or may be likely to yield, information important in prehistory or history (information potential).

For a property to retain and convey historic integrity it must possess most of the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Location is the place where the historic property was constructed or the place where a historic event occurred. Integrity of location refers to whether the property has been moved since its construction. Design is the combination of elements that create the form, plan, space, structure, and style of a property. Setting is the physical environment of a historic property that illustrates the character of the place. Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. Feeling is a property's expression of

the aesthetic or historic sense of a particular period of time. This is an intangible quality evoked by physical features that reflect a sense of a past time and place. Association is the direct link between the important historic event or person and a historic property. Continuation of historic use and occupation help maintain integrity of association.

STATE

California Register of Historical Resources

All properties in California that are listed in or formally determined eligible for listing in the NRHP are also listed in the California Register of Historical Resources (CRHR). The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a Statewide program with a scope and with criteria for inclusion similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

A historical resource must be significant at the local, state, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria below is considered a significant historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria:

Criterion 1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

Criterion 2. Is associated with the lives of persons important to local, California, or national history.

Criterion 3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values.

Criterion 4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Similar to the NRHP, a historical resource must meet one of the above criteria and retain integrity to be listed in the CRHR. The CRHR uses the same seven aspects of integrity used by the NRHP.

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on "historical resources," "unique archaeological resources," and "Tribal cultural resources." Pursuant to Public Resources Code (PRC) Section 21084.1, a "project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." Section 21083.2 requires agencies to determine whether projects would have effects on unique archaeological resources.

Historical Resources

"Historical resource" is a term with a defined statutory meaning (PRC Section 21084.1; State CEQA Guidelines Sections 15064.5[a] and [b]). Under State CEQA Guidelines Section 15064.5(a), historical resources include the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in, the CRHR (PRC Section 5024.1).

2) A resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g), will be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3) Any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational,

social, political, military, or cultural annals of California may be considered to be a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource will be considered by the lead agency to be historically significant if the resource meets the criteria for listing in the CRHR (PRC Section 5024.1).

4) The fact that a resource is not listed in or determined to be eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to PRC Section 5020.1[k]), or identified in a historical resources survey (meeting the criteria in PRC Section 5024.1[g]) does not preclude a lead agency from determining that the resource may be a historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

Unique Archaeological Resources

CEQA also requires lead agencies to consider whether projects will affect unique archaeological resources. PRC Section 21083.2(g) states that "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following criteria:

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

California Native American Historical, Cultural, and Sacred Sites Act

The California Native American Historical, Cultural, and Sacred Sites Act (PRC Section 5097.9) applies to both State and private lands. The act requires, upon discovery of human remains, that construction or excavation activity cease and that the county coroner be notified. If the remains are those of a Native American, the coroner must notify the Native American Heritage Commission (NAHC), which notifies and has the authority to designate the most likely descendant (MLD) of the deceased. The act stipulates the procedures the descendants may follow for treating or disposing of the remains and associated grave goods.

Health and Safety Code, Section 7050.5

Section 7050.5 of the Health and Safety Code requires that construction or excavation be stopped in the vicinity of discovered human remains until the coroner can determine whether the remains are those of a Native American. If they are determined to be those of a Native American, the coroner must contact NAHC.

Public Resources Code, Section 5097

PRC Section 5097 specifies the procedures to be followed if human remains are unexpectedly discovered on nonfederal land. The disposition of Native American burials falls within the jurisdiction of NAHC. Section 5097.5 of the code states:

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

LOCAL

City of Roseville 2035 General Plan

The City of Roseville 2035 General Plan EIR lists the following policies related to archaeological, historic, cultural, and Tribal cultural resources that may be applicable to the project.

- **Policy OS4.1** Consult with local Native American Tribes that are traditionally and culturally affiliated with resources that could be affected by City plans or projects, identify areas that may be of cultural or tribal cultural significance, and determine appropriate treatment for the areas.

- Policy OS4.2 When items of historical, cultural, or archaeological significance are discovered within the City, a qualified archaeologist or historian shall be called to evaluate the find and to recommend proper action.
- Policy OS4.4 The City shall coordinate with the appropriate federal, state, local agencies, and Native American Most Likely Descendant (MLD) Tribes upon discovery of artifacts. The City shall offer the Maidu Museum & Historic Site as a temporary housing location for artifacts that are discovered and subsequently determined to be "removable."

3.8.2 Environmental Setting

The following information is from the *Cultural Resources Assessment Report for the Roseville Industrial Park Project*, which is included as Appendix F (Ascent 2022).

REGIONAL PREHISTORY

A tripartite classification system for cultural change in California's Sacramento River Valley has been standard since the 1930s. This system has recently been adjusted based on modern calibration curves for radiocarbon dates. Based on this new system, the following classification system has been defined for the pre-contact period: Paleo-Indian (11,500–8550 cal [calibrated] before common era [B.C.E.]), Lower Archaic (8550–5550 cal B.C.E.), Middle Archaic (5550–550 cal B.C.E.), Upper Archaic (550 cal B.C.E.–cal C.E. 1100), and Emergent or Late Prehistoric Period (cal C.E. 1100–Historic Contact).

Subsequent to the Paleo-Indian and Lower Archaic periods, the cultural framework is further divided into three regionally based "patterns." Specific to the project area, there are three regionally based patterns. These are the Windmiller, Berkeley, and Augustine patterns. The patterns mark distinct changes in artifact types, subsistence practices, and settlement patterns, which began circa 5550 cal B.C.E. and lasted until historic contact in the mid-1800s. They were initially identified at three archaeological sites: the Windmiller site (CA-SAC-107) near the Cosumnes River in Sacramento County; the West Berkeley site (CA-ALA-307) on the east side of the San Francisco Bay in Alameda County; and the Augustine site (CA-SAC-127) in the Sacramento–San Joaquin Delta. In general, the patterns conform to three temporal divisions: Middle Archaic Period/Windmiller Pattern, Upper Archaic Period/Berkeley Pattern, Late Prehistoric Period/Augustine Pattern.

Paleo-Indian and Lower Archaic Periods (11,500–5550 cal B.C.E.)

There is little evidence of the Paleo-Indian and Lower Archaic periods in the Central Valley. Recent geoarchaeological studies have found that large segments of the Late Pleistocene landscape throughout the California lowlands have been buried or removed by periodic episodes of deposition and erosion. Periods of climate change and associated alluvial deposition occurred at the end of the Pleistocene (approximately 9050 cal B.C.E.) and at the beginning of the early Middle Holocene (approximately 5550 cal B.C.E.). Earlier studies had also estimated that Paleo-Indian and Lower Archaic sites along the lower stretch of the Sacramento River and San Joaquin River drainage systems had been buried by Holocene alluvium up to 33 feet thick that was deposited during the last 5,000 to 6,000 years. The formation of the Sacramento–San Joaquin Delta began during the early Middle Holocene. After approximately 1,000 cal B.C. during the Late Holocene, there were renewed episodes of alluvial fan and floodplain deposition.

The archaeological evidence that is available for the Paleo-Indian Period is primarily defined by basally thinned, fluted projectile points. These points are morphologically similar to well-dated Clovis points found elsewhere in North America. In the Central Valley, fluted points have been recovered from remnant features of the Pleistocene landscape at only three archaeological localities, the Woolfsen Mound in Merced County; Tracey Lake in San Joaquin County; and Tulare Lake basin in Kings County.

Middle Archaic Period/Windmiller Pattern (5550–550 cal B.C.E.)

Archaeological sites dating to the first 3,000 years of the Middle Archaic are relatively scarce in the Sacramento River Valley, mainly due to natural geomorphic processes. On the valley floor, sites are more common after 2550 cal. B.C.E.

The archaeological record in the valley and foothills indicates the subsistence system during this period included a wide range of natural resources (e.g., plants, small and large mammals, fish, and waterfowl) indicating people followed a seasonal foraging strategy. Some researchers suggest populations may have occupied lower elevations during the winter and moved to higher elevations in the summer. Others suggest there was increasing residential stability along Central Valley river corridors during the Middle Archaic.

Excavations at Windmiller Pattern sites have yielded abundant remains of terrestrial fauna (deer, tule elk, pronghorn, and rabbits) and fish (sturgeon, salmon, and smaller fishes). Projectile points with triangular blades and contracting stems are common at Windmiller Pattern sites. A variety of fishing implements such as angling hooks, composite bone hooks, spears, and baked clay artifacts, which may have been used as net or line sinkers, are also relatively common. The points are classified within the Sierra Contracting Stem and Houx Contracting Stem series. The presence of milling implements (grinding slabs, handstones, and mortar fragments) indicate that acorns or seeds were an important part of the Middle Archaic diet.

The presence of numerous exotic trade goods within Middle Archaic assemblages indicate that populations were already part of a complex regional trade network. Obsidian sources include eastern Sierra sources (e.g., Bodie Hills, Casa Diablo, Coso, and Mount Hicks), North Coast Range (e.g., Napa Valley and Borax Lake), and southern Cascades (e.g., Tuscan). Olivella shell beads make their first appearance in the study area during the Early Period, indicating trade with Southern California coastal groups. Lastly, burial complexes with large populations and elaborate grave offerings indicate extended residential occupancy.

Upper Archaic Period/Berkeley Pattern (550 cal B.C.E. – cal C.E. 1100)

The Upper Archaic is characterized by a shift over a 1,000-year period to the more specialized, adaptive Berkeley Pattern. Excavated archaeological sites dating to the Upper Archaic indicate an increase in mortar and pestle groundstone technology. This change is supported by dated palaeobotanical remains and a decrease in slab milling stones and handstones. Archaeologists generally agree mortars and pestles are better suited to crushing and grinding acorns, while milling slabs and handstones may have been used primarily for grinding wild grass grains and seeds. New types of shell beads, charmstones, bone tools, and ceremonial blades are additional evidence of the more specialized technology present during this period.

The artifact assemblage in Berkeley Pattern sites demonstrates that populations continued to exploit a variety plant and animal resources from different environmental zones, including grassland, riparian, and freshwater marsh settings. Deposits of this temporal period have a characteristic well-developed brown midden containing hearth features, fire-fractured rock, storage pits, and house floors. These features indicate that Upper Archaic sites were intensively occupied by large populations.

Berkeley Pattern artifact assemblages are also characterized by split, saddle, and saucer shaped Olivella shell beads, Haliotis ornaments, and a variety of bone tool types. Charmstones are fishtail and asymmetrical spindle-shaped. Mortuary patterns are characterized by flexed burials in variable orientations and a paucity of grave goods. Some cremations have also been recorded in Middle Period cemeteries. Inhumations are sometimes accompanied by animal bones and animal-only burials have also been recorded. Obsidian from the North Coast Ranges and the east side of the Sierra Nevada Range indicate a slight shift in trade patterns away from more northernly sources.

Emergent Period/Augustine Pattern (cal C.E. 1100 – Historic Contact)

The archaeological record for the Emergent or Late Prehistoric Period shows an increase in the number of archaeological sites associated with the Augustine Pattern in the Sacramento River Valley, as well as an increase in the number and diversity of artifacts. The Emergent Period was shaped by a number of cultural innovations, such as the bow and arrow and intricate fishing technology, as well as an elaborate social and ceremonial organization. Cultural patterns typical of the Emergent Period appear to be reflected in the cultural traditions known from historic period Native American groups.

Faunal and botanical remains recovered at Emergent Period archaeological sites indicate occupants relied on a diverse assortment of mammals, fish, and plant, including acorns and pine nuts. Hopper mortars, shaped mortars, and pestles are among the new technologies that appear during this time period. Small, Gunther barbed series

projectile points have been found at sites dating to the early part of the period, while Desert-side notched points appear later in the period. The Stockton serrated arrow point also appears in archaeological assemblages dating to this period and in some parts of the lower Sacramento River Valley Cosumnes Brownware ceramics are present. The appearance of ceramics during this period is likely a direct improvement on the prior baked clay industry. Complex fishing instruments appear, such as the serrated fish harpoons, composite bone hooks, and the toggle harpoon.

During the Emergent Period, villages were located along major waterways with smaller settlements found in outlying areas. Settlements on natural levees and high spots in floodplains were common. House floors or other structural remains have been preserved at some sites dating to this period. The increase in sedentism and population growth led to the development of social stratification, with an elaborate social and ceremonial organization. Examples of items associated with rituals and ceremonials include flanged tubular pipes, incised patterned bird bone tubes and whistles, and baked clay effigies representing animals and humans. Mortuary practices changed to include flexed burials, cremations with grave goods and offerings, and pre-interment burning in a burial pit. Currency, in the form of clamshell disk beads, also developed during the later part of the period together with extensive exchange networks that included the Pacific Northwest and southern California.

HISTORIC SETTING

Historic land use around Pleasant Grove Creek within the project site has changed little in the last 160 years. The earliest Euro-American use of the project area occurred in late 1840s, when argonauts entered the area searching for placer gold. That played out quickly and as early as 1854, small-scale ranching began. Around this same time, a man named Lee acquired 10,500 acres of land through government script and settled on Pleasant Grove Creek. In 1856, he sold his parcel to Stephen A. Boutwell, who began to acquire other land near the California and Oregon Railroad (now Southern Pacific). Boutwell and his partner, William Dunlap, used their land for a sheep ranch, combining their holdings with those of a new partner, James W. Kaseberg, in 1864. During the 1870s, as many as 30,000 head of sheep were sheared on the ranch each year. The Boutwell, Dunlap, and Kasberg ranch was also home of the first thoroughbred and trotting horses raised in California.

Another important early farming family in the area was the Fiddyments. The Fiddyment family has a long history in the Roseville area and their ranch borders the project site on the east side. Elizabeth Jane Fiddyment came to the Sacramento area from Illinois in 1854, a widow with a four-year-old son, Walter Frederick Fiddyment. Upon arriving in the Elk Grove area in southern Sacramento County, she met and married a local farmer and stock-raiser, George Hill. The new family moved to the Pleasant Grove District in Roseville in 1856 to live and work with her sister's family on their farming operation. Around this time, Elizabeth's brother-in-law repaid a debt to her with a parcel of land, the first of what would eventually become extensive land holdings.

In 1879, Elizabeth's son, Walter, left his mother's home when he married Ella Bond. Walter bought 80 acres in the Pleasant Grove District, the first of 240 acres he eventually owned in the area. When the soil and natural irrigation proved too poor for farming, Walter turned to raising horses and mules, which also proved unprofitable. He then turned to raising cattle and sheep. Walter’s son Russell even tried a turkey farm on the ranch in the 1920s. In the 1970s, the family added a pistachio orchard to their endeavors. Today, the family continues to raise cattle and grow pistachios near Pleasant Grove Creek.

In the mid-1970s, the land in and around the project site began to be re-contoured to accommodate rice cultivation on both sides of Pleasant Grove Creek. Rice cultivation continued up until sometime after 2002. After that, the land was converted to irrigated pasture and a retention basin was excavated just south of Pleasant Grove Creek. Today, the land is still used for agriculture and cattle grazing.

ARCHAEOLOGICAL SENSITIVITY

Three geologic units are present in the project site: the Turlock Lake Formation, the Riverbank Formation, and Holocene alluvium. A preliminary geotechnical study of the project site (Gularte & Associates 2021) found that alluvial silty sands comprise approximately the upper 6 to 13 feet of the project site. Below 13 feet, the project site is

underlain with very stiff to hard silt and silty clay with minor beds of very dense silty sand down to approximately 50 feet. North of Pleasant Grove Creek, the soils are composed of interbedded stiff to hard silt, sandy silt, and silty clay with minor beds of very dense silty sand.

In 2008, a comprehensive geoarchaeological study was prepared for the California Department of Transportation (Caltrans), District 3, which includes Placer County (Meyer and Rosenthal 2008). The study found that due to the mid-Pleistocene age of the Turlock Lake Formation (450,000 to 600,000 years ago) and the Riverbank Formation (150,000 to 450,000 years ago), the presence of buried archaeological deposits in these formations is extremely unlikely. Conversely, the potential for buried deposits in Holocene alluvium is considered moderate to high depending on the exact age of the deposit. The Caltrans study concluded that the Sacramento River Valley in general has moderate potential for buried sites associated with latest Holocene geological units (Qha). These Holocene soils are typically associated with sites dating to the Upper Archaic and Emergent periods.

Therefore, because the Riverbank and Turlock Lake formation comprise approximately 90 percent of the project site, the majority of the project site has very low sensitivity for buried archaeological deposits. The exception to this is the areas at the west and east ends of the segment of Pleasant Grove Creek (see Figure 3.8-1) and under the 13 feet of fill on the north bank of the creek. Although the south bank is composed of the same fill as the north bank, the south area was disturbed past the 13 feet of fill when it was reconfigured into a retention basin. Therefore, the south area of fill has low potential for intact archaeological deposits; the south bank of Pleasant Grove Creek remains sensitive. Figure 3.8-1 depicts the area of archaeological sensitivity within the project site. These areas should be considered to have a moderate sensitivity for buried archaeological deposits.

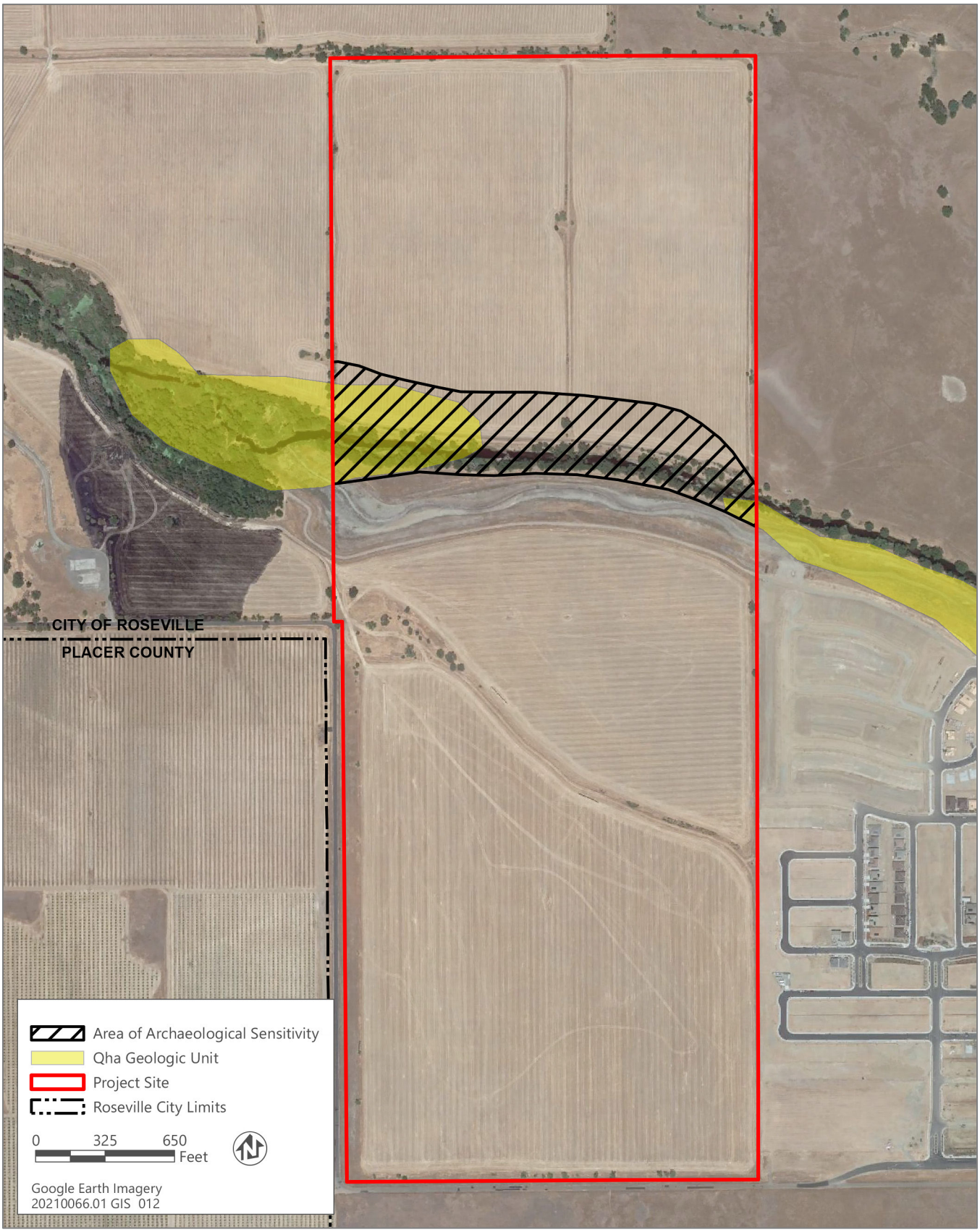
RECORDS SEARCH AND SURVEY

On May 28, 2021, a search of records concerning the project site and a one-half-mile radius was conducted at the North Central Information Center (NCIC), at California State University, Sacramento (PLA-21-36). The following information was reviewed as part of the records search:

- site records of previously recorded cultural resources,
- previous cultural studies,
- NRHP and CRHR listings,
- the California Historic Resources Inventory,
- Built Environment Resource Directory for Placer County, and
- Historical Maps (USGS Topographic and GLO Plat maps).

The records search revealed no previously recorded resources within the project site or within a one-half-mile radius. The search also found that one previous investigation included the entirety of the project site, four previous investigations included only a portion of the project site, and six investigations have occurred within one-half-mile.

Field work for the project was conducted on July 6 and 7, 2021 by Ascent cultural resources staff. Overall, the survey found no presence of anthropogenic soils (i.e., midden), hearth features, or concentrations of shell, bone, or lithic materials that would have indicated the presence of a pre-contact indigenous archaeological deposit. Similarly, no concentrations of glass, metal, or ceramic that would have indicated the presence of a historic-age archaeological deposit were observed. No buildings were present and no built environment structures or objects which appeared to be 45 years or older were observed; all irrigation and watering features were of modern plastic, metal, and concrete typical for the documented agricultural and grazing use of the property.



Source: Data based on information provided by Gularte & Associates Geotechnical Consultants in 2021; adapted by Ascent in 2021.

Figure 3.8-1 Area of Potential Buried Resource Sensitivity

Only two isolated archaeological objects were recorded as a result of the survey: a handstone and a concrete pad. Isolates are defined as one or two artifacts occurring by themselves and not associated with an archaeological site. Because they have no historical context, isolates are generally not eligible for listing in CRHR or NRHP and, therefore, were not evaluated for significance and not discussed further in this EIR.

3.8.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

The impact analysis for archaeological and historical resources is based on the findings and recommendations of the *Cultural Resources Assessment Report for the Roseville Industrial Park Project* (Ascent 2022). The analysis is also informed by the provisions and requirements of federal, state, and local laws and regulations that apply to cultural resources.

PRC Section 21083.2(g) defines a "unique archaeological resource" as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one or more of the following CRHR-related criteria: (1) that it contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) that it as a special and particular quality, such as being the oldest of its type or the best available example of its type; or (3) that it is directly associated with a scientifically recognized important prehistoric or historic event or person. An impact on a resource that is not unique is not a significant environmental impact under CEQA (State CEQA Guidelines Section 15064.5[c][4]). If an archaeological resource qualifies as a resource under CRHR criteria, then the resource is treated as a unique archaeological resource for the purposes of CEQA.

For the purposes of the impact discussion, "historical resource" is used to describe built-environment historic-period resources. Archaeological resources (both prehistoric and historic-period), which may qualify as "historical resources" pursuant to CEQA, are analyzed separately from built-environment historical resources.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to cultural resources if it would:

- cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the State CEQA Guidelines;
- cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the State CEQA Guidelines; or
- disturb any human remains, including those interred outside of dedicated cemeteries.

ISSUES NOT DISCUSSED FURTHER

As described above, no historical resources were identified on the project site. The records search revealed no previously recorded historical resources within the project site and no built environment structures or objects which appeared to be 45 years or older were observed during the pedestrian survey. Therefore, project construction and operation would have no impact on historical resources. Therefore, this issue is not analyzed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.8-1: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources

Results of the records search and pedestrian survey did not result in the identification of archaeological resources within the project site. However, project-related ground-disturbing activities, including off-site roadway and utility improvements, could result in discovery or damage of yet undiscovered archaeological resources as defined in State CEQA Guidelines Section 15064.5 or PRC Section 21083.2(g). This would be a **potentially significant** impact.

The NCIC records search revealed that no prehistoric or historic-period archaeological sites have been previously documented within the project site or within a one-half-mile radius. The pedestrian survey found no anthropogenic soils (i.e., midden), above ground features, or concentrations of shell, bone, or lithic materials that would have indicated the presence of a pre-contact indigenous archaeological deposit. Additionally, no unique archaeological resources as defined in PRC Section 21083.2(g) or archaeological resources as defined in State CEQA Guidelines Section 15064.5 were identified during the survey.

As discussed previously, because the Riverbank and Turlock Lake formation comprise approximately 90 percent of the project site, the majority of the site has very low sensitivity for buried archaeological deposits. The exception to this is the areas at the west and east ends of the segment of Pleasant Grove Creek (see Figure 3.8-1) and below the 13 feet of fill on the north bank of the creek. These areas have a moderate sensitivity for buried archaeological deposits. For these reasons, there is potential for ground disturbance during project construction in this area to encounter previously undiscovered or unrecorded archaeological sites and materials. These activities could damage or destroy previously undiscovered archaeological resources. This would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.8-1a: Develop and Implement a Worker Environmental Awareness Program

Prior to the start of any ground disturbing construction activities, a qualified archaeologist shall develop a construction worker awareness brochure for all construction personnel. The brochure will be developed in coordination with representatives from Native American tribes culturally affiliated with the project area. The topics to be addressed in the Worker Environmental Awareness Program will include, at a minimum:

- types of archaeological and Tribal cultural resources expected in the project area;
- what to do if a worker encounters a possible resource;
- what to do if a worker encounters bones or possible bones; and
- penalties for removing or intentionally disturbing archaeological and Tribal cultural resources, such as those identified in the Archeological Resources Protection Act.

Mitigation Measure 3.8-1b: Halt Ground Disturbance Upon Discovery of Subsurface Archaeological Features

In the event that any subsurface archaeological features or deposits, including locally darkened soil ("midden") and concentrations of charcoal, flaked stone, glass, metal, or ceramic, are discovered during construction, all ground-disturbing activity within 100 feet of the find shall be halted and a qualified professional archaeologist shall be retained to assess the significance of the find. If the qualified archaeologist determines the archaeological material to be Native American in nature, the applicant shall contact the appropriate Native American tribe for their input on the preferred treatment of the find. If the find is determined to be significant (i.e., because it is determined to constitute a unique archaeological resource), the archaeologist shall develop, and the applicant shall implement, appropriate procedures to protect the integrity of the resource and ensure that no additional resources are affected. Procedures could include but would not necessarily be limited to preservation in place, archival research, subsurface testing, or contiguous block unit excavation and data recovery.

Significance after Mitigation

Implementation of Mitigation Measures 3.8-1a and 3.8-1b would reduce impacts associated with archaeological resources to a **less-than-significant** level because they would require the performance of professionally accepted and legally compliant procedures for the discovery and protection of previously undocumented significant archaeological resources.

Impact 3.8-2: Disturb Human Remains

Based on documentary research, no evidence suggests that any prehistoric or historic-period marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, ground-disturbing construction activities could uncover previously unknown human remains. Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097 would make this impact **less than significant**.

Based on documentary research, no evidence suggests that any prehistoric or historic-period marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, the location of grave sites and Native American remains can occur outside of identified cemeteries or burial sites. Therefore, there is a possibility that unmarked, previously unknown Native American or other graves could be present within the project site and could be uncovered by project-related construction activities. California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and PRC Section 5097.

These statutes require that, if human remains are discovered, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the appropriate County coroner shall be notified immediately. If the remains are determined by the coroner to be Native American, NAHC shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated Most Likely Descendant, and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments, if present, are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

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3.9 HAZARDOUS MATERIALS, WILDFIRE, AND OTHER HAZARDS

This section describes the potential impacts of the proposed Roseville Industrial Park Project related to hazardous materials. This section also evaluates the effects of the project on wildfire and wildfire-related risks and other hazards, including proximity to airports and potential obstruction of an emergency response plan. Service levels by fire personnel and other emergency responders are addressed in Section 3.10, "Public Services." The evaluation provided in this section is based on review of available documents, the Phase I environmental site assessment (ESA), including a data search of various agency lists, and the Limited Phase II Site Investigation completed for the project site by ATC Group Services (ATC) (ATC 2021a, 2021b). The ATC reports are provided in Appendix G.

For purposes of this section, the term "hazardous materials" refers to both hazardous substances and hazardous wastes. A "hazardous material" is defined in the Code of Federal Regulations (CFR) as "a substance or material that … is capable of posing an unreasonable risk to health, safety, and property when transported in commerce" (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

> "Hazardous material" means any material that, because of its quantity, concentration, physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

"Hazardous wastes" are defined in California Health and Safety Code Section 25141(b) as wastes that:

> … because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

No comment letters regarding hazards and hazardous materials or wildfire were received in response to the notice of preparation (see Appendix A).

3.9.1 Regulatory Setting

FEDERAL

Management of Hazardous Materials

Various federal laws address the proper handling, use, storage, and disposal of hazardous materials, as well as requiring measures to prevent or mitigate injury to health or the environment if such materials are accidentally released. The US Environmental Protection Agency (EPA) is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are primarily contained in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the Code, are listed in 49 CFR 172.101. Management of hazardous materials is governed by the following laws.

- The Toxic Substances Control Act of 1976 (15 US Code [USC] Section 2601 et seq.) regulates the manufacturing, inventory, and disposition of industrial chemicals, including hazardous materials. Section 403 of the Toxic Substances Control Act establishes standards for lead-based paint hazards in paint, dust, and soil.
- The Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.) is the law under which EPA regulates hazardous waste from the time the waste is generated until its final disposal ("cradle to grave").

- The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also called the Superfund Act or CERCLA) (42 USC 9601 et seq.) gives EPA authority to seek out parties responsible for releases of hazardous substances and ensure their cooperation in site remediation.
- The Superfund Amendments and Reauthorization Act of 1986 (Public Law 99-499; USC Title 42, Chapter 116), also known as SARA Title III or the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), imposes hazardous materials planning requirements to help protect local communities in the event of accidental release.
- The Spill Prevention, Control, and Countermeasure (SPCC) rule includes requirements for oil spill prevention, preparedness, and response to prevent oil discharges to navigable waters and adjoining shorelines. The rule requires specific facilities to prepare, amend, and implement SPCC Plans. The SPCC rule is part of the Oil Pollution Prevention regulation, which also includes the Facility Response Plan rule.

Transport of Hazardous Materials

The US Department of Transportation regulates transport of hazardous materials between states and is responsible for protecting the public from dangers associated with such transport. The federal hazardous materials transportation law, 49 USC 5101 et seq. (formerly the Hazardous Materials Transportation Act 49 USC 1801 et seq.) is the basic statute regulating transport of hazardous materials in the United States. Hazardous materials transport regulations are enforced by the Federal Highway Administration, the US Coast Guard, the Federal Railroad Administration, and the Federal Aviation Administration.

Worker Safety

The federal Occupational Safety and Health Administration (OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 USC 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and those required for excavation and trenching.

STATE

Management of Hazardous Materials

In California, both federal and state community right-to-know laws are coordinated through the Governor's Office of Emergency Services. The federal law, SARA Title III or EPCRA, described above, encourages and supports emergency planning efforts at the state and local levels and to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (e.g., produce, use, store) hazardous materials above certain quantities. The provisions of EPCRA apply to four major categories:

- emergency planning,
- emergency release notification,
- reporting of hazardous chemical storage, and
- inventory of toxic chemical releases.

The corresponding state law is Chapter 6.95 of the California Health and Safety Code (Hazardous Materials Release Response Plans and Inventory). Under this law, qualifying businesses are required to prepare a Hazardous Materials Business Plan, which would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment. At such time as the applicant begins to use hazardous materials at levels that reach applicable state and/or federal thresholds, the plan is submitted to the administering agency.

The California Department of Toxic Substances Control (DTSC), a division of the California Environmental Protection Agency, has primary regulatory responsibility over hazardous materials in California, working in conjunction with EPA

to enforce and implement hazardous materials laws and regulations. As required by Section 65962.5 of the California Government Code, DTSC maintains a hazardous waste and substances site list for the State, known as the Cortese List. Individual regional water quality control boards (RWQCBs) are the lead agencies responsible for identifying, monitoring, and cleaning up leaking underground storage tanks (USTs). The Central Valley RWQCB has jurisdiction over the project site.

Transport of Hazardous Materials and Hazardous Materials Emergency Response Plan

The State of California has adopted US Department of Transportation regulations for the movement of hazardous materials originating within the state and passing through the state; state regulations are contained in 26 California Code of Regulations (CCR). State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads.

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous materials incidents is one part of the plan. The plan is managed by the Governor's Office of Emergency Services, which coordinates the responses of other agencies in the project vicinity.

Management of Construction Activities

Through the Porter-Cologne Water Quality Act and the National Pollution Discharge Elimination System (NPDES) program, RWQCBs have the authority to require proper management of hazardous materials during project construction. For a detailed description of the Porter-Cologne Water Quality Act, the NPDES program, and the role of the Central Valley RWQCB, see Section 3.12, "Hydrology and Water Quality."

The State Water Board adopted the statewide NPDES General Permit in August 1999. The state requires that projects disturbing more than one acre of land during construction file a Notice of Intent with the RWQCB to be covered under this permit. Construction activities subject to the General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non-stormwater discharges to storm sewer systems and other waters. A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management plans (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control.

Worker Safety

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are typically more stringent than federal OSHA regulations and are presented in Title 8 of the CCR. Cal/OSHA conducts onsite evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

Title 8 of the CCR also includes regulations that provide for worker safety when blasting and explosives are utilized during construction activities. These regulations identify licensing, safety, storage, and transportation requirements related to the use of explosives in construction.

California Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection (CAL FIRE) is dedicated to the fire protection and stewardship of over 31 million acres of the state's privately-owned wildlands. Public Resource Code (PRC) Sections 4125-4137 establish that CAL FIRE has the primary financial responsibility of preventing and suppressing fires in the State Responsibility Area (SRA). PRC Section 4290 states that CAL FIRE also has responsibility for enforcement of Fire Safe Standards including road standards for fire equipment access; standards for signs identifying streets, roads, and buildings; minimum private water supply reserves for emergency fire use; fuel breaks and greenbelts. PRC Section 4291 gives CAL FIRE the authority to enforce 100 feet of defensible space around all buildings and structures on non-

federal SRA lands, or non-federal forest-covered lands, brush-covered lands, grass-covered lands, or any land that is covered with flammable material.

Additionally, CAL FIRE is also responsible for a broad range of programs that guide forest policy and planning within California, such as the *2019 Strategic Fire Plan for California* discussed below, and for implementing the Fire and Resource Assessment Program (FRAP). FRAP assesses the amount and extent of California's forests and rangelands, analyzes their conditions, and identifies alternative management and policy guidelines. Fire Hazard Severity Zones (FHSZs) for community planning are developed under FRAP and identify areas with very high fire hazards in both the SRA and local responsibility area (LRA).

2019 Strategic Fire Plan for California

The *2019 Strategic Fire Plan for California* lays out central goals for reducing and preventing the impacts of fire in the state (California Board of Forestry and Fire Protection and CAL FIRE 2019). The goals are meant to establish, through local, state, federal, and private partnerships, a natural environment that is more resilient and human-made assets that are more resistant to the occurrence and effects of wildland fire.

Public Resources Code

PRC Section 4427 includes fire safety statutes that restrict the use of equipment that may produce a spark, flame, or fire; require the use of spark arrestors on construction equipment with internal combustion engines; specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and specify fire suppression equipment that must be provided on site for various types of work in fire-prone areas.

California Fire Code

The California Fire Code (Title 24, Part 9, California Code of Regulations [CFC]) establishes minimum requirements to safeguard public health from hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency situations. The CFC specifies fire resistant ratings for building materials and finishes, installation of sprinklers, use and storage of hazardous or flammable materials, and means of egress. Many local jurisdictions have adopted the CFC as part of their local codes.

Emergency Response and Evacuation Plans

The State of California Emergency Plan was adopted on October 1, 2017 and describes how state government mobilizes and responds to emergencies and disasters in coordination with partners in all levels of government, the private sector, non-profits, and community-based organizations. The Plan also works in conjunction with the California Emergency Services Act and outlines a robust program of emergency preparedness, response, recovery, and mitigation for all hazards, both natural and human-caused. All local governments with a certified disaster council are required to develop their own emergency operations plan for their jurisdiction that meet state and federal requirements. Local emergency operations plans contain specific emergency planning considerations, such as evacuation and transportation, sheltering, hazard specific planning, regional planning, public-private partnerships, and recovery planning (California Governor's OES 2017).

LOCAL

City of Roseville General Plan

The Safety Element of the *City of Roseville General Plan* (2020) contains the following policies that may be applicable to the project:

- **Policy SAFE 4.1:** Continue to pursue and promote fire prevention programs and standards.
- **Policy SAFE 4.2:** Continue to follow service level response times, as listed in the City's Standards of Cover document.

- **Policy SAFE 4.4:** Provide a comprehensive emergency medical services program to deliver basic and advanced life support services.
- **Policy SAFE 4.5:** Provide highly trained personnel to ensure effective suppression of fires and safety for firefighters.
- **Policy SAFE 4.7:** Phase the timing of the construction of fire stations to be available to serve the surrounding service area.
- **Policy SAFE 4.8:** Continually update the Roseville Emergency Operations Plan and ensure that participants are prepared to efficiently carry out assigned functions.

City of Roseville 2020 Design and Construction Standards

Section 8 of the Roseville design standards require a minimum flow of water for fire protection in accordance with the Roseville Fire Department and California Fire Code. For single-family detached houses, water mains must provide a flow of 1,500 gallons per minute in addition to the peak normal maximum daily consumption needs for a neighborhood. The required fire flow for multi-family, commercial, business, industrial, and school areas is determined on a case-by-case basis by the Roseville Fire Department, but may not exceed 4,000 gallons per minute, in addition to the peak normal daily consumption needs. Fire hydrants shall be placed at street intersections wherever possible. Fire hydrants and blow-offs not located at intersections shall be installed on property lines between lots. Fire hydrants and blow-offs shall have a maximum spacing of 500 feet measured along the street frontage in residential areas and a maximum spacing of 350 feet in all other areas. Hydrants shall be required within a cul-de-sac or dead-end street measuring more than 250 feet as measured from the curb return of the intersecting street and the end of the bulb or street. Sections 5, 6, and 7 of the Roseville design standards contain a variety of requirements that are intended to provide safe access to property and on streets throughout the City for motorists and emergency vehicles including driveways, turn lanes, streets, and traffic lights.

Roseville Emergency Operations Plan and Multi-Hazard Mitigation Plan

The City of Roseville has developed an Emergency Operations Plan (City of Roseville 2011). The plan describes organizational and operational responsibilities in the event of an emergency, including hazardous materials emergencies and clean up and de-contamination procedures. The Emergency Operations Plan is an extension of the City's Multi-Hazard Mitigation Plan and follows nationally adopted Incident Command System guidelines. The City's 2016 Multi-Hazard Mitigation Plan was developed to evaluate hazards within the City and identifies planning tools, policy changes, programs, projects, and other activities that can mitigate the impacts of hazards (City of Roseville 2016). Through mutual aid agreements, the Roseville Fire Department can also request services from the Placer County, City of Sacramento, and Sacramento Metropolitan Fire District Hazardous Materials Response Teams in the event of a large-scale incident. The Roseville Fire Department also assists the California Highway Patrol (CHP), OES, and other responding agencies as requested, in the event of a hazardous materials spill on State Route 65 or Interstate 80.

City of Roseville Fire Department

Fire suppression services for the City of Roseville, including the project site, are provided by local fire stations operated by the Roseville Fire Department. The City of Roseville Fire Department has a Fire & Life Safety Division that manages a comprehensive inspection program that includes annual fire inspections, Certified Unified Protection Agency inspections, and construction inspections.

3.9.2 Environmental Setting

HAZARDS AND HAZARDOUS MATERIALS

Phase I ESA and Limited Phase II Site Investigation

A Phase I ESA for the Roseville Industrial Park Project at 6382 Phillip Road (the project site) in Roseville, California, was conducted by ATC (ATC 2021a). The purpose of the Phase I ESA was to identify evidence or indications of "recognized environmental conditions" (REC) as defined by the American Society for Testing and Materials' (ASTM) *Designation E 1527-13: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. Section 1.1.1 of ASTM Designation E 1527-13 defines a REC as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment" (ATC 2021a).

The Phase I ESA included a query of federal, state, and local hazardous materials databases by Environmental Data Resources; a review of information available on GeoTracker and DTSC's EnviroStor (http://www.envirostor.dtsc.ca.gov/public/) online database; Placer County Environmental Health Department records; City of Roseville Fire Department records; an evaluation of the historical use of the site; a site reconnaissance visit to the project site; and an interview for information regarding past and present use of the project site and the potential for impacts related to the use, storage, or disposal of hazardous substances or petroleum on the project site (ATC 2021a).

No evidence of hazardous materials or hazardous wastes was observed within the project site. ATC observed small areas of non-hazardous trash/debris along the south and east borders of the project site and two agricultural water wells within the project site. One water well, located close to the southern edge of the project site did not appear to be in use and had a metal lid welded to the casing. The second water well was located along the eastern edge of the site and appeared to be active. The presence of two agricultural water wells on the property does not represent a REC based on the nature of the wells. However, the Phase I ESA states that based on the historical agricultural use of the property as an orchard from approximately 1937 to at least 1947, pesticides and/or herbicides may have been used on the property and near-surface soils may have at one time contained these compounds. The orchard on the east side represents a REC. Review of aerial photographs did not identify any other past uses indicating other potential RECs at the project site or the surrounding properties (ATC 2021a).

As part of the Phase I ESA, ATC also conducted a Tier 1 vapor encroachment screen in accordance with ASTM E2600-15 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* for potential vapor encroachment conditions (VECs). A VEC is the presence or likely presence of vapors of chemicals of concern in the property's vadose zone (i.e., the zone between the land surface and water table where moisture content is less than saturation level). VECs are typically caused by the release of vapors from contaminated soil or groundwater either on or near the property. Reported releases were not identified; therefore, ATC did not identify any VECs within the project site.

Based on information collected from the Phase I ESA, ATC recommended (1) decommissioning the two water wells prior to redevelopment, according to the appropriate City of Roseville and Placer County well regulations, and (2) performing shallow soil sampling in the former orchard area.

Consistent with the recommendations of the Phase I ESA, ATC prepared a Limited Phase II Site Investigation (ATC 2021b)to evaluate potential environmental impacts to shallow soil from the historical orchards and potential impacts from application of herbicides and pesticides at in the eastern portion of the project site. ATC conducted soil sampling of a 2-acre area on the east side of the project site, just south of Pleasant Grove Creek that was depicted as part of an orchard on aerial photographs dated 1937 and 1947. The composited soil samples were analyzed for organochlorine pesticides by EPA Method 8081A, organophosphorus pesticides by EPA method 8141A, chlorinated herbicides by EPA Method 8151A, and arsenic and lead by EPA Method 6010B. No pesticides were detected in any of the soil samples (ATC 2021b).

Arsenic and lead were detected above the respective reporting limits in all four soil samples; however, arsenic and lead were detected in concentrations generally consistent with background levels for these naturally occurring elements. While a site-specific background concentration of arsenic for the project area has not been established, as measured by the US Geological Survey, arsenic background levels in California soils that are not impacted by anthropogenic sources range from 0.3 to 69 milligram/kilogram (mg/kg) with a mean of 6.6 mg/kg. The overall range of arsenic across the state is between 0.6 and 11.0 mg/kg (ATC 2021b). The overall range of lead across the state is between 12.4 and 97.1 mg/kg with a mean of 23.9 mg/kg. Given that the arsenic concentrations at the project site range from 2.6 mg/kg to 3.7 mg/kg and the lead concentrations range from 3.5 mg/kg to 6.3 mg/kg, the levels of both arsenic and lead at the project site are well within background levels and, therefore, no further investigation was recommended (ATC 2021b).

Schools

The nearest school to the project site is Orchard Ranch Elementary School, which is 0.63 mile south of the site. Orchard Ranch Elementary School serves transitional kindergarten through 5th grade.

Airports

The nearest airport is Lincoln Regional Airport, which is approximately 7 miles northeast of the project site in the City of Lincoln. The Lincoln Regional Airport is a public airport. The project site is not within an airport land use plan area.

WILDFIRE

Wildfire Behavior and Controlling Factors

Wildfire behavior is a product of several variables, primarily climate, vegetation, topography, and human influences that intermix to produce local and regional fire regimes that affect how, when, and where fires burn. The fire regime in any area is defined by several factors, including fire frequency, intensity, severity, and area burned. Each of these are important for an understanding of how the variables that affect fire behavior produce fire risks. Fire frequency refers to the number of fires that occur in a given area over a given period of time; fire intensity refers to the speed at which fire travels and the heat that it produces; fire severity involves the extent to which ecosystems and existing conditions are affected or changed by a fire; and area burned is the size of the area burned by wildfire.

Human influence on wildfire is broad and can be substantial. It includes direct influences such as the ignition and suppression of fires, and indirect influences such as through alterations in land use patterns that support modified vegetative regimes and increased development in the Wildland-Urban Interface.

Wildfires are a significant threat in California, particularly in recent years as the landscape responds to climate change and decades of fire suppression. As climate change persists, it is anticipated to produce increasing temperatures and drier conditions that would generate abundant dry fuels. All wildfires (those initiated by both natural and manmade sources) tend to be larger under drier atmospheric conditions and when fed by drier fuel sources (Balch et al. 2017).

Additionally, climate change has led to exacerbation of wildfire conditions during a longer period of the year as the spring season has warmed—driving an earlier spring snowmelt, and as winter precipitation has decreased overall (Westerling et al. 2006). Further, wildfire activity is closely related to temperature and drought conditions, and in recent decades, increasing drought frequency and warming temperatures have led to an increase in wildfire activity (Westerling et al. 2006, Schoennagel et al. 2017). In particular, the western US, including California, has seen increases in wildfire activity in terms of area burned, number of large fires, and fire season length (Westerling et al. 2006, Abatzoglou and Williams 2016).

Wildfire Environment within the City of Roseville

As discussed in Section 3.9.1, "Regulatory Setting," CAL FIRE maintains FHSZ maps for the LRA and SRA. These areas are mapped based on fuels, terrain, weather, and other relevant factors. According to the *City of Roseville General Plan* (2020), and consistent with the FHSZ map database available from CAL FIRE (CAL FIRE 2021), the city is designated as LRA and there are no "Very High" FHSZ within the city.

The closest SRA to the city of Roseville is located east and northeast of the cities of Rocklin and Loomis, respectively (Figure 3.9-1). The closest areas designated as "Very High" FHSZs are areas within El Dorado County and Auburn, which are 16 and 22 miles from the project site, respectively (CAL FIRE 2021).

Wildfire Environment at the Project Site

The project site is undeveloped and/or grazing land. The project site is predominantly flat with low hills due to previous grading and agricultural operations. Pleasant Grove Creek traverses the property in an east–west direction, bisecting the site into north and south parcels. The project site is within the LRA and is not located in an FHSZ (Figure 3.9-1). Evidence of a recent fire immediately west of the project site was identified during a site visit conducted by Ascent in 2021. The fire appeared to have started near the entrance of the Al Johnson Wildlife Area and burned east toward the project site. However, the fire stopped at Pleasant Grove Creek, and the project site was not directly affected.

The project site is within Roseville Fire Department Fire District 9 and is served by Fire Station #9 located approximately 1.3 miles southeast of the project site at 2451 Hayden Parkway (City of Roseville 2018).

No emergency response/evacuation plan currently exists for the project site; however, the City of Roseville Emergency Operations Plan (City of Roseville 2011) covers emergency response within the city, including the project site.

3.9.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Hazards and Hazardous Materials

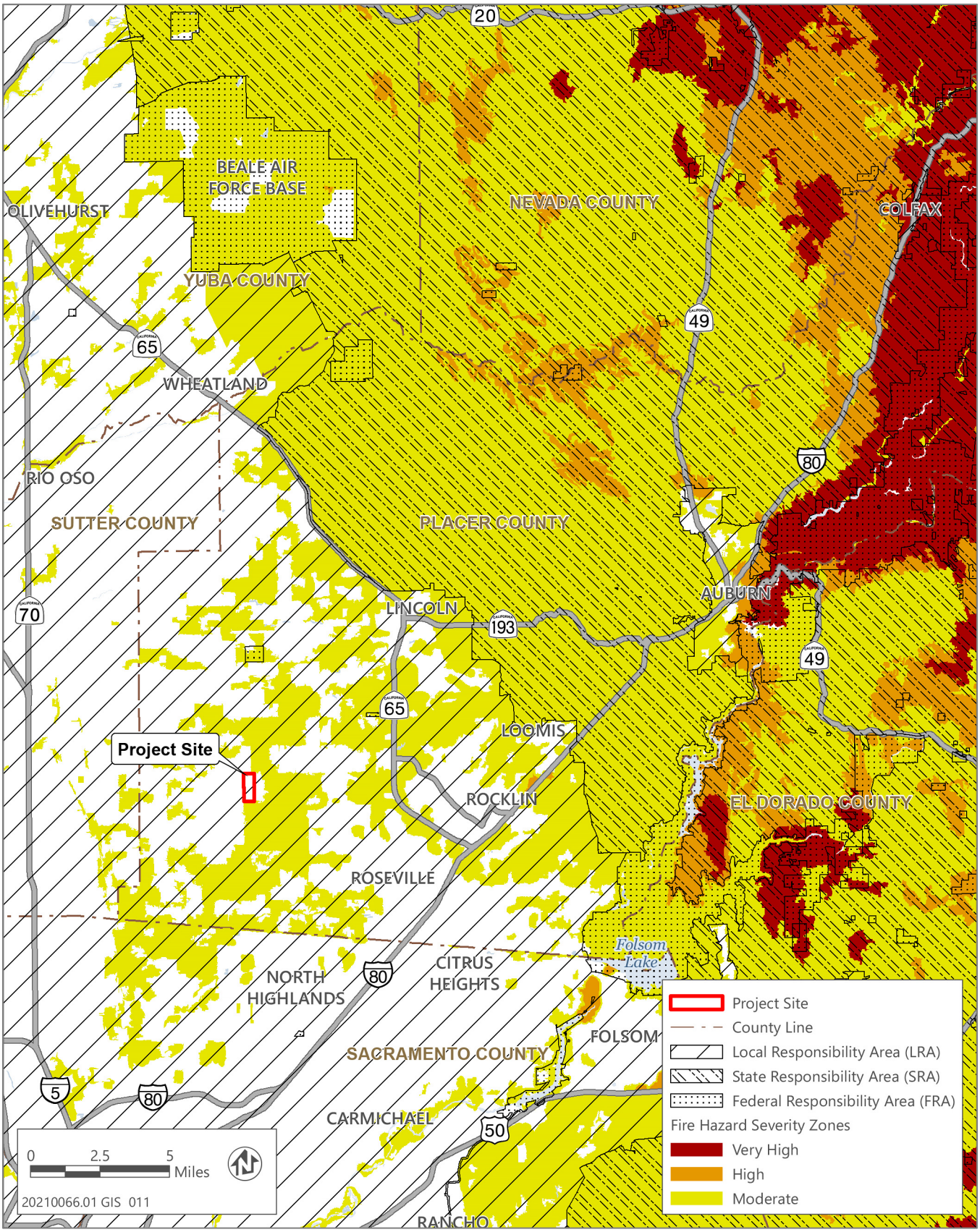
The following reports and data sources document potential hazardous conditions at the project site and were reviewed for this analysis:

- available literature, including documents published by federal, state, and local agencies;
- applicable elements from the *City of Roseville General Plan*;
- Phase I Environmental Site Assessment for the project, prepared by ATC (2021a); refer to Appendix G; and
- Limited Phase II Site Investigation for the project, prepared by ATC (2021b); refer to Appendix G.

Project construction and operation were evaluated against the hazardous materials information gathered from these sources to determine whether any risks to public health and safety or other conflicts would occur.

Wildfire

The analysis of environmental impacts on wildfire risk focuses on the potential for new or increased project-related risks associated with wildfire, including impairment of an emergency response plan, exposing people or structures to uncontrolled fire, and post-fire risks such as slope instability or debris-flows. Information used in this section was obtained from the *City of Roseville General Plan*, CAL FIRE's FHSZ map database, relevant fire and emergency-related plans, scientific journals, and relevant reports.



Source: Data downloaded from CAL FIRE in 2021.

Figure 3.9-1 Fire Hazard Severity Zones

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to hazards and hazardous materials if it would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the 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; or
- implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The project would cause a significant impact related to wildfire if the project is located in or near SRAs or lands classified as Very High FSHZs and would do any of the following:

- 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.

ISSUES NOT DISCUSSED FURTHER

The school nearest to the project site is Orchard Ranch Elementary School, which is 0.63 mile south of the site. Because there are no schools within 0.25-mile of the site and the project would not emit hazardous materials, this issue is not discussed further in this Draft EIR.

The project site is not on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (Cortese List) (ATC 2021a). Therefore, this issue is not discussed further in this Draft EIR.

The nearest airport is Lincoln Regional Airport, which is approximately 7 miles northeast of the project site in the city of Lincoln. The project site is not within an airport land use plan area or within 2 miles of a public airport or public use airport, or within the vicinity of a private airstrip. Implementing the project would not result in an aviation-related safety hazard for people residing or working in the project area. Therefore, this issue is not discussed further in this Draft EIR.

The project site is not located within an SRA or a FHSZ. The closest SRA to the city of Roseville is located east and northeast of the cities of Rocklin and Loomis, respectively. The closest areas designated as "Very High" FHSZs are areas within the cities of El Dorado County and Auburn, which are 16 and 22 miles from the project site, respectively (CAL FIRE 2021). The flat topography of the project site and its proximity to water do not exacerbate wildfire risk. Because the location and topography of the project do not exacerbate wildfire risk, factors such as slope and prevailing wind would not further exacerbate the wildfire risk because the risk is already minimal; therefore, the potential to expose project occupants or workers to pollutant concentrations from a wildfire or the uncontrolled

spread of a wildfire due to slope, prevailing winds, and other factors, exacerbate wildfire risks is not discussed further. In addition, the potential for the project to 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 is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.9-1: Storage, Use, Disposal, Transport, or Upset of Hazardous Materials

Construction of the proposed project would involve the storage, use, and transport of hazardous materials at the project site. Handling of hazardous materials would be in compliance with local, state, and federal regulations. Operation of the project may also require storage, use, and transport of hazardous materials associated with industrial uses on-site. Although the types and amounts of hazardous materials needed for operation of the project are not yet known, businesses that would store or use hazardous materials would be required to comply with laws and regulations intended to reduce potential impacts to workers and the environment associated with routine transport or accidental release of hazardous materials. This impact would be **less than significant**.

Project construction would involve the temporary storage, use, and transport of hazardous materials (e.g., fuels, lubricants, paint, solvents, cleaners). Use of hazardous materials during construction would be in small quantities and would be temporary. Transportation of hazardous materials on area roadways is regulated by the CHP and Caltrans, whereas use of these materials is regulated by DTSC, as outlined in 22 CCR. The project applicant and its contractors would also be required to use, store, and transport hazardous materials in compliance with local, state, and federal regulations during construction.

Operation of the project would involve industrial uses, including light manufacturing that may require the storage, use, and transport of larger quantities of hazardous materials in the long-term. It should be noted, however, that the special area overlay (described in Chapter 3, "Project Description") would prohibit hazardous materials handling as a primary use, although there are other allowable land uses that would likely include hazardous materials use/storage as an ancillary use. Any storage or use of hazardous materials during operation of the industrial park would be required to comply with appropriate regulatory agency standards such as CFR Titles 29, 40, and 49, and Chapter 6.95 of the California Health and Safety Code designed to avoid releases of hazardous materials. Examples of these requirements include preparation and implementation of a spill prevention, control, and countermeasures plan and a hazardous materials business plan. Although the specific businesses and industrial activities and associated types and amounts of hazardous materials to be used on-site are not yet known, businesses that would store or use hazardous materials would be required to comply with laws and regulations intended to reduce potential impacts to workers and the environment associated with routine transport or accidental release of hazardous materials. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.9-2: Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan

The City of Roseville maintains an Emergency Operations Plan (City of Roseville 2011) that serves as the official emergency plan for the city. As part of project operation, adequate emergency access routes to and from the development area would be established and emergency response would not be impaired. However, construction activities associated with the project could result in temporary lane closures, increased traffic, and other roadway conditions that could interfere with or slow down emergency vehicle access and services. Therefore, this impact would be **potentially significant**.

The City of Roseville manages emergencies including in the project area and maintains an Emergency Operations Plan that describes how the City would manage emergency incident or disaster mitigation, preparedness, response,

and restoration related to fire and rescue. The Emergency Operations Plan includes an emergency alert and notification process, guidelines to ensure fire and dispatch centers are adequately equipped, and law enforcement coordination for evacuation and rescue procedures.

In the long-term, the project would result in approximately 1,938 employees working on-site that would increase the use of Blue Oaks Boulevard and other area roadways. The multiple emergency response resources in place would adequately allow for the evacuation of the project site with emergency alert notifications, rapid dispatch and emergency response, and law enforcement coordination to implement evacuation operations. Further, adequate emergency access routes to and from the development area would be established as required by state and local regulations.

However, construction activities would involve truck traffic that could result in temporary lane closures, increased traffic, and other roadway conditions that could interfere with or slow down emergency vehicle access and services. Therefore, this impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.9-2: Provide Adequate Emergency Access in Case of Temporary Lane Closures During Construction

If temporary lane closures are required during project construction, the applicant shall notify the City of Roseville Police and Fire Departments. The applicant shall provide for temporary traffic controls as appropriate during construction activities to facilitate traffic flow and to permit the movement of emergency vehicles. Temporary traffic controls could include measures such as signage, physical barriers and channelizing devices, reduced speed limit, detours, and flaggers.

Significance after Mitigation

Implementation of this mitigation measure would reduce potential impacts to emergency access to a **less-than-significant** level because emergency access would be maintained, and lane closures would be coordinated with emergency service providers.

Impact 3.9-3: Exacerbate Wildfire Risk as a Result of Installation of Infrastructure

Construction within the project site would include construction of buildings and associated infrastructure to support industrial, warehousing, and distribution uses. The project would also require installation and maintenance of infrastructure including an electrical substation, extension of nearby electrical infrastructure, and improvements along Blue Oaks Boulevard and Phillip Road. Infrastructure would be installed in compliance with state and local regulations; however, there would still be the potential for wildfire ignition during construction. This impact would be **potentially significant**.

Construction within the project site would include construction of buildings, an electrical substation, and associated infrastructure to support industrial, warehousing, and distribution uses. Short-term construction would include installation of Stomwater Pollution Prevention Plan best management practices; clearing and grubing; mass grading and soil stabilization; installation of footings, slab, wall panels, roof structure; installation of mechanical, electrical, and plumbing infrastructure and building envelope and finishes; installation of underground wet and dry utilities, hardscape/paving, and irrigation and landscaping. These construction activities would introduce new temporary sources of ignition in the form of worker commute vehicles and use of heavy construction equipment. Use of motorized equipment can contribute to increased wildfire ignition risk through various mechanisms including sparks resulting from metal equipment contacting rocks or other hard material, vehicle catalytic converters becoming hot and contacting vegetation under the vehicle, and faulty equipment catching fire during operation.

The project would also require installation and maintenance of infrastructure including an electrical substation, extension of nearby electrical infrastructure, and improvements along Blue Oaks Boulevard and Phillip Road. The

electrical substation property would be 225 feet by 175 feet. Although substation design is not completed yet, the substation would likely be a steel structure, approximately 40 feet tall with 65 feet tall steel poles.

The project site and surrounding area are not within an SRA or a FHSZ (CAL FIRE 2021). All construction of new infrastructure would be subject to City Fire Code Requirements, which includes safety measures to minimize the threat of fire. Title 24 of the CCR sets forth the minimum development standards for emergency access, fuel modification, setback, signage, and water supply, which help minimize fire risk. Moreover, utilities would primarily be installed underground although some limited utility infrastructure would be installed overhead (i.e., electrical line to substation), and the electrical substation would be installed in a paved area. Further, development would be constructed and maintained in compliance with state and local regulations for fire protection, including the use of fire-resistant building materials, fire-resistant landscaping, defensible space, adequate water supply, and emergency access. Therefore, installation and maintenance of infrastructure would not exacerbate wildfire risk.

Although the project would not exacerbate wildfire risk in the long-term, there would still be an increased potential for wildfire ignition during construction. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.9-3a: Prepare and Implement a Fire Risk Management Plan

A fire risk management plan shall be prepared prior to the start of construction by the contractor. The plan shall outline the potential for fires occurring as a result of project construction, and outline measures necessary to prevent fires. The plans shall be prepared in consultation with the City of Roseville Fire Department; City approval of the plans will be required prior to initiating construction activities. Additionally, fire-suppression materials and equipment shall be kept adjacent to all areas of work and in staging areas and shall be clearly marked. Detailed information for responding to fires shall be provided in the project's fire risk management plan.

Mitigation Measure 3.9-3b: Implement Fire Prevention Measures during Construction

During all construction activities, the contractor shall implement the following measures:

- Maintain all areas clear of vegetation and other flammable materials for at least a 50-foot-radius of any welding or grinding operations, or the use of an open flame;
- Spray nearby vegetation with water, if not already cleared, using a water truck or other suitable equipment, prior to any welding or grinding operations or the use of an open flame;
- All equipment, gasoline-powered hand tools, and construction and maintenance vehicles shall be equipped with spark arresters;
- Equip all construction and maintenance vehicles entering the project site, including welding trucks or rigs, with minimal fire suppression equipment (e.g., ax, bucket, 5-pound fire extinguisher, shovels);
- Maintain at least one half-full water truck or water tanker at each work site during all periods of work and for 1 hour after all work has ceased for the day; and
- Use a dedicated fire watch during all welding activities within existing operational stations.

Significance after Mitigation

With the implementation of Mitigation Measures 3.9-3a and 3.9-3b and adherence to all applicable regulations, potential impacts associated with wildfires during construction of the project would be **less than significant** because a fire risk management plan and fire prevention measures plan would be prepared and implemented.

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3.10 PUBLIC SERVICES

This section provides an overview of existing public services in the City of Roseville and evaluates the potential for implementation of the proposed Roseville Industrial Park Project to affect availability, service level, and/or capacity of public services, including fire protection services, police protection services, public schools, and parks, and, if such an effect is determined to occur, whether new or expanded facilities would be required that could result in a potentially significant impact to the environment. Other publicly provided utility services, such as water and wastewater treatment, stormwater management, electricity, and natural gas services, are addressed in Section 3.11, "Utilities and Service Systems."

No comment letters regarding public services were received in response to the notice of preparation (see Appendix A).

3.10.1 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws related to public services are applicable to the project.

STATE

California Fire Code

The 2019 California Fire Code, which incorporates by adoption the 2018 International Fire Code, contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code 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 California Fire Code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code. This includes regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

California Occupational Safety and Health Administration

In accordance with California Code of Regulations, Title 8 Sections 1270 "Fire Prevention" and 6773 "Fire Protection and Fire Equipment," the California Occupational Safety and Health Administration has established minimum standards for fire suppression and emergency medical services. The standards include guidelines on the handling of highly combustible materials, fire hose sizing requirements, restrictions on the use of compressed air, access roads, and the testing, maintenance and use of all firefighting and emergency medical equipment.

State School Funding

California Education Code Section 17620 authorizes school districts to levy a fee, charge, dedication, or other requirement against any development project for the construction or reconstruction of school facilities, provided that the district can show justification for levying of fees. California Government Code Section 65995 limits the fee to be collected to the statutory fee unless a school district conducts a School Facility Needs Assessment (California Government Code Section 65995.6) and meets certain conditions.

Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) instituted a school facility program by which school districts can apply for state construction and modernization funds. This legislation imposed limitations on the power of cities and counties to require mitigation of school facilities impacts as a condition of approving new development.

LOCAL

City of Roseville General Plan

The *City of Roseville General Plan* (2020a) contains the following policies that may be applicable to the project:

Fire Protection

- **Policy SAFE4.2:** Continue to follow service level response times, as listed in the City's Standards of Cover document.
- **Policy SAFE4.4:** Provide a comprehensive emergency medical services program to deliver basic and advanced life support services.
- **Policy SAFE4.5:** Provide highly trained personnel to ensure effective suppression of fires and safety for firefighters.
- **Policy SAFE4.7:** Phase the timing of the construction of fire stations to be available to serve the surrounding service area.

Police Services

- **Policy SAFE3.1:** Provide a high level of visible patrol services within the City.
- **Policy SAFE3.2:** Respond to both emergency and routine calls for service in a timely manner consistent with department policy.
- **Policy SAFE3.8:** Work with other city departments to review public and private development plans, ensuring that crime prevention is addressed.
- **Policy SAFE3.9:** Coordinate with patrol officers in patrolling parks, open space and trails, and continue coordination with other law enforcement agencies.

Schools

- **Policy PF3.2:** Financing for new school facilities should be identified and secured before new development is approved, where feasible.
- **Policy PF3.4:** The City and the school districts will work together to develop criteria for the designation of school sites, consider the opportunities for reducing the cost of land for school facilities, and work to minimize vehicular traffic by ensuring opportunities for bicycle and pedestrian connections. The City shall encourage the school districts to comply with City standards in the design and landscaping of school facilities.
- **Policy PF3.6:** Designate public/quasi-public land uses in clusters so that the use of schools, parks, open space, libraries, child care, and community activity and service centers create a community or activity focus.

Parks and Recreation

- **Policy PR1.11:** Plan for safe and secure parks and recreation areas.
- **Policy PR1.14:** Ensure that adequate funding is provided for initial development and ongoing maintenance and operation of new public parks, recreation facilities, open space, paseos, and greenways.

City of Roseville 2019 Design and Construction Standards

Section 8 of the Roseville design standards require a minimum flow of water for fire protection in accordance with the Roseville Fire Department and California Fire Code. For single-family detached houses, water mains must provide a flow of 1,500 gallons per minute in addition to the peak normal maximum daily consumption needs for a

neighborhood. The required fire flow for multi-family, commercial, business, industrial, and school areas is determined on a case-by-case basis by the Roseville Fire Department, but may not exceed 4,000 gallons per minute, in addition to the peak normal daily consumption needs.

Fire hydrants shall be placed at street intersections wherever possible. Fire hydrants and blow-offs not located at intersections shall be installed on property lines between lots. Fire hydrants and blow-offs shall have a maximum spacing of 500 feet measured along the street frontage in residential areas and a maximum spacing of 350 feet in all other areas. Hydrants shall be required within a cul-de-sac or dead-end street measuring more than 250 feet as measured from the curb return of the intersecting street and the end of the bulb or street.

Sections 5, 6, and 7 of the Roseville design standards contain requirements that are intended to provide safe access to property and on streets throughout the City for motorists and emergency vehicles, including driveways, turn lanes, streets, and traffic lights.

City of Roseville Municipal Code

Chapter 4.52, "Public Facilities Fee," of Title 4 is intended to provide funds for capital projects, necessary to maintain service required by the general plan within existing service areas and existing portions of the city which are developed or for which land use has already been granted, and to ensure compliance with the applicable zoning ordinance and general plan requirements for the facilities funding. Fees are imposed on new residential development, commercial, industrial, and business/professional development in accordance with Sections 4.52.050 to 4.52.090 of Chapter 4.52.

Roseville Fire Department Standards of Cover

The Roseville Fire Department's Standards of Cover report establishes both baseline emergency response and benchmark performance measures (Roseville Fire Department 2020). Baseline measures reflect historical performance and benchmarks are Total Response Time (TRT) goals. TRT is measured in two ways: first-arriving unit and effective response force (ERF) (i.e., total number of personnel necessary to address the emergency situation). TRT is composed of call processing time, turnout time, and travel time. The Roseville Fire Department observes the 90th percentile of performance as opposed to the average response time (i.e., 50th percentile in a normally distributed set of data). This depicts more efficiently what is done the majority of the time as opposed to what is done approximately half the time. Based on the City of Roseville's adopted General Plan, comprehensive risk assessment that included historical data sets, fiscal resources, and input from community stakeholders, the Standards of Cover report establishes the following three primary benchmark performance measures in terms of deployment and emergency response:

- First Unit –Total Response Time – EMS Calls for Service = **7 Minutes at 90th Percentile**
- First Unit –Total Response Time – Fire, Hazardous Material and Technical Rescue Calls for Service = **8 Minutes at 90th Percentile**
- Effective Response Force – Fire Calls for Service = **11 Minutes and 30 Seconds at 90th Percentile**

Emergency medical services (EMS) 90th percentile performance benchmarks are 7 minutes for the first-arriving unit and 10 minutes and 30 seconds for the ERF. Fire suppression, hazardous materials, and technical rescue benchmarks have been set at 8 minutes for the first-arriving unit and 11 minutes and 30 seconds for the ERF. Baseline performance measures for EMS are 8 minutes and 12 seconds for the first-arriving unit, and there were not enough ERF incidents requiring a complete ERF to determine an accurate total response time. Baseline performance measures for fire suppression are 9 minutes and 36 seconds for the first-arriving unit, 14 minutes and 6 seconds for an initial moderate fire ERF, and 22 minutes and 30 seconds for a high ERF. Baseline performance measures for hazardous materials first-arriving unit are 9 minutes and 30 seconds, and ERF is 16 minutes and 48 seconds. Baseline performance measures for technical rescue are 9 minutes and 48 seconds for the first-arriving unit and ERF is 19 minutes and 30 seconds. (Roseville Fire Department 2020)

3.10.2 Environmental Setting

Public services are currently provided to the project site primarily by the City of Roseville, as noted in Table 3.10-1.

Table 3.10-1 Public Services Providers in the City of Roseville

Service	Providers
Fire and Police Protection	City of Roseville
Schools	Roseville City School District, Roseville Joint Union High School District, Eureka Union School District, Dry Creek Joint Elementary School District, and Center Joint Unified School District
Parks and Recreation	City of Roseville

Source: City of Roseville 2020a.

FIRE PROTECTION

The Roseville Fire Department provides fire protection, fire suppression, emergency medical services, and hazardous materials management within the City. The Roseville Fire Department employs approximately 119 personnel and operates eight fire stations within the city limits (City of Roseville 2020a:VIII-21). The Roseville Fire Department also provides fire code enforcement, fire safety inspections, plan review, hazardous materials enforcement and inspections, hazard abatement, public information, and public education activities, emergency preparedness, and other services. Additionally, the City maintains mutual and automatic aid agreements with the Placer County Fire Department, the South Placer Fire Protection District, the Rocklin Fire Department, and the Sacramento Metropolitan Fire District.

The project site is located within District 9, which is served by Fire Station #9 (2451 Hayden Parkway). Future Fire Station #11 would be located to the northeast of the project site (in the Amoruso Ranch Specific Plan area).

Each of Roseville's eight fire stations houses a fire engine, a Captain that supervises the assigned personnel, an Engineer that drives the truck and operates the fire pump, and a Firefighter-paramedic that performs firefighting and life-saving skills (Roseville Fire Department 2021). Additionally, two of the fire stations also house a fire truck, containing a variety of specialized tools and ladders. Several of the fire stations also have smaller wildland fire engines, which are designed to operate off-road to fight wildland fires. Typically, these apparatuses are only in-service during the summer months when wildland fires pose the most danger.

The Roseville Fire Department does not have an adopted a response time standard, but most response times were under nine minutes for an emergency call in 2020 (Table 3.10-2). In 2020, the Roseville Fire Department responded to over 16,717 calls for service with 90 percent of responses within 8 minutes and 49 seconds (City of Roseville 2021a: B-55).

Table 3.10-2 Roseville Fire Department Response Times

Response Time Goal	2019 Actuals	2020 Actuals	2021 Estimate	2022 Estimate
Total response time (call to arrival) for 90% of the total emergency incidents	08:33	08:49	08:52	08:49
Total response time (call to arrival) for 90% of the total emergency fire incidents	07:56	08:44	08:46	08:44
Total response time (call to arrival) for 90% of the total emergency medical incidents	08:18	08:33	08:35	08:33

Source: City of Roseville 2021a: B-57.

The California Department of Forestry and Fire Protection (CAL FIRE) has established a fire hazard severity classification system to assess the potential for wildland fires. The City's Planning Area is designated by CAL FIRE as a Local Responsibility Area, and there are no Very High Fire Hazard Severity Zones. For a discussion of the project's potential effects on wildfire and wildfire-related risks, see Section 3.9, "Hazards and Hazardous Materials."

Nevertheless, the Roseville Fire Department reviews proposed development that includes open space or is located adjacent to open spaces to ensure appropriate fire safety provisions are included.

An important requirement for fire suppression is adequate fire flow, which is the amount of water, expressed in gallons per minute (gpm), available to control a given fire and the length of time this flow is available. The total fire flow needed to extinguish a structural fire is based on a variety of factors, including building design, internal square footage, construction materials, dominant use, height, number of floors, and distance to adjacent buildings. Minimum requirements for available fire flow at a given building are dependent on standards set in the California Fire Code. According to the City of Roseville General Plan, Roseville's supply and availability of water for firefighting needs is sufficient to serve the demands of buildout of the General Plan, which includes the project site (City of Roseville 2020a:VIII-21).

POLICE PROTECTION

The Roseville Police Department provides primary law and traffic enforcement services within Roseville. Police headquarters are located at 1051 Junction Boulevard. The Roseville Police Department is responsible for patrol duty within the city limits, including parks and open space areas, responding to and investigating crimes and other calls for service, providing animal control services, and ensuring traffic safety (City of Roseville 2020a:VIII-19).

The Roseville Police Department staffs and houses its own communications center, which is the 911 public safety answering point for the City (City of Roseville 2020a:VIII-19). The communications center dispatches for Roseville Police and Fire.

The Roseville Police Department supports 210 full time equivalent positions, including 143 sworn officers and 67 professional personnel (Roseville Police Department 2020). The Police Department's Fiscal Year 2021/2022 budget provides funding to support 211 positions, including three new positions (City of Roseville 2021a: B-51). Funding for law enforcement services primarily comes from the City's General Fund.

The City has not adopted a police-to-population ratio (Baquera, pers. comm., 2021). Rather, the police department sets a response goal of 3 minutes or less for 90 percent of emergency calls (City of Roseville 2020b). In 2020, the City employed 143 sworn officers and has an estimated population of 146,875 (California Department of Finance 2021), providing a police-to-population ratio of 0.97 officer per 1,000 residents. Similarly, the Roseville Police Department has not adopted a formal response time standard but strives to achieve a desired standard response rate of three minutes or less for 90 percent of emergency calls (Baquera, pers. comm., 2021).

SCHOOLS

School services in Roseville are provided by the Roseville City School District, Roseville Joint Union High School District, Eureka Union School District, Dry Creek Joint Elementary School District, and Center Joint Unified School District.

The Roseville City School District consists of 15 elementary schools (grades K–5) and four middle schools (grades 6–8). Enrollment for the 2020–2021 school year for the Roseville City School District was 11,008 students (California Department of Education 2021).

The Roseville Joint Union High School District currently operates three comprehensive high schools, a continuation school, adult school, and an independent study school within the city limits; one comprehensive high school within unincorporated Placer County; and one comprehensive high school within unincorporated Sacramento County. Enrollment for the 2020–2021 school year for the entire Roseville Joint Union High School District was 12,109 students and enrollment for district high schools serving the City was 5,858 (California Department of Education 2021).

The Eureka Union School District operates three schools that serve grades K-3, two schools that serve grades 4-6, and two schools that serve grades 7-8. Excelsior Elementary School, Maidu Elementary School, Olympus Junior High School are within the city limits. Enrollment for the 2020-2021 school year for the entire Eureka Union School District was 3,149 students and enrollment for district schools serving the City was 1,413 (California Department of Education 2021).

The Dry Creek Joint Union School District operates six elementary schools (grades K-5), one K-8 school, and two middle schools (grades 6-8). Coyote Ridge Elementary School, Heritage Oak Elementary School, Quail Glen Elementary School, and Silverado Middle School are within the city limits. Enrollment for the 2020-2021 school year for the entire Dry Creek Joint Union School District was 6,335 students and enrollment for district schools serving the City was 2,507 (California Department of Education 2021).

The Center Joint Unified School District consists of four elementary schools, one middle school (grades 7–8), and two high schools in unincorporated Sacramento County. Enrollment for the 2020-2021 school year for the entire Center Joint Unified School District was 4,162 students and enrollment for district schools serving the City was 2,617 (California Department of Education 2021).

According to the City of Roseville General Plan EIR, multiple new schools are planned in the above school districts—including Roseville City School District and Roseville Joint Union High School District—several of which are currently under construction or will be constructed in the next few years (City of Roseville 2020b: 4.11-9).

PARKS AND RECRETAION

Roseville's park and recreation facilities are operated by the City of Roseville Parks, Recreation & Libraries Department. In 2016, the City had 1,043 acres of parkland (City of Roseville 2020b: 4.11-10). The City has an adopted standard of nine acres of parkland per 1,000 residents and defines "parkland" to include public developed parks, recreational open space, and joint-use park-school facilities. The nine-acre standard is further divided into six acres of developed parks per 1,000 residents and three acres of open space per 1,000 residents.

Recreational facilities in the vicinity of the project site include Astill Family Park (1401 Grand Junction Way) and Sierra Crossing Park (4251 Brookstone Drive) (City of Roseville 2021b). In addition to traditional parklands, the City also provides open space lands, other green space, multi-use paths, and other recreational facilities such as golf courses and swimming pools.

The Al Johnson Wildlife Area is located to the northwest of the project site and is part of a 1,700-acre site planned to accommodate the City's stormwater Regional Retention facility (known as the Pleasant Grove Retention Facility) and potential recreation uses.

A series of multi-use paths for cyclists, pedestrians, and non-motorized vehicles are provided throughout Roseville. Multi-use paths are located to the south of the project site within the West Roseville Specific Plan area and are currently under construction to the west of the project site within the Creekview Specific Plan area (City of Roseville 2021b).

3.10.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Evaluation of potential public service impacts was based on a review of documents pertaining to the project, including the *City of Roseville General Plan* (2020a), *City of Roseville 2035 General Plan Update Final Environmental Impact Report* (2020b), and consultation with appropriate public service providers. Impacts on public services that would result from the project were identified by comparing existing service capacity and facilities against future demand associated with project implementation.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to public services if it would:

- result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:
  - fire protection,
  - police protection,
  - schools,
  - parks, and
  - other public facilities.

ISSUES NOT DISCUSSED FURTHER

The project is not expected to result in substantial, direct population growth, and indirect impacts related to population growth are addressed in Section 5.1, "Growth-Inducing Impacts." The project includes development of an industrial park on undeveloped grazing land in the northwest corner of Roseville. At full buildout, the project would provide up to 1,938 permanent jobs in the industrial sector. It is anticipated that the majority of these employees would be hired from the local population base. For further information on the project's impact on population, employment, and housing, see Section 3.2, "Population, Employment, and Housing." Therefore, the project is not expected to increase long-term demand for schools or parks necessitating the expansion of existing facilities or construction of new facilities. As documented in the General Plan EIR (City of Roseville 2020b), existing school facilities and services as well as parks and recreational facilities in the City are adequate to serve the existing City residents. The project would be subject to development impact fees that would provide the legally maximum required level of funding under State law. The California Legislature has declared that the school impact fee is deemed to be full and adequate mitigation under CEQA (Government Code Section 65996). Therefore, the project would not increase long-term demand for schools or parks and, as such, these issues are not discussed further. The project's potential to increase the use of existing recreational facilities such that substantial physical deterioration of these facilities would occur or be accelerated is addressed in Chapter 1, "Introduction" under "Effects Not Found to Be Significant."

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.10-1: Result in the Need for New or Expanded Fire Service Facilities

Because the project would adhere to all applicable standards and fire codes and would not adversely affect existing fire response and performance, implementation of the project would not necessitate the construction of new or expanded fire service facilities within the City of Roseville. Therefore, this impact would be **less than significant**.

The project site is located within the Roseville Fire Department's service area. The project would be designed and operated according to applicable federal, state, and local requirements, which include provisions for smoke detectors, sprinklers, building and emergency access, and hydrant sizing, pressure, and siting.

Development of residential and non-residential uses has the potential to adversely affect the ability of the Roseville Fire Department to adequately respond to fire emergencies. While the project would not add new residential units, it would add a new industrial park development with up to 15 buildings and would provide up to 1,938 permanent jobs. Implementation of the project would not create a unique demand on fire protection resources and would not interfere with existing services. As part of the City's development review process, the City will ensure that existing fire protection services and facilities are adequate to serve the project once construction is complete. Fire services are a general fund department funded primarily by sales tax and property tax revenue. As part of project operation, sales tax and property tax revenue generated by the project would help fund existing and future fire protection needs. Additionally, the Development Agreement for the project will include a requirement for the applicant to pay a Fire

Service Construction Tax, which is used to fund the construction, reconstruction, or repair of fire facilities, or the acquisition, repair, or maintenance of fire equipment (Rizzi, pers. comm., 2021). According to the City of Roseville General Plan EIR, future Fire Station #11 is planned to be located in the Amoruso Ranch Specific Plan area, to the northeast of the project site (City of Roseville 2020b: 4.11-3). This new fire station would be expected to be funded through development fees (including from this project) as well as funding from other sources. While the new fire station is planned to better serve the west Roseville area, implementation of the project would not require construction of new or expanded facilities (Rizzi, pers. comm., 2021). The project would adhere to all applicable requirements related to fire protection, would generate sales tax revenue used to fund general fund departments such as the Fire Department, is within the Fire Department's existing service area, and, most importantly, and would not require the need for new or expanded facilities. Therefore, impacts related to fire protection would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.10-2: Result in the Need for New or Expanded Police Facilities

Project development could result in an increased demand for law enforcement services; however, the project would generate sales tax and property tax revenue used to fund general fund departments such as the Police Department and the project would not result in an increased need for new or expanded police facilities. Therefore, this impact would be **less than significant**.

As described above, the project is located within the city limits of Roseville and is served by the City of Roseville Police Department. The project includes development of an industrial park on undeveloped grazing land in the northwest corner of Roseville. At full buildout, the project would provide up to 1,938 permanent jobs in the industrial sector. The project would not add new residential units.

Similar to fire protection, project development could adversely affect the ability of the Roseville Police Department to adequately respond to emergencies. While the project would not add new residential units, it would convert agricultural land to an industrial park, with up to 15 buildings and up to 1,938 employees. Project development could result in an increased demand for law enforcement services, examples of which include the need to respond to building alarm activations, vehicle break-ins, or conflicts between employees (Baquera, pers. comm., 2021). According to the Roseville Police Department, it is unknown if additional officers would be needed as a result of this project, but it is anticipated that calls for service will increase based on this new development (Baquera, pers. comm., 2021).

Police services are a general fund department funded primarily by sales tax and property tax revenue. As part of project operation, sales tax and property tax revenue generated by the project would help fund existing and future law enforcement needs. The Roseville Police Department currently supports 210 full time equivalent positions, including 143 sworn officers and 67 professional personnel (Roseville Police Department 2020). The Police Department's Fiscal Year 2021/2022 budget provides funding to support 211 positions, including three new positions (City of Roseville 2021a: B-51). These new positions would help expand the Police Department's current staffing to better serve the City, including the project, but would not result in the construction of new or expanded facilities that could generate significant environmental impacts. Although it is anticipated that there will be increased calls for service and requests for police due to the new development, the project is unlikely to increase existing response times throughout the City. Because the project would generate sales tax and property tax revenue used to fund general fund departments such as the Police Department and the project would not result in an increased need for new or expanded facilities, impacts related to police protection would be **less than significant**.

Mitigation Measures

No mitigation is required.

3.11 UTILITIES AND SERVICE SYSTEMS

This section evaluates the availability of existing utility and infrastructure systems (i.e., water, wastewater, recycled water, and solid waste) to serve the proposed project and the impact of the project on these systems. The project's demand for these public utilities and available supplies are also evaluated. Potential effects related to stormwater and drainage are addressed in Section 3.12, "Hydrology and Water Quality," and potential effects related to increased demand for electricity and natural gas are addressed in Section 3.14, "Energy."

Comments regarding compliance with stormwater regulations during construction and operation of the project were received in response to the notice of preparation (see Appendix A); these comments are addressed in Section 3.12, "Hydrology and Water Quality." No NOP comments related to other utilities and service systems were received.

3.11.1 Regulatory Setting

DOMESTIC WATER/RECYCLED WATER

Federal

Safe Drinking Water Act

As mandated by the Safe Drinking Water Act (Public Law 93-523), passed in 1974, the Environmental Protection Agency (EPA) regulates contaminants of concern to domestic water supply. Such contaminants are defined as those that pose a public health threat or that alter the aesthetic acceptability of the water. These types of contaminants are regulated by EPA primary and secondary Maximum Contaminant Levels (MCLs). MCLs and the process for setting these standards are reviewed every 3 years. Amendments to the Safe Drinking Water Act enacted in 1986 established an accelerated schedule for setting drinking water MCLs. EPA has delegated responsibility for California's drinking water program to the State Water Resources Control Board Division of Drinking Water (SWRCB-DDW). SWRCB-DDW is accountable to EPA for program implementation and for adoption of standards and regulations that are at least as stringent as those developed by EPA.

State

Urban Water Management Plan

In 1983, the California Legislature enacted the Urban Water Management Planning Act (UWMPA) (California Water Code Sections 10610–10656). The UWMPA states that every urban water supplier that provides water to 3,000 or more customers, or that provides more than 3,000 acre-feet (af) of water annually, should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry years. This effort includes the adoption of an Urban Water Management Plan (UWMP) by every urban-water supplier and an update of the plan every 5 years on or before December 31, of every year ending in a five or zero. The UWMPA has been amended several times since 1983 with the most recent amendment occurring with Senate Bill (SB) 318 in 2004. The UWMPA and SB 610, described below, are interrelated; the UWMP is typically relied upon to meet the requirements for SB 610.

The City of Roseville 2020 UWMP, adopted in June 2021, is based on the City's 2035 General Plan and is described in more detail below (City of Roseville 2021).

Senate Bill 610

SB 610 was adopted in 2001 and reflects the growing awareness of the need to incorporate water supply and demand analysis at the earliest possible stage in the land use planning process.

The Public Resources Code Section 21151.9 requires that a water supply assessment (WSA) be prepared for proposed projects as defined in the statute to ensure that long term water supplies are sufficient to meet the project's demands

in normal, single dry, and multiple dry years for a period of 20 years. Preparation of a WSA is required if a proposed action meets the statutory definition of a "project," which includes at least one of the following (California Water Code Section 20912[a]):

- a proposed residential development of more than 500 dwelling units;
- a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- a proposed 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 square feet of floor area; or
- a mixed-use project that includes one or more of the projects specified in the above bullets.

These same requirements are also set forth in CEQA Guidelines Section 15155. Completion of a WSA requires collection of proposed water supply data and information relevant to the project in question, an evaluation of existing/current use, a projection of anticipated demand sufficient to serve the project for a period of at least 20 years, delineation of proposed water supply sources, and an evaluation of water supply sufficiency under single year and multiple year drought conditions. A WSA has been prepared for this project and is provided in Appendix H.

California Safe Drinking Water Act

The SWRCB-DDW is responsible for implementing the federal Safe Drinking Water Act (SDWA) and its updates, as well as California statutes and regulations related to drinking water. State primary and secondary drinking-water standards are promulgated in California Code of Regulations Title 22, Sections 64431–64501.

The California Safe Drinking Water Act (CA SDWA) was passed in 1976 to build on and strengthen the federal SDWA. The CA SDWA authorizes SWRCB-DDW to protect the public from contaminants in drinking water by establishing MCLs that are at least as stringent as those developed by EPA, as required by the federal SDWA.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 (SGMA) became law on January 1, 2015 and applies to all groundwater basins in the state (California Water Code [CWC] Section 10720.3). (The SGMA comprises three separate bills: SB 1168, SB 1319, and Assembly Bill [AB] 1739. All three were signed into law by the governor on September 16, 2014.) 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 (CWC Section 10720.1).

Pursuant to the SGMA, any local agency that has water supply, water management, or land use responsibilities within a groundwater basin may elect to be a "groundwater sustainability agency" for that basin (CWC Section 10723). West Placer Groundwater Sustainability Agency (WPGSA) consists of the cities of Roseville and Lincoln, Placer County Water Agency (PCWA), Nevada Irrigation District, and Placer County. The WPGSA is one of a group of five GSAs formed within the North American Subbasin that consist of the West Placer, Sacramento, South Sutter Water District, Sutter County, and Recreation District 1001 GSAs.

The SGMA also requires DWR to categorize each groundwater basin in the state as high, medium, low, or very low priority (CWC Sections 10720.7, 10722.4). On December 15, 2014, DWR announced its official "initial prioritization" of the state's groundwater basins for purposes of complying with the SGMA, and this priority list became effective on January 1, 2015 (DWR 2022). DWR has ranked the North American Subbasin as "high priority." The Groundwater Sustainability Plan for the North American Subbasin has been submitted to DWR for review, and the public comment period closed on April 16, 2022 (RD1001 GSA et al. 2021).

Department of Public Health

California Department of Public Health regulations require that recycled water must be conveyed in a totally separate distribution system from the potable water supply. The City's Environmental Utilities Department is responsible for implementing a cross-connection program to ensure that future potable services are not accidentally connected to

the recycled water system. Additionally, a public information program (including signage) is in place to notify the public of the use and location of recycled water application.

Regional Water Quality Control Board - Recycled Water Master Reclamation Permit

The recycled water distribution system operates under a Master Water Reclamation Permit (Order No. 97-147) issued by the Regional Water Quality Control Board (RWQCB). This permit contains specific prohibitions on the use of recycled water by the City and places stringent water quality and treatment and disinfection standards on the City's recycled water.

Local

City of Roseville General Plan

The Public Facilities Element of the *City of Roseville General Plan* (2020a) contains the following water policies that may be applicable to the project:

Water System

- **Policy PF6.1:** Secure and maintain sufficient and diverse sources of water to meet the needs of the existing community and planned growth.
- **Policy PF6.2:** Provide sufficient water treatment capacity and infrastructure to meet projected water demand through buildout of the General Plan.
- **Policy PF6.5:** New development shall pay a fair share of the cost for adequate water supply, treatment and distribution, including extension of water mains, easement acquisitions, treatment plant expansions, water storage, groundwater wells, pumping expansions, and dry year reliability.
- **Policy PF6.6:** Design the City's water system to maintain a minimum water pressure of 50 pounds per square inch, while providing adequate water to meet fire demands in the system.
- **Policy PF6.10:** Develop and implement water efficiency standards and measures as necessary elements of the water system.
- **Policy PF6.11:** Continue the management and expansion of the groundwater and aquifer storage and recovery program to increase resiliency and reliability of water supply during all supply conditions.

Recycled Water Systems

- **Policy PF7.1:** Expand recycled water distribution system to deliver and meet estimated irrigation demands.

City of Roseville Urban Water Management Plan

The City prepared and adopted a 2020 UWMP. This plan was prepared to comply with the UWMPA of the California Water Code (described above). UWMPs must be developed by urban water providers supplying more than 3,000 customers or supplying more than 3,000 acre-feet (af) of water annually and submitted to DWR every 5 years. The UWMP describes the availability of water and discusses water use, recycled water use, and water conservation (City of Roseville 2021).

City of Roseville Municipal Code

Section 14 of the City's Municipal Code contains regulations associated with water rates, conservation, and water waste prohibitions. Chapter 14.17 of the City's Municipal Code contains regulations pertaining to recycled water use. It is the policy of the City of Roseville that where the use of recycled water is feasible, appropriate, and acceptable to all applicable regulatory agencies, the City will require an owner or customer to use recycled water in lieu of potable water where appropriate. The Recycled Water Division of the Environmental Utilities Department manages recycled water use in the City of Roseville.

City of Roseville Improvement Standards

Section 8 of the City's Improvement Standards (Water System Design) provides criteria for the design of domestic water systems. Compliance with these standards ensures water delivery facilities are properly sized to distribute water to any new customers that would be created as a result of implementing the proposed project.

Section 14 of the City's Improvement Standards (Recycled Water Infrastructure Design) provides criteria for design of recycled water systems. Compliance with these standards reduces impacts related to recycled water distribution by ensuring that these systems are properly sized for anticipated demands.

City of Roseville Water Conservation Ordinance

In 1991, the City developed and adopted the Roseville Water Conservation and Drought Mitigation Ordinance as documented in the City's Municipal Code Chapter 14.09. Under this ordinance, the City has authority to declare water shortage conditions and implement drought-related mitigation measures. In February 2008, the City of Roseville adopted Ordinance 4629, which added Sections 14.09.200 through 14.09-220 and amended Sections 14.09-020 through 14.09.090 of the Roseville Municipal Code regarding water conservation. The purpose of this ordinance is to ensure compliance with all federal, state, and local requirements relating to water conservation and drought mitigation. Ordinance 4629 provides an approach to conservation that reflects there are now more water customers billed on metered rates, which creates additional tools to achieve conservation.

City of Roseville Landscape Ordinance

In 2006, the State enacted legislation requiring DWR to update the State Model Water Efficient Landscape Ordinance. The updated model ordinance contains several new landscape and irrigation design requirements aimed at reducing water waste in landscape irrigation. All local land use agencies are required to adopt the model ordinance or develop an ordinance that is at least as effective by January 2010. The City of Roseville adopted an Ordinance tailored to meet the City's needs that is based on, and is at least as effective as, the model ordinance. The new Water Efficient Landscape Ordinance has been incorporated into the City's Zoning Ordinance as Chapter 19.67 and supersedes the City's 1993 Water Efficient Landscape Requirements document.

WASTEWATER

Federal

Clean Water Act

The Clean Water Act (CWA) employs a variety of regulatory and non-regulatory tools to reduce direct pollutant discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff. Those portions of the CWA that relate to wastewater discharges are discussed below.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established under the CWA to regulate municipal and industrial discharges to surface waters of the United States. NPDES permit regulations have been established for broad categories of discharges including point source waste discharges and nonpoint sources (nonpoint source discharges are further discussed in Section 3.12, "Hydrology and Water Quality"). Each NPDES permit identifies limits on allowable concentrations and mass loadings 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 EPA must consider in setting effluent limits for priority pollutants.

NPDES permits cover various industrial and municipal discharges, including discharges from storm sewer systems in larger cities, stormwater generated by industrial activity, runoff from construction sites disturbing more than 1 acre, and mining operations. Point source dischargers must obtain a discharge permit from the proper authority (usually a state, sometimes EPA, a tribe, or a territory). So-called "indirect" point source dischargers are not required to obtain NPDES permits. "Indirect" dischargers send their wastewater into a public sewer system, which carries it to the municipal sewage treatment plant, through which it passes before entering any surface water.

State

NPDES Permit for the Pleasant Grove Wastewater Treatment Plant

In March 2014, the Central Valley RWQCB issued WDR Order No. R5-2014-0051 (NPDES No. CA 0084573) to the City for its Pleasant Grove Wastewater Treatment Plant (PGWWTP), which treats wastewater from its service area before discharging it to Pleasant Grove Creek. This is an NPDES self-monitoring permit that outlines performance standards for the effluent into Pleasant Grove Creek. The water quality objectives established in the Central Valley RWQCB Basin Plan are protected, in part, by NPDES Permit No. CA 0084573.

The quality of the effluent that can be discharged to waterways is established by the Central Valley RWQCB through Waste Discharge Requirements (WDRs) that implement the NPDES permit. WDRs are updated at least every 5 years. A new permit must be issued in the event of a major change or expansion of the facility.

Local

City of Roseville General Plan

The Public Facilities Element of the *City of Roseville General Plan* (2020a) contains the following wastewater policies that may be applicable to the project:

- **Policy PF7.3:** Ensure that wastewater treatment capacity is available for planned development and intensification and that wastewater generation is minimized.

City of Roseville Municipal Code

Section 14 of the City's Municipal Code contains regulations associated with sewer use, sewer rates and charges, and industrial wastewater. Chapter 14.26 prohibits discharge to a sanitary sewer of any pollutant or wastewater that would interfere with the operation or performance of the City's wastewater collection or treatment facilities.

City of Roseville Improvement Standards

Section 9 of the City's Improvement Standards (Sanitary Sewer Design) provides criteria for design of sewer systems. Compliance with these standards would reduce impacts related to wastewater conveyance by ensuring that wastewater collection and conveyance facilities are properly sized to convey the flows from development associated with the project.

SOLID WASTE

Federal

No federal plans, policies, regulations, or laws are applicable to the provision of solid waste for the project.

State

California Building Standards Code (Title 24)

Where a local jurisdiction has not adopted a more stringent construction and demolition (C&D) ordinance, construction activities are required to implement Section 5.408 of the California Green Building Standards Code (CALGreen Code). Under Section 5.408, and in accordance with amendments to SB 1374 (2002), effective January 1, 2017, a minimum of 65 percent of nonhazardous C&D waste must be recycled and/or salvaged for reuse. Applicable projects are required to prepare and implement a construction waste management plan, which is submitted to the local jurisdiction before building permits are issued. Applicable projects include all newly constructed residential buildings or structures, existing residential buildings or structures with additions/alterations, all newly constructed nonresidential buildings or structures, existing nonresidential buildings with additions of 1,000 or more square feet, and existing nonresidential alterations when permit valuation or estimated construction cost of alteration is $200,000 or more.

California Integrated Waste Management Act (1989)

To minimize the amount of solid waste that must be disposed of in landfills, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties were required 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 with the county plan. In order of priority, the plans must promote source reduction, recycling and composting, and environmentally safe transformation and land disposal.

In 2011, AB 341 modified the California Integrated Waste Management Act, established a statewide recycling goal of 75 percent, and directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The resulting Mandatory Commercial Recycling Regulation requires that on and after July 1, 2012, certain businesses that generate 4 cubic yards or more of commercial solid waste per week shall arrange for recycling services. To comply with this requirement, businesses may either separate recyclables and self-haul them or subscribe to a recycling service that includes mixed waste processing.

AB 1826 (Chapter 727, Statutes of 2014; Mandatory Commercial Organics Recycling) requires businesses that generate a specified amount of organic waste per week to arrange for recycling services for that waste, requires jurisdictions to implement recycling programs to divert organic waste from businesses subject to the law, and requires periodic reporting to CalRecycle by jurisdictions on their progress in implementing the program. Organic waste includes food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste. Effective April 1, 2016, businesses that generate 8 cubic yards of organic waste per week shall arrange for organic waste recycling services. Effective January 1, 2017, businesses that generate 4 cubic yards of organic waste per week shall arrange for organic waste recycling services.

Local

City of Roseville General Plan

The Public Facilities Element of the *City of Roseville General Plan* (2020a) contains the following solid waste policies that may be applicable to the project:

- **Policy PF8.2:** Comply with the source reduction and recycling standards by reducing the projected quantity of solid waste disposed at the regional landfill.
- **Policy PF8.3:** Require a waste characterization profile for proposed large-scale commercial and industrial development projects.

3.11.2 Environmental Setting

Public utilities for the project site are provided by the City of Roseville, as discussed in detail below.

WATER SUPPLY

The City of Roseville Environmental Utilities is responsible for water services within the city limits, including the project site, with the exception of a few small areas of the city that are served by PCWA, San Juan Water District (SJWD), and Citrus Heights Water District. The City provides drinking water from surface water and groundwater resources. Surface water is provided through contracts with PCWA, SJWD, and the US Bureau of Reclamation (USBR). Surface water from the American River is collected and diverted at the Folsom Lake Pumping Plant located at Folsom Dam. The City has a diversion capacity of 150 cubic feet per second (cfs) or 96 million gallons per day (mgd) at Folsom Dam. Untreated water supplies received at Folsom Lake Pumping Plant are conveyed by gravity or pumped by USBR depending on lake level through two parallel pipelines (84-inch and 72-inch). The common facilities split and thereafter raw water is conveyed through parallel pipelines—a 60-inch diameter pipeline and a 48-inch diameter pipeline—to the City's Barton Road Water Treatment Plant (WTP), which has a treatment capacity of 100 mgd (City of Roseville 2021).

Additionally, the City has 19 intertie facilities with neighboring agencies through which water supplies may be transferred under normal water year conditions as well as emergency or drought conditions (City of Roseville 2022).

Water supplies for the City also include groundwater from the North American Subbasin of the Sacramento Valley Groundwater Basin (City of Roseville 2022). The City currently owns and maintains six groundwater wells. Four of the six wells are capable of aquifer storage and recovery whereby treated water is injected into the underlying aquifer for later extraction and use. Surface water and groundwater resources are also described in detail in Section 3.12, "Hydrology and Water Quality."

Normal Years

The City has relied on river water for its primary source of water supply since 1971 and diverts water under four contracts for untreated surface water. The four untreated surface water contract entitlements for American River supply a total of 66,000 acre-feet per year (afy). The City's purchased surface water supply is subject to reductions pursuant to the Water Forum Agreement (WFA), which provides the framework for how water resources, including surface water and groundwater supplies, would be used in the region through the year 2030. The City along with several other Sacramento-area water suppliers are signatory to the January 2000 WFA. The WFA includes limitations on City surface water diversions from the American River under various hydrologic conditions (Table 3.11-1) (City of Roseville 2022).

In addition, groundwater is available in all year types and recycled water is used within the city for nonpotable uses. Table 3.11-1 shows the City's schedule of authorized water supply over the next approximately 20 years.

Table 3.11-1 Normal Year Available Water Supplies in Acre-Feet per Year

Water Source	2025	2030	2035	2040	2045
US Bureau of Reclamation	32,000	32,000	32,000	32,000	32,000
Placer County Water Agency	30,000	30,000	30,000	30,000	30,000
San Juan Water District	4,000	4,000	4,000	4,000	4,000
Water Forum Limitation[1]	-7,100	-7,100	-7,100	-7,100	-7,100
Placer County Water Agency (Future)	0	0	3,360	3,360	3,360
Recycled Water	4,036	4,464	4,976	4,976	4,976
Groundwater	1,560	2,720	3,350	3,350	3,350
Total	**64,496**	**66,084**	**70,586**	**70,586**	**70,586**

Note:

[1] The Water Forum Agreement limits the City's maximum surface water diversion to 58,900 acre-feet per year (afy) in normal/wet years, even if there are no curtailments on the City's total contract amounts of 66,000 afy.

Source: City of Roseville 2022.

Dry Years

The City's purchased surface water supply is subject to reductions during dry years (seasonal and climatic shortages) pursuant to the WFA, the USBR Operations Criteria and Plan (OCAP), and the Central Valley Project Municipal and Industrial Water Shortage Policy (CVPM&IWSP). The City's USBR contracted amount is assumed to be reduced by 75 percent in single dry years and the 5th year of a 5-year drought. Available water supplies during a single drought year and in year 5 of a 5-year drought would be the same and are presented in Table 3.11-2. It is important to note that during the drier and driest years, the City has an agreement with PCWA to release an additional 20,000 afy of water down the American River on the City's behalf through re-operation of PCWA's American River Middle Fork Project (MFP). This 20,000 afy of water is not part of the City's contracted supply of 66,000 afy (City of Roseville 2022).

Table 3.11-2 Single Dry Year and Year 5 of Multiple Dry Years Water Supplies in Acre-Feet per Year

Water Source	2025	2030	2035	2040	2045
US Bureau of Reclamation	8,000	8,000	8,000	8,000	8,000
Placer County Water Agency	30,000	30,000	30,000	30,000	30,000
San Juan Water District	0	0	0	0	0
Water Forum Limitation[1]	0	0	0	0	0
Placer County Water Agency (Future)	0	0	3,360	3,360	3,360
Recycled Water	4,036	4,464	4,976	4,976	4,976
Groundwater	7,920	12,570	14,431	14,431	14,431
Total	**49,956**	**55,034**	**60,767**	**60,767**	**60,767**

Source: City of Roseville 2022.

Groundwater Supply

Groundwater is available for use as part of the City's water supply portfolio in all year types including normal, single dry, or multiple dry year scenarios (Tables 3.11-1 and 3.11-2). Importantly, groundwater will be a critical resource in future drought years as it supplements increasingly vulnerable surface water supplies. Beginning in 2018, the City began to regularly operate existing groundwater infrastructure. In 2019 and 2020, the City was able to store excess surface water using the aquifer storage and recovery production wells to inject water into the aquifer. As the City continues to develop this program and looks to the future of sustainable supply, groundwater pumping patterns will continue to evolve (City of Roseville 2022).

Recycled Water

In addition to surface and groundwater supplies, the City operates a recycled water system and program. Current uses of recycled water within the city include irrigation of landscapes and golf courses, industrial cooling for the Roseville Energy Park, and construction uses such as dust control and soil compaction; recycled water is also conveyed outside the City's service area for golf course and landscape irrigation.

As of 2020, the peak recycled water production occurred in July and is approximately equal to the peak recycled water demand in July. For the City to further expand recycled water usage during the irrigation season, additional recycled water must be made available. This will most likely be accomplished through expansion of operational storage, with the necessary storage volume dependent on actual demand requirements (City of Roseville 2022). Expansion of the City's recycled water system and storage tanks was described and evaluated in the West Roseville Specific Plan EIR (2004, State Clearinghouse No. 2002082057). The City is working on updating the Recycled Water Systems Evaluation Study prior to developing the expansion project.

Water Supply Reliability

In the City's 2020 UWMP, projected water demands were calculated by applying the City's current land-used based unit water demand factors to land uses in the City's various specific plans at buildout. As shown in Table 3.11-3, buildout of all specific plans is assumed to occur in 2035 with a total potable and recycled water demand of 62,546 afy and remains constant through 2045. In normal years, water supplies exceed projected water demand through 2045. In single and multiple dry years, projected water demand exceeds water supplies between 1,820 afy in 2025 and 2,340 afy in 2035 through 2045. However, projected demands shown in dry years are conservative and do not assume any water conservation. The City currently has a Water Shortage Contingency Plan (WSCP) in place, as described in Appendix K of the City's 2020 UWMP. The City assumed in its 2020 UWMP that water demand in single dry or multiple dry years would be equal to normal year water demand. This is a conservative assumption as additional water conservation would likely occur in the event of a drought or another water supply shortage or emergency due to the implementation of additional water conservation measures outlined in the City's WSCP and Chapter 14.09 of the City's Municipal Code. The City's WSCP and Municipal Code include a five-stage plan describing specific actions to reduce water demand by greater than 50 percent in the event of a water supply shortage or

emergency (City of Roseville 2022). Currently, the State of California is calling for a voluntary 15 percent conservation. The City was in a Stage 3 drought in 2015 and achieved a 33 percent conservation compared with a normal year. In 2016, the City achieved approximately 25 percent conservation compared with a normal year.

Table 3.11-3 City of Roseville Planned Annual Water Supply and Demand in Acre-Feet per Year

	2025	2030	2035	2040	2045
Surface water supply	58,900	58,900	62,260	62,260	62,260
Groundwater supply	4,036	4,464	4,976	4,976	4,976
Recycled water supply	1,560	2,720	3,350	3,350	3,350
Total water supply (normal years)	**64,496**	**66,084**	**70,586**	**70,586**	**70,586**
Water demand[1]	51,589	56,990	62,546	62,546	62,546
Surplus (+)/Deficit (-) (normal years)	**+12,907**	**+9,094**	**+8,040**	**+8,040**	**+8,040**
Total water supply (single dry year or multiple dry years)	**49,956**	**55,034**	**60,767**	**60,767**	**60,767**
Water demand[1]	51,589	56,990	62,546	62,546	62,546
Surplus (+)/Deficit (-) (single dry year or multiple dry years)	**-1,633**	**-1,956**	**-1,779**	**-1,779**	**-1,779**

Notes:

[1] Includes existing and planned residential, commercial and industrial, institutional/governmental, landscaping, groundwater recharge, and system losses. Does not include projected water demand associated with the proposed project.

Source: City of Roseville 2022.

WASTEWATER

The City of Roseville, the South Placer Municipal Utility District, and Placer County are regional participants in the South Placer Wastewater Authority (SPWA). The SPWA was created in 2000 to oversee policy for funding regional wastewater infrastructure. The City owns and operates two regional wastewater treatment facilities on behalf of the regional partners. These treatment facilities are the Dry Creek Wastewater Treatment Plant and the PGWWTP. Wastewater from the project site would be treated at the PGWWTP. The City's wastewater collection system includes both gravity wastewater pipelines and lift stations with associated force mains.

Pleasant Grove Wastewater Treatment Plant

The PGWWTP provides tertiary-level treatment through the process of screening, grit removal, extended aeration, secondary clarification, filtration, and ultraviolet disinfection. The plant provides a biological process that achieves full nitrification and de-nitrification and produces recycled water that meets Title 22 regulations for full, unrestricted use. The PGWWTP was designed to treat 12 mgd average dry weather flow; however, due to high organic loading from water conservation and other factors, the PGWWTP's effective treatment capacity is approximately 9.5 mgd (City of Roseville 2017). The PGWWTP currently treats 8.3 mgd average dry weather flow and is operating at about 87 percent of rated flow capacity. Recent and anticipated acceleration of growth within the SPWA service area resulted in the need to expand the PGWWTP's treatment capacity. Based on growth projections for the SPWA service area, average dry weather flows are projected to exceed 9 mgd around 2025 and be equal to or exceed the PGWWTP's treatment capacity of 9.5 mgd by 2027 (City of Roseville 2017). As a result, the treatment capacity of the PGWWTP is currently being expanded to meet its original 12 mgd design capacity (City of Roseville 2017). The PGWWTP expansion project will increase the organic treatment capacity of the plant by adding primary clarification, sludge thickening, and anaerobic digestion to the treatment process. Increasing the organic treatment capacity of the existing PGWWTP from 9.5 mgd to be consistent with the original design capacity of 12 mgd average dry weather flow will accommodate the anticipated wastewater treatment demands through approximately 2040 (City of Roseville 2017). The expansion project is currently under construction and is anticipated to be complete in 2023.

SOLID WASTE

Solid waste generated in the city of Roseville is collected and hauled by the City and delivered to the Western Regional Sanitary Landfill, operated by the Western Placer Waste Management Authority (WPWMA) for processing and disposal. The WPWMA is a Joint Powers Authority comprised of the cities of Roseville, Rocklin, and Lincoln and Placer County. The Western Regional Sanitary Landfill is a Class II/III municipal solid waste (non-hazardous) landfill and is permitted to accept 1,900 tons of solid waste per day and 624 vehicles per day. The facility, which opened in 1995, receives, separates, processes, and markets recyclable materials removed from delivered solid waste. In addition to the landfill, the facility includes a public waste and recyclables drop-off area, a compost area, a C&D processing area, the Material Recovery Facility (MRF), and a household hazardous waste collection area. Most solid waste collected from the city of Roseville is delivered to the MRF for processing. The landfill has a total capacity of 36.4 million cubic yards. As of June 30, 2017, the landfill had a remaining disposal capacity of approximately 24.5 million cubic yards. Based on projected waste disposal, which assumes a 2 percent average annual increase in municipal solid waste, the landfill is currently estimated to reach the end of its life in 2058 (City of Roseville 2020b). Expansion of the landfill to extend the life an additional 43 to 52 years is currently under environmental review. This expansion, if approved would expand the permitted capacity of the landfill to between 45.1 and 50.2 million cubic yards (WPMA 2021).

3.11.3 Environmental Impacts and Mitigation Measures

ANALYSIS METHODOLOGY

CEQA Guidelines Section 15155 requires preparation of a WSA when a project is of sufficient size to be defined as a "water-demand project." The analysis of water supply is based on information included in *Water Supply Assessment for Roseville Industrial Park Project* (City of Roseville 2022). Analysis of wastewater treatment, wastewater conveyance, and potable water conveyance is based on information included in the *Potable Water Master Plan* (Panattoni Development Company, Inc. 2022a), *Roseville Industrial Park Recycled Water Master Plan* (Panattoni Development Company, Inc. 2022b), *Roseville Industrial Park Wastewater Master Plan* (Panattoni Development Company, Inc. 2022c), and *Roseville Industrial Park Specific Plan Area Water Conservation Plan* (Panattoni Development Company, Inc. 2022d). Solid waste disposal demands that would result from the project are based on solid waste generation rates in the 2035 General Plan EIR (City of Roseville 2020b). When possible, a quantitative comparison was used to determine impacts of the project on future demands.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would have a significant impact related to utilities and service systems if it would:

- require or result in the relocation or construction of new or expanded water, or wastewater treatment or storm water drainage, 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 that 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;
- negatively impact the provision of solid waste services or 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.

ISSUES NOT DISCUSSED FURTHER

As noted above, project effects related to increased demand for electricity and natural gas for construction and operations are evaluated in Section 3.14, "Energy." Potential effects related to stormwater and drainage are addressed in Section 3.12, "Hydrology and Water Quality."

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.11-1: New or Expanded Utility Infrastructure or Determination of Inadequate Capacity

The project would develop a currently vacant site into a range of industrial uses, including light manufacturing, warehousing, and distribution uses, which would require extending the surrounding utility infrastructure onto the project site. All utility infrastructure extensions and hookups would occur within the disturbance area of the project site or within existing roadways (i.e., Blue Oaks Boulevard, Phillip Road, and Westbrook Boulevard), the environmental effects of which have been analyzed in this EIR including Section 3.12, "Hydrology and Water Quality." The project's projected demand for water, along with the project's projected wastewater output are within the existing and future capacity of the utility providers that serve the project site. For these reasons, the impact would be **less than significant.**

The project site is a vacant parcel, and the existing utility infrastructure would be extended onto the project site to serve the proposed project, as detailed below.

Water Supply

Water supply is provided by the City of Roseville Environmental Utilities. As detailed above in Section 3.11.2, "Environmental Setting," the City manages a water distribution system comprised of distribution and transmission mains, groundwater wells, and the Barton Road WTP. The City's water is sourced from surface water and groundwater from the North American Subbasin. The City has a diversion capacity of 150 cfs or 96 mgd at Folsom Dam. From the pump station, raw water is conveyed through parallel pipelines to the Barton Road WTP (City of Roseville 2021). Barton Road WTP has a treatment of up to 100 mgd. The City's recycled water infrastructure is currently at capacity.

The project would require utility infrastructure extensions to serve the project including extension of an existing 12-inch water main within Blue Oaks Boulevard. The 12-inch water main would continue along Blue Oaks Boulevard as well as run north along Phillip Road to serve the southern portion of the project site. The adjacent Creekview subdivision also has an existing 12-inch water main along Grasscreek Drive that the proposed project would connect to along the east side of the southern portion of the project site. A 12-inch water main would be placed on the proposed bridge that traverses the Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel, to provide service to the northern portion of the project site. The adjacent subdivision will have a 12-inch water main at Benchmark Drive that the proposed project would connect to along the east side of the northern portion of the project site. The 12-inch water mains have been sized with adequate capacity to serve the project (Panattoni Development Company, Inc. 2022a). The total project water demand would be 0.93 mgd at buildout, which is 0.93 percent of the total capacity of the Barton Road WTP. All of the water infrastructure would be within the disturbance area of the project site or within existing roadways. Impacts associated with construction of new or extended utility infrastructure are analyzed throughout this EIR.

While the proposed project is expected to receive a minimum amount of recycled water equal to the average dry weather flow of wastewater generated and conveyed by the project (i.e., 0.15 mgd) for irrigation, the City's recycled water infrastructure is currently at capacity. Until expansion of the recycled water system, the irrigation system would be connected to the potable water system and the potable water system described above has been sized to have capacity to accommodate the project's irrigation water demands. The proposed project would require an additional pump and would contribute to the need for additional recycled water storage tanks. However, the City has already planned for the installation of additional storage tanks and has evaluated the environmental impacts associated with installing those tanks in the 2035 General Plan EIR (City of Roseville 2020b). The planned tanks would have adequate capacity to accommodate the project's recycled water demands. Therefore, the project would not require expansion of the City's recycled water system but would connect to the recycled water system should it be expanded in the

future (Panattoni Development Company, Inc. 2022b). Expansion of the City's recycled water system and storage tanks was described and evaluated in the West Roseville Specific Plan EIR (2004, State Clearinghouse No. 2002082057). The City is working on updating the Recycled Water Systems Evaluation Study prior to developing the expansion project.

The project is not expected to strain the existing and future water system infrastructure such that it would require the construction of additional new or expanded infrastructure.

Wastewater

Wastewater service would be provided by the City of Roseville Environmental Utilities. Dual force mains would be constructed from the lift station along Blue Oaks Boulevard and Westbrook Boulevard to pump flows to a new manhole on the west side of Westbrook Boulevard. A gravity pipe would then convey flows to a new manhole in Westbrook Boulevard to connect to the existing 21-inch wastewater pipe. The new wastewater infrastructure would connect to existing infrastructure offsite and carry wastewater from the site to a lift station located south of the Pleasant Grove Creek Bypass Channel and then to the PGWWTP. The wastewater pipelines have been sized with adequate capacity to serve the project (Panattoni Development Company, Inc. 2022c). All of the wastewater infrastructure would be within the disturbance area of the project site or within existing roadways. Impacts associated with construction of new or extended utility infrastructure are analyzed throughout this EIR.

PGWWTP has an average flow capacity of 12 mgd and currently treats 8.3 mgd. Therefore, current remaining capacity is 87 percent. The project is projected to generate 0.15 mgd average dry weather flow of wastewater. The project's wastewater output would be 3 percent of the remaining capacity of the PGWWTP. Therefore, the project is not anticipated to strain the wastewater treatment system such that it would require the construction of new or expanded wastewater infrastructure.

Summary

The project's anticipated water demand and wastewater output would be within the capacity of the existing utility infrastructure. All proposed utility hookups to existing infrastructure would occur within the disturbance area of the project site or adjacent roadways. In addition, given the small amount of wastewater that would be produced by the project compared to available capacity, the existing wastewater treatment facilities would have capacity to serve the project. The project would therefore have a **less-than-significant** impact related to requiring or resulting in the relocation or construction of new utility infrastructure.

Mitigation Measures

No mitigation is required.

Impact 3.11-2: Adequacy of Water Supplies

The projected water supplies in normal years would exceed water demands for the city, including the proposed project. In single dry and multiple dry years, there would be a deficit in projected water supplies. However, projected water demands do not assume any water conservation. With implementation of water conservation measures, the City is expected to have adequate water supplies to serve the project in all water year types. In addition, in the drier and driest years, the City has an agreement with PCWA to release an additional 20,000 afy of water down the American River, which would further increase the City's water supplies. The impact would be **less than significant**.

As described above in Section, 3.11.2, "Environmental Setting," the 2020 UWMP is a long-term water resource planning document used by the City to ensure there is enough water to meet both existing and future demands in normal, dry, and multiple dry years. The City's 2020 UWMP projects potable water demand through 2035 by applying the city's current land-used based unit water demand factors to land uses in the city's various specific plans at buildout. At the time the 2020 UWMP was prepared, the proposed project was not considered in the city's water demand projections. Water demand associated with the project is expected to begin in 2025 and linearly increase until buildout in 2035. The maximum demand for the project is expected to be in 2035 at buildout. Projected water demand for the city in 2035 is anticipated to be 62,546 afy (Tables 3.11-3 and 3.11-4) (City of Roseville 2022). The

project is anticipated to require 518 afy of potable water and 43 afy of recycled water (for a total of 561 afy), resulting in a total water demand for the city and the project of 63,107 afy. As discussed under Impact 3.11-1, the landscape irrigation demands for the proposed project are ultimately expected to be served by the city's recycled water system; however, these demands would be served from the potable water system in the interim until the necessary recycled water system infrastructure is constructed. Available normal year water supply projected for 2035 is 70,586 afy, which would exceed the city's projected demand plus the project's projected demand of 63,107 afy. In dry years and multiple dry years, projected water supply in 2035 would be 60,767 afy, which would not be adequate to serve the projected demands for the city or the combined demands of the city and the project (Tables 3.11-3 and 3.11-4). In particular, in single dry years and years four and five of an extended drought, water supply shortages would range from 0.3 to 8.6 percent of projected demand (Table 3.11-4).

However, the projected water supply does not assume any water conservation. Currently, the State of California is calling for a voluntary 15 percent conservation. The City was in a Stage 3 drought in 2015 and achieved a 33 percent conservation compared with a normal year. In 2016, the City achieved approximately 25 percent conservation compared with a normal year. Considering that the City has been able to achieve up to a 33 percent conservation, it is reasonable to assume that the City could achieve an 8.6 percent conservation, which is the maximum shortfall projected after project implementation. It is expected that the City would implement the provisions of its WSCP described above in Section 3.11.2, "Environmental Setting," to reduce demand in single and multiple dry years, which would include replacing turf with low water plants and using smart irrigation controllers. Implementation of these measures would reduce water demands from the project by 20 percent (Panattoni Development Company, Inc. 2022d). The project, if approved, would be subject to the same water use restrictions as other City water customers when the WSCP is implemented. With implementation of water conservation measures, the City is expected to have adequate water supplies to serve the project in all water year types (City of Roseville 2022). In addition, in the drier and driest years, the City has an agreement with PCWA to release an additional 20,000 afy of water down the American River on the City's behalf that is not part of the City's contracted supply of 66,000 afy, which would further increase the City's water supplies. The impact would be **less than significant**.

Table 3.11-4 Summary of City of Roseville + Project Water Supply and Demand Comparison

Year Type	2025	2030	2035	2040	2045
Normal Year					
Total water supply	64,496	66,084	70,586	70,586	70,586
City water demand	51,589	56,990	62,546	62,546	62,546
Project water demand	187	374	561	561	561
Surplus (+)/Deficit (-)	**+12,720**	**+8,720**	**+7,479**	**+7,479**	**+7,479**
Percent Shortfall	--	--	--	--	--
Single Dry Year					
Total water supply	49,956	55,034	60,767	60,767	60,767
City water demand	51,589	56,990	62,546	62,546	62,546
Project water demand	187	374	561	561	561
Surplus (+)/Deficit (-)	**-1,820**	**-2,330**	**-2,340**	**-2,340**	**-2,340**
Percent Shortfall	**3.5%**	**4.1%**	**3.7%**	**3.7%**	**3.7%**
Multiple Dry Year 1					
Total water supply	64,496	66,084	70,586	70,586	70,586
City water demand	51,589	56,990	62,546	62,546	62,546
Project water demand	187	374	561	561	561
Surplus (+)/Deficit (-)	**+12,720**	**+8,720**	**+7,479**	**+7,479**	**+7,479**
Percent Shortfall	--	--	--	--	--

Year Type	2025	2030	2035	2040	2045
Multiple Dry Year 2					
Total water supply	59,596	61,184	65,686	65,686	65,686
City water demand	51,589	56,990	62,546	62,546	62,546
Project water demand	187	374	561	561	561
Surplus (+)/Deficit (-)	**+7,820**	**+3,820**	**+2,579**	**+2,579**	**+2,579**
Percent Shortfall	--	--	--	--	--
Multiple Dry Year 3					
Total water supply	59,596	61,184	65,686	65,686	65,686
City water demand	51,589	56,990	62,546	62,546	62,546
Project water demand	187	374	561	561	561
Surplus (+)/Deficit (-)	**+7,820**	**+3,820**	**+2,579**	**+2,579**	**+2,579**
Percent Shortfall	--	--	--	--	--
Multiple Dry Year 4					
Total water supply	51,596	53,184	57,686	57,686	57,686
City water demand	51,589	56,990	62,546	62,546	62,546
Project water demand	187	374	561	561	561
Surplus (+)/Deficit (-)	**-180**	**-4,180**	**-5,421**	**-5,421**	**-5,421**
Percent Shortfall	**0.3%**	**7.3%**	**8.6%**	**8.6%**	**8.6%**
Multiple Dry Year 5					
Total water supply	49,956	55,034	60,767	60,767	60,767
City water demand	51,589	56,990	62,546	62,546	62,546
Project water demand	187	374	561	561	561
Surplus (+)/Deficit (-)	**-1,820**	**-2,330**	**-2,340**	**-2,340**	**-2,340**
Percent Shortfall	**3.5%**	**4.1%**	**3.7%**	**3.7%**	**3.7%**

Source: City of Roseville 2022: Table 8-1.

Mitigation Measures

No mitigation is required.

Impact 3.11-3: Landfill Capacity and Compliance with Solid Waste Regulations

The project's anticipated solid waste production of 7.9 tons per day would comprise 0.7 percent of the Western Regional Sanitary Landfill's remaining daily capacity. Given the project's small contribution to the Western Regional Sanitary Landfill's remaining capacity, it is not anticipated that the project would generate solid waste in excess of the capacity of local infrastructure. Additionally, the project would comply with all applicable federal, state, and local management and reduction statutes related to solid waste, including the state Integrated Waste Management Act and the solid waste policies of the City of Roseville General Plan. For these reasons, the project would have a **less-than-significant** impact on generating 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.

At full buildout, the proposed project is expected to result in 1,938 new employees. Assuming a solid waste generation rate of 8.2 pounds per day (ppd) per employee consistent with the 2035 General Plan EIR (City of Roseville 2020b), the project would generate approximately 15,310 ppd or 7.9 tons per day of solid waste. Solid waste collection at the project site would be provided by the City, which provides both solid waste and recycling services

within the City limits. As described above in Section 3.11.2, "Environmental Setting," the closest landfill to the project site is the Western Regional Sanitary Landfill, which has a remaining capacity of 24.5 million cubic yards and a maximum permitted throughput of 1,900 tons per day (City of Roseville 2020b). As of 2018, the average daily tonnage at the Western Regional Sanitary Landfill was 822 tons per day (WPMA 2021). Therefore, the project's anticipated solid waste production of 7.9 tons per day would comprise 0.7 percent of the remaining daily capacity for the Western Regional Sanitary Landfill. Given the project's small contribution to the Western Regional Sanitary Landfill's remaining daily capacity, it is not anticipated that the project would generate solid waste in excess of the capacity of local infrastructure.

Additionally, the project would comply with all applicable federal, state, and local management and reduction statutes related to solid waste, including the state Integrated Waste Management Act and the solid waste policies of the City of Roseville General Plan. As detailed in Section 3.11.1, "Regulatory Setting," the Integrated Waste Management Act requires businesses that generate 4 cubic yards or more of commercial solid waste per week to arrange for recycling services. The project would have recycling services provided by the City, and the Western Regional Sanitary Landfill is a mixed waste processing facility. The Integrated Waste Management Act also requires businesses that generate 8 cubic yards of organic waste per week to arrange for organic waste recycling services. The project is not anticipated to generate more than 8 yards of organic waste per week; however, the City provides organic waste services that the project could use during operation. Given that the City provides both organic waste and recycling services and these services would be provided to the project, the project would comply with the Integrated Waste Management Act. Additionally, the City's General Plan has a policy of ensuring compliance with state law (Policy PF8.2).

Solid waste generated by the project would be a small percent of the remaining daily capacity of the Western Regional Sanitary Landfill. In addition, the project would be in compliance with applicable state solid waste regulations and would therefore also comply with General Plan Policy PF8.2. For these reasons, the project would have a **less-than-significant** impact on generating 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.

Mitigation Measures

No mitigation is required.

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3.12 HYDROLOGY AND WATER QUALITY

This section identifies the regulatory context and policies related to hydrology and water quality, describes the existing hydrologic conditions at the project site, and evaluates potential hydrology, drainage, and receiving water-quality impacts of the proposed project. Potential effects related to water supply and sewer/wastewater facilities are addressed in Section 3.11, "Utilities and Service Systems."

No comment letters regarding hydrology and water quality were received in response to the notice of preparation (see Appendix A).

3.12.1 Regulatory Setting

FEDERAL

Clean Water Act

The US Environmental Protection Agency (EPA) is the lead federal agency responsible for water quality management. The Clean Water Act (CWA) is the primary federal law that governs and authorizes water quality control activities by EPA as well as the states. Various elements of the CWA address water quality. These are discussed below.

CWA Water Quality Criteria/Standards

Pursuant to federal law, EPA has published water quality regulations under Title 40 of the Code of Federal Regulations. Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. As defined by the act, water quality standards consist of designated beneficial uses of the water body in question and criteria that protect the designated uses. Section 304(a) requires EPA to publish advisory water quality criteria that accurately reflect the latest scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. As described in the discussion of state regulations below, the State Water Resources Control Board (SWRCB) and its nine regional water quality control boards (RWQCBs) have designated authority in California to identify beneficial uses and adopt applicable water quality objectives.

CWA Section 303(d) Impaired Waters List

Under Section 303(d) of the CWA, states are required to develop lists of water bodies that do not attain water quality objectives after implementation of required levels of treatment by point source dischargers (municipalities and industries). Section 303(d) requires that the state develop a total maximum daily load (TMDL) for each of the listed pollutants. The TMDL is the amount of the pollutant that the water body can receive and still comply with water quality objectives. The TMDL is also a plan to reduce loading of a specific pollutant from various sources to achieve compliance with water quality objectives. In California, implementation of TMDLs is achieved through water quality control plans, known as Basin Plans, of the state RWQCBs. See the discussion of state plans, policies, regulations, and laws below.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program was established in the CWA to regulate municipal and industrial discharges to surface waters of the United States. NPDES permit regulations have been established for broad categories of discharges including point source waste discharges and nonpoint source stormwater runoff. Each NPDES permit identifies 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.

"Nonpoint source" pollution originates over a wide area rather than from a definable point. Nonpoint source pollution often enters receiving water in the form of surface runoff and is not conveyed by way of pipelines or discrete conveyances. Two types of nonpoint source discharges are controlled by the NPDES program: discharges

caused by general construction activities and the general quality of stormwater in municipal stormwater systems. The goal of the NPDES nonpoint source regulations is to improve the quality of stormwater discharged to receiving waters to the maximum extent practicable. The RWQCBs in California are responsible for implementing the NPDES permit system (see the discussion of state plans, policies, regulations, and laws below).

National Flood Insurance Act

The Federal Emergency Management Agency (FEMA) is tasked with responding to, planning for, recovering from, and mitigating against disasters. The Federal Insurance and Mitigation Administration within FEMA is responsible for administering the National Flood Insurance Program (NFIP) and administering programs that aid with mitigating future damages from natural hazards.

FEMA prepares Flood Insurance Rate Maps (FIRMs) that delineate the regulatory floodplain to assist local governments with the land use planning and floodplain management decisions needed to meet the requirements of NFIP. Floodplains are divided into flood hazard areas, which are areas designated per their potential for flooding, as delineated on FIRMs. Special Flood Hazard Areas are the areas identified as having a 1 percent chance of flooding in each year (otherwise known as the 100-year flood). In general, the NFIP mandates that development is not to proceed within the regulatory 100-year floodplain if the development is expected to increase flood elevation by 1 foot or more.

STATE

California Porter-Cologne Act

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the SWRCB and each of the nine RWQCBs power to protect water quality and is the primary vehicle for implementation of California's responsibilities under the CWA. The applicable RWQCB for the proposed project is the Central Valley RWQCB. The SWRCB and the Central Valley RWQCB have the authority and responsibility to adopt plans and policies, regulate discharges to surface and groundwater, regulate waste disposal sites, and require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substances, sewage, or oil or petroleum products.

Under the Porter-Cologne Act, each RWQCB must formulate and adopt a water quality control plan (known as a "Basin Plan") for its region. The Basin Plan for the Central Valley region includes a comprehensive list of waterbodies within the region and detailed language about the components of applicable Water Quality Objectives (WQOs). The Basin Plan recognizes natural water quality, existing and potential beneficial uses, and water quality problems associated with human activities throughout the Sacramento and San Joaquin River Basins. Through the Basin Plan, the Central Valley RWQCB executes its regulatory authority to enforce the implementation of TMDLs, and to ensure compliance with surface WQOs. The Basin Plan includes both narrative, and numerical WQOs designed to provide protection for all designated and potential beneficial uses in all its principal streams and tributaries. Applicable beneficial uses include municipal and domestic water supply, irrigation, non-contact and contact water recreation, groundwater recharge, freshwater replenishment, hydroelectric power generation, and preservation and enhancement of wildlife, fish, and other aquatic resources.

The Central Valley RWQCB also administers the adoption of waste discharge requirements, manages groundwater quality, and adopts projects within its boundaries under the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit).

NPDES General Permit

The SWRCB adopted the statewide NPDES General Permit in August 1999. The state requires that projects disturbing more than 1 acre of land during construction file a Notice of Intent with the RWQCB to be covered under the permit. Construction activities subject to the General Permit include clearing, grading, stockpiling, and excavation. Dischargers are required to eliminate or reduce non stormwater discharges to storm sewer systems and other waters.

A stormwater pollution prevention plan (SWPPP) must be developed and implemented for each site covered by the permit. The SWPPP must include best management plans (BMPs) designed to prevent construction pollutants from contacting stormwater and keep products of erosion from moving off-site into receiving waters throughout the construction and life of the project; the BMPs must address source control and, if necessary, pollutant control.

NPDES Stormwater Permit for Discharges from Small Municipal Separate Storm Sewer Systems

The Municipal Stormwater Permitting Program regulates stormwater discharges from municipal separate storm sewer systems (MS4s). Stormwater is runoff from rain or snow melt that runs off surfaces such as rooftops, paved streets, highways, or parking lots and can carry with it pollutants such as oil, pesticides, herbicides, sediment, trash, bacteria, and metals. The runoff can then drain directly into a local stream, lake, or bay. Often, the runoff drains into storm drains that eventually drain untreated into a local waterbody.

As a Phase II community, the City is currently required to operate under an NPDES Municipal Stormwater Permit administered by the state. The City's Stormwater Management Plan was adopted and approved by the RWQCB, and the City received a Phase II Stormwater Permit in 2004. The SWRCB is currently updating the General Phase II permit requirements, which are expected to be more in line with the current Phase I requirements. Upon the adoption of the updated General Phase II Permit by the state, the City will update its Stormwater Permit to comply with the new requirements.

California Water Code

The California Water Code is enforced by the California Department of Water Resources (DWR). The mission of DWR is "to manage the water resources of California in cooperation with other agencies, to benefit the state's people, and to protect, restore, and enhance the natural and human environments." DWR is responsible for promoting California's general welfare by ensuring beneficial water use and development statewide.

Groundwater Management

Groundwater Management is outlined in the California Water Code (CWC), Division 6, Part 2.75, Chapters 1-5, 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 Senate Bill (SB) 1938 in 2002, AB 359 in 2011, and the Sustainable Groundwater Management Act (SB 1168, SB 1319, and AB 1739) in 2014. The intent of the Acts 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 Sustainable Groundwater Management Act of 2014 (SGMA) became law on January 1, 2015 and applies to all groundwater basins in the state (CWC 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 (CWC Section 10720.1).

Pursuant to the SGMA, any local agency that has water supply, water management, or land use responsibilities within a groundwater basin may elect to be a "groundwater sustainability agency" for that basin (CWC Section 10723). West Placer Groundwater Sustainability Agency (WPGSA) consists of the cities of Roseville and Lincoln, Placer County Water Agency, Nevada Irrigation District, and Placer County. The WPGSA is one of a group of five GSAs formed within the North American Subbasin that consist of the West Placer, Sacramento, South Sutter Water District, Sutter County, and Recreation District 1001 GSAs.

The SGMA also requires DWR to categorize each groundwater basin in the state as high, medium, low, or very low priority (CWC Sections 10720.7, 10722.4). On December 15, 2014, DWR announced its official "initial prioritization" of the state's groundwater basins for purposes of complying with the SGMA, and this priority list became effective on January 1, 2015 (DWR 2022). DWR has ranked the North American Subbasin as "high priority." The Groundwater Sustainability Plan for the North American Subbasin has been submitted to DWR for review, and the public comment period closed on April 16, 2022 (RD1001 GSA et al. 2021).

Central Valley Flood Protection Act

The Central Valley Flood Protection Act of 2008 establishes the 200-year flood event as the minimum level of protection for urban and urbanizing areas. As part of the state's FloodSAFE program, those urban and urbanizing areas protected by flood control project levees must receive protection from the 200-year flood event level by 2025. DWR and Central Valley Flood Protection Board (CVFPB) collaborated with local governments and planning agencies to prepare the 2012 Central Valley Flood Protection Plan (CVFPP), which the CVFPB adopted on June 29, 2012. The Central Valley Flood Protection Act calls for updates to the CVFPP every five years. The 2017 Update to the CVFPP was adopted in August 2017. The 2022 CVFPP Update will evaluate progress made since passage of major state bonds in 2007 and will recommend future management actions led by state, local, and/or federal agencies to continue implementation of the CVFPP. This update will focus on climate resilience, project implementation, accomplishments, and performance tracking, and alignment with other state efforts (DWR 2021).

LOCAL

City of Roseville General Plan

The Open Space and Conservation and Safety Elements of the *City of Roseville General Plan* (2020a) contain the following policies that may be applicable to the project:

- **Policy OS3.1:** Utilize cost-effective urban run-off controls, including Best Management Practices, such as low impact development and naturalized stormwater management features, to reduce the rate of stormwater runoff and limit urban pollutants from entering the watercourses.
- **Policy OS3.2:** Implement erosion control and topsoil conservation measures to limit sediments within watercourses.
- **Policy OS3.3:** Ensure a buffer area between waterways and urban development to protect water quality and riparian areas.
- **Policy SAFE2.1:** Continue to regulate, through land use, zoning, and other restrictions, all uses and development in areas subject to potential flooding and require new development to comply with the State Plan of Flood Control requirements.
- **Policy SAFE2.5:** Minimize the potential for flood damage to public and emergency facilities, utilities, roadways, and other infrastructure.
- **Policy SAFE2.6:** Require new developments to evaluate potential flood hazards, and provide mitigation to ensure that the cumulative rate of peak run-off is maintained at pre-development levels.
- **Policy SAFE2.9:** Where feasible, maintain natural stream courses and adjacent habitat and combine flood control, recreation, water quality, and open space functions

Placer County Flood Control and Water Conservation District

The Placer County Flood Control and Water Conservation District (PCFCWCD) was established by SB 1312, effective August 23, 1984. The PCFCWCD develops regional strategies for flood control management. In 1990, the PCFCWCD published the Stormwater Management Manual (SWMM) that contains specifications and policies for the design of storm drain facilities. The SWMM criteria are referenced in Section 10 of the City's Improvement Standards.

City of Roseville Stormwater Management Program

The City's Stormwater Management Program (SWMP) contains policies, activities, and strategies that comprise the City's minimum control measures and BMPs that address NPDES requirements for the Phase II Stormwater Permit. The six minimum control measures required under the NPDES permit are public outreach, public involvement, illicit discharge detection and elimination, construction site runoff, new development and redevelopment, and municipal operations. Some specific control measures described in the SWMP include storm drain labeling, development of a storm sewer system map, establishing a stormwater ordinance, site inspections to identify illicit connections and non-

stormwater discharges to the storm sewer, and structural controls (such as detention ponds, vegetative areas, and runoff pretreatment) and non-structural controls (such as alternative construction methods, site design, and zoning) (City of Roseville 2004).

The City adopted the "Urban Stormwater Quality Management and Discharge Control Ordinance" in 2006 to establish a regulatory framework to implement construction and post-construction stormwater controls and regulate illicit discharges and connections to the City's stormwater conveyance system from both residential and business sources. The City has adopted the *Stormwater Quality BMP Guidance Manual for Construction* (City of Roseville 2011) and the *West Placer Storm Water Quality Design Manual* (Placer County 2016). The City has the authority during plan checks and site inspections to enforce the SWMP. Additionally, prior to final approval, the owner of any stormwater control structure is required to submit an operations and maintenance manual and a proposed maintenance schedule.

Grading Ordinance

Section 16.20.040 of the Roseville Municipal Code regulates stockpiling and grading and addresses conditions under which permits and grading plans are required. Section 16.20.070 identifies grading plan performance standards. Both Minor and Major grading plans are required by the City. A Major grading plan is required for any project that would result in the placement of fill in a channel or tributary that carries flow of 200 cubic feet/second or more during a 10-year storm event. Major grading plans must be reviewed and approved by the Planning Commission. All grading plans must comply with the following criteria:

A. Fill or cut slopes with a height exceeding five feet shall not exceed a slope of 4:1.

B. When grading around native oak trees:

    1. Cut or fill slopes exceeding two feet in height shall not be permitted within a distance of 1.5 times the radius of the tree's protected zone,

    2. the grade shall not be raised or lowered around more than 50 percent of the protected zone, and

    3. the grading shall not change the drainage pattern within a distance of 1.5 times the radius of the tree's protected zone.

Section 16.20.020 requires that all grading be performed in accordance with either City Improvement Standards or Chapter 16 of the Zoning Ordinance, whichever is more restrictive. A project applicant must have an Improvement and/or Grading Plan along with a site-specific SWPPP prior to the start of grading activities. Slopes or banks along creek channels must be designed with proper slope protection to prevent soil erosion and channel-bank undercutting.

Flood Damage Prevention Ordinance

Section 9.80 of the Roseville Municipal Code is the Flood Damage Prevention ordinance. Land uses and development within the City's regulatory floodplain are restricted to protect residents and structures from risks associated with flooding. Railroads, streets, bridges, utility transmission lines, pipelines, and other similar uses of a primarily open space nature may be permitted in the floodplain with the approval of a flood encroachment permit. All uses permitted within the floodplain must comply with Section 19.80.040 of the municipal code that prohibits any development from increasing peak flows; adversely affecting the stream channel, increasing flood heights, or having an adverse effect on a proposed use. An adverse effect on base flood elevations occurs when the cumulative effect of the proposed development will increase the base flood elevations by one-tenth of one foot or more at any point outside of the property controlled by the developer (Section 9.80.040). Within the floodway, all new development is prohibited unless a certified professional engineer certifies that the encroachment will not result in any increase in flood levels (Section 9.80.210). In addition, the following conditions apply:

- Any fill placed in the floodplain must be shown to serve some beneficial purpose, must be limited to the minimum amount necessary to meet its purpose, and any fill or excavation must be protected against erosion by rip-rap, vegetative cover, or bulkheading.

- Storage or processing of materials that are buoyant, flammable, toxic, explosive, or could be injurious to animal or plant life in time of flooding is prohibited. Storage of other materials may be allowed if it will not be damaged by floods and is readily removable from the area within the time available after flood warning. All materials stored in the floodplain must be anchored or be readily removable during flood season.

The City Council may grant a variance from these ordinances for a project, taking into consideration public safety, project engineering, and the public service provided by the project (Section 9.80.310).

3.12.2 Environmental Setting

HYDROLOGY AND DRAINAGE

Regional Hydrology

The Pleasant Grove Creek watershed totals approximately 30,000 acres with several tributaries, including South Branch Pleasant Grove Creek, Kaseburg Creek, Coyote Creek, and University Creek. The watershed's tributaries were historically dry or very nearly dry in the summer months but are now mostly perennial due to urban development and rice farming. Pleasant Grove Creek receives the treated effluent from the City of Roseville's Pleasant Grove Wastewater Treatment Plant (City of Roseville 2020b).

Pleasant Grove Creek discharges into the Pleasant Grove Creek Canal west of the project site in Sutter County, which flows into the Natomas Cross Canal and then into the Sacramento River near Verona. The Natomas Cross Canal watershed is within the Sacramento River Basin. The Sacramento River Basin covers approximately 26,500 square miles and is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Delta-Central Sierra area to the south. The average runoff from the Basin is estimated to be 21.3 million acre-feet per year (City of Roseville 2020b).

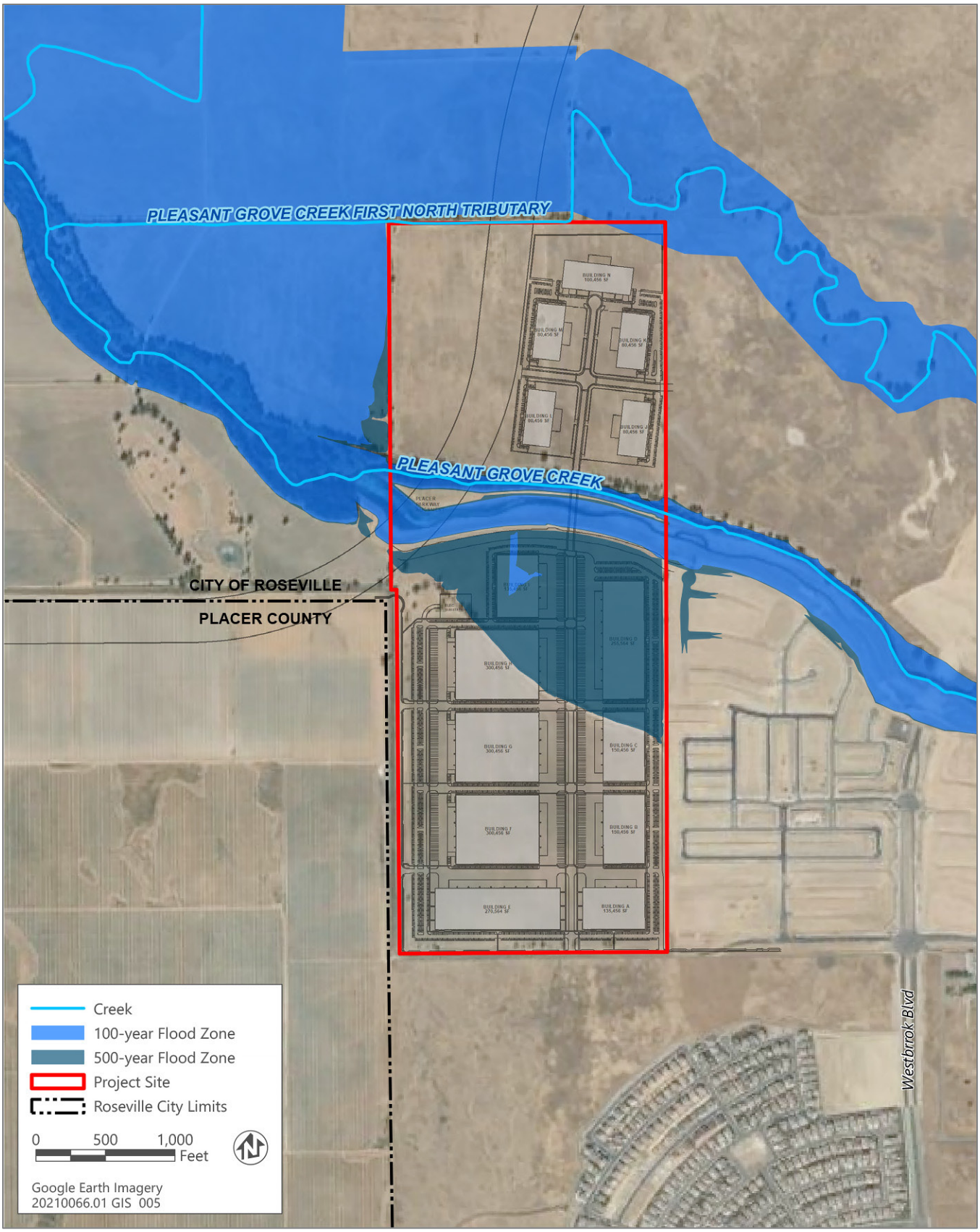
The Basin Plan designates the following beneficial uses for the Sacramento River: municipal and domestic supply, agricultural irrigation, contact and non-contact recreation, warm and cold freshwater habitat, warm and cold migration, warm and cold spawning, wildlife habitat, and navigation (Central Valley RWQCB 2018). Applying the Central Valley RWQCB's "tributary rule," the beneficial uses of any specifically identified water body generally also apply to all its tributaries.

Local Hydrology

Pleasant Grove Creek traverses the project site in an east–west direction, bisecting the site into a north and south parcel. Previous farming activities at the project site have modified the original hydrology/drainage of the site over 70+ years. The north and south parcels of the project site drain toward Pleasant Grove Creek. The southern portion of the site was used more recently for flood control purposes (a detention basin and constructed channel). Of the 241-acre project site, 16 acres comprise the Pleasant Grove Creek Floodplain and a retention basin bypass channel.

Flood Conditions

FEMA published a FIRM for the project site. A conceptual FEMA floodplain map is shown in Figure 3.12-1. The mapping delineates the boundary of the FEMA 100-year and 500-year floodplains. The area north and northeast of the project site is designated as 100-year floodplain for the Pleasant Grove Creek First North Tributary, and areas adjacent to either side of Pleasant Grove Creek within the project site are designated as 100-year floodplain for Pleasant Grove Creek. In addition, the northwest corner of the south parcel is considered 500-year floodplain for Pleasant Grove Creek.



Source: Data downloaded from the City of Roseville in 2020 and FEMA in 2021.

Figure 3.12-1 Flood Zones

SB 5 (2007) enacted the Central Valley Flood Protection Act of 2008 to provide additional protection for urban areas within the 200-year floodplain (0.5 percent annual exceedance probability) that meet five specific locational criteria: within the Sacramento-San Joaquin Valley, within an urban area of more than 10,000 people, within a FEMA flood hazard zone, within an area of potential flood depth exceeding 3 feet, and in a watershed of more than 10 square miles. Within the City, the SB 5 requirements apply to Pleasant Grove Creek (the mainstem and the North Branch) (City of Roseville 2020b).

Placer County and the cities of Roseville, Rocklin, Lincoln, and Auburn participated in the *Auburn Ravine, Coon, and Pleasant Grove Creeks Flood Mitigation* (PCFCWCD 1993) to address concerns related to flooding related to regional development. The study found that the unmitigated peak flow increases would have the potential to increase flows in the Natomas Cross Canal by less than 3.6 inches along tributary streams, and increased runoff volumes would have the potential to increase flooding by approximately 1.2 inches in the ponding area upstream of the Natomas Cross Canal (PCFCWCD 1993). While shallow, these increases would inundate several hundred additional acres in Sutter County during a major flood. The study recommended a combination of regional and local detention and retention basins, adoption of a regional floodplain management plan, and adoption of grading ordinances and policies to remediate ongoing and prevent future flood hazards. Subsequently, the City has established a fee program to construct a regional retention basin to address the increase in runoff from development within the city.

The project site is part of the City-owned property known as Reason Farms, which totals approximately 1,500 acres. The City purchased the property in 2003 for the regional retention basin project. The project was originally known as the Reason Farms Retention Basin Facility and was later renamed to the Pleasant Grove Retention Facility. The City is the project proponent for that facility, which is already designed and approved but not yet constructed. The project site is in an area that is no longer needed for the retention basin project (which would be located within the 1,700-acre Al Johnson Wildlife Area to the northwest of the project site). The Al Johnson Wildlife Area Retention Basin Project provides the opportunity to construct two retention basins: a south basin with 1,850 acre-feet (af) of storage and a north basin with 680 af of storage. The south basin would provide mitigation of volumetric increases resulting from development within the City to date. It is anticipated that the north basin, or a reprogramming of the south basin, would accommodate the cumulative development in the City (City of Roseville 2020b).

Groundwater Hydrology

The City of Roseville is located within the approximately 350,000-acre North American River groundwater subbasin, which extends beneath western Placer County, southern Sutter County, and northern Sacramento County, and is a subbasin of the broader Sacramento Groundwater Basin (DWR 2006). The subbasin is bounded by the Bear River on the north, the Feather and Sacramento Rivers on the west, the American River on the south, and a north/south line extending from the Bear River to Folsom Lake that passes about 2 miles east of the City of Lincoln. DWR estimates that the storage capacity of the North American subbasin is approximately 4.9 million af (City of Roseville 2020b).

The North American subbasin hydrogeology is characterized by an upper groundwater system and a lower groundwater system. The upper groundwater system exists in the deep Quaternary alluvial deposits. The lower groundwater system is largely confined and exhibits recharge characteristics that indicate that it is somewhat hydraulically isolated from the upper system. Water-bearing features in the upper system are generally limited to loose unconsolidated sediments, with water flowing intermittently. The vadose zone is relatively deep and becoming deeper over time due to groundwater withdrawal for agricultural use (DWR 2006).

Under natural conditions, groundwater recharge results from infiltration of precipitation (rain and snow). The rate and quantity of water reaching the aquifer depends on factors that include the amount and duration of precipitation, soil type, vertical permeability, clay content, slope, land cover, and the presence of a cemented hardpan or bedrock. Most soils can be categorized into hydrologic soil groups based on runoff-producing characteristics. Soils containing hardpan occupy more than half of the valley on the east side of the Sacramento River and these hardpans severely restrict downward movement of water (NRCS 2018).

The project site is located within the Central Area of the North American subbasin. Currently the groundwater levels are between 0 and 15 feet below ground surface near the American and Bear Rivers. Over time, groundwater levels have risen in response to decreased groundwater use but levels still vary in response to climatic conditions when

surface water availability decreases and groundwater pumping increases. Groundwater levels declined noticeably during the 2012 to 2016 drought but began to recover following the end of that drought. However, they have not generally fully recovered to pre-drought levels (RD 1001 et al. 2021).

The City is a member of the WPGSA, which is the Groundwater Sustainability Agency tasked with complying with the SGMA in Roseville. Currently, the City operates six groundwater well facilities. As part of the City's groundwater program, it has invested in Aquifer Storage and Recovery, which provides the capability to supplement the groundwater basin through direct injection of drinking water into the groundwater basin that can be later recovered for drinking water use during dry periods (City of Roseville 2020a).

Stormwater Drainage

The City manages the stormwater infrastructure and flows within the city. In the city, the stormwater drainage system consists of surface runoff to streets, subsurface storm drainage pipelines, canals, and retention basins. A 1,700-acre site northwest of the project site is planned to accommodate the Pleasant Grove Retention Basin Project (discussed above), which will address the City's stormwater needs. There are no existing stormwater drainage facilities on the project site.

WATER QUALITY

Surface Water Quality

Treated tertiary effluent from the City's Pleasant Grove Wastewater Treatment Plant is discharged directly to Pleasant Grove Creek southeast of the project site. In accordance with state requirements, surface water quality samples are collected on a weekly basis and analyzed for a variety of constituents to ensure that the discharge does not adversely affect water quality in Pleasant Grove Creek or the Sacramento River (City of Roseville 2020b).

Pleasant Grove Creek is a 303(d) listed waterbody for pyrethroids, dissolved oxygen, toxicity, cypermethrin, and bifenthrin (SWRCB 2021).

Groundwater Quality

Nitrate concentrations in the Central Area of the North American subbasin are typically below the maximum contaminant levels for drinking water; however, nitrate concentrations are trending upward in most of the subbasin. Elevated iron and manganese levels may also be encountered in the Central Area. In the WPGSA area total dissolved solid levels are generally stable or decreasing. Groundwater wells in the project vicinity had slightly elevated levels of arsenic, but low levels of nitrate, total dissolved solids, boron, iron, and manganese (RD 1001 et al. 2021).

3.12.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Evaluation of potential hydrologic and water quality impacts is based on a review of existing documents and studies that address water resources in the vicinity of the project. Information obtained from these sources was reviewed and summarized to describe existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section. This analysis incorporates the findings of the *Water Supply Assessment for Roseville Industrial Park Project* (City of Roseville 2022). This report was prepared to inform project design. The analysis also incorporates the findings of the *Preliminary Drainage Study for Roseville Industrial Park Project* (Laugenour and Meikle 2023), which is included as Appendix I. In determining the level of significance, the analysis assumes that the project would comply with relevant federal, state, and local laws, ordinances, and regulations.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would have a significant impact related to hydrology and water quality if it would:

- violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water 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, in a manner that would
  - result in substantial erosion or siltation on- or off-site;
  - result in flooding on-site or off-site;
  - create or contribute runoff water that would exceed the capacity of existing or planned stormwater- drainage systems or provide substantial additional sources of polluted runoff;
  - impede or redirect flood flows
- result 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.

ISSUES NOT DISCUSSED FURTHER

The project site is located inland with no large water bodies located in the vicinity, and there is no known history of mud flow in the vicinity. The project would not subject people or structures to a significant risk of inundation from sea level rise, tsunami, seiche, or mudflow. Therefore, there would be no impact, and this issue is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.12-1: Violate Water Quality Standards or Waste Discharge Requirements, Otherwise Degrade Water Quality, or Interfere with Implementation of a Water Quality Control Plan

Project construction activities such as grading, excavation, trenching, and spoil pile storage could result in erosion and sedimentation, and discharge of other nonpoint source pollutants. In addition, operation of the proposed industrial park has the potential to generate polluted runoff associated with storage of chemicals and vehicle/equipment leaks. To avoid or minimize the potential for adverse construction- and operation-related effects on water quality, the project applicant would be required to develop and implement a SWPPP and BMPs and comply with the City's Urban Stormwater Quality Management and Discharge Control Ordinance, West Placer Storm Water Quality Design Manual, PCFCWCD's Stormwater Management Manual, and Section 16.20.040 of the Roseville Municipal Code that include measures to control, prevent, remove, or reduce pollution. Therefore, short- and long-term impacts on surface and groundwater quality would be **less than significant**.

Short-term Construction Impacts

All earth-disturbing activities during construction would be subject to the NPDES. The NPDES Permit Program, administered by the Central Valley RWQCB, helps to control pollution in stormwater by regulating sources of pollution at construction sites that would result in the discharge of pollutants into stormwater and downstream receiving waters during both construction and operational activities. As required by the NPDES, the project would be required to obtain coverage under the General Permit for discharges associated with construction activity (Construction General Permit Order 2009-0009-DWQ). The NPDES General Permit identifies limits on discharge,

monitoring and reporting requirements, and other provisions to ensure that the discharge does not adversely affect water quality or human health. Construction activities subject to the NPDES General Permit include clearing, grading, and other ground-disturbing activities such as stockpiling or excavation. The NPDES General Permit requires development and implementation of a SWPPP and BMPs such as maintaining or creating drainages to convey and direct surface runoff away from bare areas, and installing physical barriers such as berms, silt fencing, waddles, straw bales, and gabions. Because the project applicant would be required to comply with the provisions of the NPDES General Permit, including preparation of a SWPPP and implementation of all identified BMPs, short-term construction impacts associated with water quality standards and waste discharge requirements would be minimized.

A bridge would be also constructed across Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel to connect the north and south parcels. Bridge construction would include installation of 24-inch diameter bridge supports within the Pleasant Grove Creek channel and the Pleasant Grove Creek Bypass Channel. Permitting would be required for construction of the bridge as the abutments and a pier would be located within the Pleasant Grove Creek and adjacent Pleasant Grove Creek Bypass Channel. As noted above, the bridge would be needed to connect the north and south parcels; therefore, bridge construction would not occur until development of the north parcel occurs.

In addition, the project would be required to comply with the City's Urban Stormwater Quality Management and Discharge Control Ordinance including implementing measures from the Stormwater BMP Guidance Manual for Construction and the West Placer Storm Water Quality Design Manual (Placer County 2016). The City has the authority during plan checks and site inspections to enforce the City's SWMP. Stockpiling and grading conducted as part of the project would also be required to comply with Section 16.20.040 of the Roseville Municipal Code.

Long-Term Operational Impacts

The project includes development of new industrial uses on land that is currently undeveloped. This development would result in approximately 175 acres of new impervious surfaces and a permanent bridge over Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel. The project also has the potential to generate polluted runoff associated with storage of chemicals and vehicle/equipment leaks. However, the project would be designed to minimize impacts to water quality including providing landscape setbacks that would serve as a buffer along streets and Pleasant Grove Creek.

The City operates under an NPDES Municipal Stormwater Permit administered by the state. The City's Stormwater Management Plan was adopted and approved by the Central Valley RWQCB and the City received a Phase II Stormwater Permit in 2004. The waste discharge requirements contained in the NPDES Municipal Stormwater Permit have been designed to be consistent with the water quality standards and goals established in the Central Valley RWQCB's Basin Plan. In compliance with City's Urban Stormwater Quality Management and Discharge Control Ordinance including implementing measures from the Stormwater BMP Guidance Manual for Construction, PCFCWCD's Stormwater Management Manual, and the West Placer Storm Water Quality Design Manual, potential long-term water quality impacts from the project would be minimized.

The project would include implementation of design measures to minimize impacts to Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel and compliance with the City's Phase II Stormwater Permit, Urban Stormwater Quality Management and Discharge Control Ordinance, West Placer Storm Water Quality Design Manual, and Section 16.20.040 of the Roseville Municipal Code that include measures to control, prevent, remove, or reduce pollution. Thus, short- and long-term impacts on surface and groundwater quality would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.12-2: Substantially Decrease Groundwater Supplies, Interfere with Groundwater Recharge, or Interfere with Implementation of a Sustainable Groundwater Management Plan

The proposed project would not directly use groundwater as a water supply source and no wells are proposed as part of the project. However, the project would receive its water supply from the City of Roseville Environmental Utilities, which relies on surface water and groundwater supplies. The project site is undeveloped land and implementation of the project would add approximately 175 acres of impervious surface to the site; however, this would account for less than 0.1 percent of the surface area of the North American River subbasin. Therefore, the project would not substantially decrease groundwater levels nor interfere with groundwater recharge. This impact would be **less than significant**.

The project would receive its water supply from the City of Roseville Environmental Utilities via a new forcemain and water pipeline extended from surrounding development. The project would connect to this existing infrastructure via a new 16-inch water line. The project is anticipated to require 518 acre-feet per year (afy) of potable water and 43 afy of recycled water, resulting in a total water demand for the project of 561 afy. The proposed project would not directly use groundwater as a water supply source and no wells are proposed as part of the project. The two existing wells on-site would be decommissioned.

The City relies on surface and groundwater supplies. Groundwater makes up approximately 6 percent of the City's total water supply and is available for use as part of the City's water supply portfolio in all year types including normal, single dry, or multiple dry year scenarios (see Section 3.11, "Utilities and Service Systems," for a detailed discussion of water supplies). However, the City's groundwater wells are primarily used for backup water supply and to improve water supply reliability during drought and emergency conditions. As part of the City's groundwater program, it has invested in Aquifer Storage and Recovery, which provides the capability to supplement the groundwater basin through direct injection of drinking water into the groundwater basin that can be later recovered for drinking water use during dry periods (City of Roseville 2020a). Implementation of the project is not expected to substantially deplete groundwater supplies or interfere with sustainable management of the groundwater basin.

The project site is undeveloped land and implementation of the project would add approximately 175 acres of impervious surface to the site. However, the portion of the project site surrounding Pleasant Grove Creek and a retention basin bypass channel would continue to allow for infiltration. The addition of 175 acres of impervious surfaces would account for less than 0.1 percent of the surface area of the North American River subbasin; therefore, this addition of impervious surfaces would not substantially impede groundwater recharge. Impacts related to groundwater levels and recharge would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.12-3: Substantially Alter the Existing Drainage Pattern of the Site Resulting in Substantial Flooding, Additional Sources of Polluted Runoff, or Exceedance of Existing Stormwater Infrastructure Capacity

Development of the undeveloped project site and the addition of impervious surfaces would alter the existing drainage rate and pattern of the site. This would result in increased runoff and potentially an increase in flooding. In addition, portions of the project site are designated as 100-year floodplain and 500-year floodplain for Pleasant Grove Creek. A bridge would be also constructed across Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel to connect the north and south parcels, which would result in a permanent structure within the floodway that could affect drainage. However, the project would be required to comply with City Improvement Standards, the City's Stormwater Quality Design Manual, and PCFCWCD's Stormwater Management Manual that require stormwater drainage facilities be designed with adequate capacity for stormwater flows from the project site. Additionally, the project applicant would contribute funding toward construction of the Pleasant Grove Retention Basin Project, which is a planned, regional stormwater retention facility that has been designed to accommodate the City's stormwater needs, including stormwater from the project site. The project would also be required to obtain a Letter of Map Revision from FEMA and the bridge would be designed and maintained such that it would not impede floodflows within Pleasant Grove Creek or Pleasant Grove Creek Bypass Channel. With implementation of these measures, this impact would be **less than significant**.

The volume and rate of stormwater runoff generated from an area is affected by development through conversion of vegetated or pervious surfaces to impervious surfaces and by the development of drainage systems that connect these impervious surfaces to streams or other water bodies. In this way, development can increase the rate of runoff and eliminate storage, detention, and infiltration that would naturally occur along drainage paths. As water runs off the land surface, it can become concentrated, overwhelming existing storm drain systems, causing flooding in lower watershed areas.

The project would require the addition of 175 acres of impervious surfaces, which would increase runoff and could increase the potential for flooding. In addition, areas adjacent to either side of Pleasant Grove Creek within the project site are designated as 100-year floodplain for Pleasant Grove Creek and the northwest corner of the south parcel is designated as 500-year floodplain for Pleasant Grove Creek (see Figure 3.12-1). A bridge would be also constructed across Pleasant Grove Creek and Pleasant Grove Creek Bypass Channel to connect the north and south parcels, which would result in a permanent structure within the floodway that could affect drainage of these waterways.

Stormwater flows from the project site would be directed to low impact design features such as bioretention facilities, disconnected downspouts, and detention basins to improve the water quality before entering the proposed storm drain network. This storm drain system would have a network of underground storm drainage pipes ranging in size from 4 inches to 36 inches in diameter. The drainage system would then outfall to Pleasant Grove Creek.

Plans for drainage facilities would be designed and facilities would be constructed in conformance with the City Improvement Standards, PCFCWCD's Stormwater Management Manual, and other permit criteria applicable at the time of development and would provide flood protection up to the 100-year storm event. The drainage system design would be developed to have adequate capacity to serve flows from the project site, minimize future maintenance, and ensure proper flow of storm water within the constructed storm drains. Furthermore, all disturbance associated with construction of the stormwater drainage facilities would occur within the disturbance area of the project.

Post-construction stormwater treatment would include routing almost all runoff from the project site to bioretention facilities. In addition to detention of peak flood flows within the Pleasant Grove Creek watershed, the project applicant will contribute toward construction of the Pleasant Grove Retention Basin Project through payment of the Pleasant Grove Watershed Mitigation Fee, which will cover the retention requirements of the project. As described in Chapter 2, "Project Description," payment of this fee would be required as part of the Development Agreement as well as the conditions of project approval. This planned, regional stormwater retention facility would be located within the Pleasant Grove watershed, at the City's Reason Farms site located immediately west of the project site and has

been designed to accommodate the City's stormwater needs, including stormwater from the project site. The Pleasant Grove Retention Basin Project is an existing project in the City's Capitol Improvement Program. As of June 30, 2021, the City has spent $12.8 million purchasing land, conducting environmental work, and preparing studies regarding expected operations and maintenance costs and preferred options (Kemen, pers. comm., 2023). Most recently, the City has worked with Placer County and County developers on a Memorandum of Understanding to make the basin a regional facility that will mitigate for some County projects as well as City projects (with the County contributing fair share costs). The City intends to construct the Pleasant Grove Retention Basin Project in the next five years (Kemen, pers. comm., 2023).

The deck for the bridge across Pleasant Grove Creek and Pleasant Grove Bypass Channel would be approximately 2 feet thick. With a clearance of 3 feet from the 200-year water surface elevation to the bottom of the bridge deck. Bridge construction would include installation of 24-inch diameter bridge supports within the Pleasant Grove Creek and the Pleasant Grove Creek Bypass Channel. Permitting would be required for construction of the bridge as the abutments and a pier would be located within these waterways. The bridge would be designed and maintained such that it would not impede floodflows within Pleasant Grove Creek or Pleasant Grove Creek Bypass Channel.

Because the project would place fill within the floodplain to remove building areas outside of the floodplain, the project would also require a Letter of Map Revision (LOMR) from FEMA prior to starting construction to address areas within the 100-year and 500-year floodplains, as described in Chapter 2, "Project Description." FEMA will confirm whether the proposed project and proposed hydrology changes would meet minimum NFIP standards. Then FEMA will officially revise the current NFIP map to show changes to floodplains, regulatory floodways, and flood elevations. This process is explained in more detail, below.

For the south parcel, the project applicant will file a Conditional Letter of Map Revision (CLOMR) request. FEMA will then issue a CLOMR stating that FEMA will revise their map panels to remove the floodplain are on the development areas if the project is built as stated in the CLOMR application. Following construction, as-built plans will be submitted to FEMA in a LOMR, which will officially remove the floodplain in the development area south of Pleasant Grove Creek.

For the north parcel, a separate CLOMR application will be submitted because the proposed bridge structure is proposed within the delineated "floodway," which is a special flood zone regulated by the NFIP. This analysis is required to demonstrate that there would be no rise upstream or downstream of the project site as a result of project construction. Special notifications are also required, and it also generally triggers a 90-day appeal period. Similar to the south parcel, the project applicant must demonstrate the project's ability to achieve the FEMA requirements with the CLOMR application and technical analysis. Also, similar to the south parcel, once project construction is complete, the LOMR will be filed with FEMA to revise/remove any floodplains currently shown on the north parcel.

Additionally, to meet FEMA standards, the project would be designed such that building floors are elevated at least two feet above the base flood elevation (BFE), and all electrical, heating, ventilation ductworks, plumbing, and air conditioning equipment and other service facilities are similarly elevated above the BFE. An Elevation Certificate will be required.

Given these factors, implementation of the project would not substantially alter the drainage pattern of the project site such that substantial flooding or exceedance of stormwater drainage systems would occur. In addition, the project's anticipated stormwater output would be within the capacity of the existing utility infrastructure. All proposed utility hookups to existing infrastructure would occur within the disturbance area of the project site. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

3.13 AESTHETICS

This section describes the existing visual conditions, meaning the physical features that make up the visible landscape, near the project site and evaluates the potential changes to those conditions that would occur from project implementation. The effects of the project on the visual environment are generally defined in terms of the project's physical characteristics and potential visibility, the extent to which the project's presence would change the perceived visual character and quality of the environment, and the expected level of sensitivity that the viewing public may have where the project would alter existing views.

No comment letters regarding aesthetics were received in response to the notice of preparation (see Appendix A).

3.13.1 Regulatory Setting

FEDERAL

No federal plans, policies, regulations, or laws related to aesthetics are applicable to the project.

STATE

California Scenic Highway Program

California's Scenic Highway Program was created by the California Legislature in 1963 and is managed by the California Department of Transportation (Caltrans). The goal of this program is to preserve and protect scenic highway corridors from changes that would affect the aesthetic value of the land adjacent to highways. A highway may be designated "scenic" depending on how much of the natural landscape travelers can see, the scenic quality of the landscape, and the extent to which development intrudes on travelers' enjoyment of the view. The nearest designated highway is State Route 180, located approximately 14 miles northeast of the project site (Caltrans 2019).

Nighttime Sky – Title 24 Outdoor Lighting Standards

The Nighttime Sky- Title 24 Outdoor Lighting Standards were created in 2005 by the California Energy Commission to regulate energy efficiency of all outdoor lighting for residential and nonresidential development. The standards reduce the adverse effects of outdoor lighting and improve overall quality by providing guidance for lighting characteristics such as maximum power and brightness, shielding, and sensor controls to turn lighting on and off.

LOCAL

City of Roseville General Plan

The *City of Roseville General Plan* (2020) includes the following relevant policies that pertain to aesthetic resources:

Community Form: General

- **Policy LU1.1:** Ensure high-quality development in new and existing development areas, as defined through specific plans, the development review process, and the Community Design Guidelines.

Community Design

- **Policy LU7.1:** Through the design review process, apply design standards that promote the use of high quality building materials, architectural and site designs, landscaping signage, and amenities.
- **Policy LU7.2:** Continue to develop and apply design standards that result in efficient site and building designs, pedestrian friendly projects that stimulate the use of alternative modes of transportation, and the establishment of a functional relationship between adjacent developments.
- **Policy LU7.3:** Encourage designs that strike a balance between the incorporation of aesthetic and development requirements, and the economic considerations associated with development.

- **Policy LU7.4:** Promote flexibility in the design review process to achieve design objectives, and encourage projects with innovative, unique and creative architectural style and design.
- **Policy LU7.6:** Encourage project designs that place a high priority and value on open space, and the preservation, enhancement and incorporation of natural resources and other features including consideration of topography, vegetation, wetlands, and water courses.
- **Policy LU7.8:** The location and preservation of native oak trees and oak woodlands shall be a primary factor in determining site design, building location, grading, construction and landscaping, and in establishing the character of projects through their use as a unifying element in both new and existing development.
- **Policy LU7.9:** Control artificial lighting to avoid spill-over lighting onto adjacent properties. Use anti-reflective architectural materials and coatings to prevent glare.
- **Policy LU9.9:** Development proposed on the western edge of the City shall provide a distinctive open space transition to create a physical and visual buffer between the City and County that ensures that the identity and uniqueness of the City and County will be maintained.

Community Design Guidelines

Community Design Guidelines for the City of Roseville were adopted in 1995 to create consistency in the quality of new development. The Community Design Guidelines promote design principles that encourage diversity, balance aesthetic and functional considerations, and attempt to integrate the natural and built environments. The Design Committee, Planning Commission, and City Council use the Community Design Guidelines in the design review process for projects requiring discretionary approval, and by City staff for discretionary projects that are approved by the Planning Manager (City of Roseville 2008). The Community Design Guidelines address the following topics:

- site planning and architectural design standards for new residential, commercial, and industrial development and modifications to existing buildings;
- landscaping and screening techniques to preserve and enhance the visual quality;
- signs for new development;
- landscaping and signage at entryways;
- streetscape improvements such as street trees, landscaped medians, and street furnishings; and
- lighting design and provisions to promote public safety and reduce glare and light spillover onto adjacent properties.

3.13.2 Environmental Setting

METHODOLOGY AND TERMINOLOGY

Identifying the project area's visual resources, character, and quality involves the following process:

- objectively identify visual features and resources of the landscape,
- assess the character and quality of the resources relative to overall regional visual character, and
- determine importance to people (or sensitivity) of views of visual resources in the landscape.

Visual quality is assessed through determining the degree of vividness, unity, and intactness of the view:

- **Vividness:** The extent to which the landscape is memorable, which is associated with the distinctiveness, diversity, and contrast of visual elements.
- **Intactness:** The integrity of visual order in the landscape and the extent to which the existing landscape is free from atypical visual intrusions (i.e., an element that appears out of place with the visual order).
- **Unity:** The extent to which visual intrusions are sensitive to and in visual harmony with the existing landscape.

REGIONAL SETTING

The northwest portion of the City of Roseville is generally regarded as a transitional zone between the flat, open terrain of the Central Valley to the west and the foothills of the Sierra Nevada Mountains to the east. Long-range views within the region include views of the Sierra Nevada, Sutter Buttes, and the Coast Range.

The project site is at the junction of agricultural land to the west, a nature preserve (Al Johnson Wildlife Area) to the northwest, and three specific plan areas (the Creekview Specific Plan area to the east, the West Roseville Specific Plan area to the south, and the Amoruso Ranch Specific Plan to the north). The visual setting and quality of these landscapes is described below and summarized in **Error! Reference source not found.**.

Table 3.13-1 Regional Visual Quality

Site Name	Vividness	Intactness	Unity
Agricultural land	Low to moderate	Moderate to high	Moderate to high
Al Johnson Wildlife Area	High	Moderate to high	Moderate to high
Creekview Specific Plan area	Low to moderate	Low to moderate	Moderate to high
West Roseville Specific Plan area	Low to moderate	Low to moderate	Moderate to high
Amoruso Ranch Specific Plan	Moderate	Moderate to high	Moderate to high

Source: Compiled by Ascent in 2021.

The surrounding agricultural land consists of row crops, grain crops, orchards, and grassland that support livestock grazing (City of Roseville 2020). Lands immediately west of the project site are in active agriculture production. The visual intactness and unity of the agricultural lands are both moderate to high due to the visual integrity and connectivity of the agricultural parcels. With the exception of roadways, the agricultural land to the west of the project site is generally undisturbed by other land uses. The vividness of the agricultural lands is low to moderate due to the lack of striking and distinctive visual patterns in the landscape. The view within these agricultural lands is generally flat in topography and visually consistent with row crops, orchards, and grasslands, and no major landmarks or other visual features create a striking change in the landscape.

The Al Johnson Wildlife Area is located northwest of the site and is part of a 1,700-acre site planned to accommodate the City's stormwater Regional Retention facility and potential recreation uses. This nature preserve was previously used for agriculture and consists of leveled agricultural fields separated by earthen berms, many of which are also used as access roads. An entryway to the nature preserve is marked with a rock sign, and a main trail guides recreationalists through fields with scattered trees to Pleasant Grove Creek. Views within the Al Johnson Wildlife Area have a moderate to high visual intactness and unity. The fields within the preserve are contiguous with the surrounding agricultural land creating visual unity in the landscape as a whole. Furthermore, the amount of human-caused visual disturbances within the preserve are minimal, which contributes to the moderate to high visual intactness of the preserve. With the exception of the built road that bisects the preserve and the sign at the entrance of the preserve, no other major visual disturbances are present. The vividness of the preserve is high due to the variation in landscape from grassland to riparian along Pleasant Grove Creek. The change in habitat is marked by a change in vegetation, with scattered oaks comprising the main vegetation type within the grassland area which transitions into a variety of riparian plant species including willow at Pleasant Grove Creek. The habitat variation is a distinctive visual pattern that adds to the high vividness of the preserve.

The Creekview Specific Plan area to the east of the project site will be built out to include 2,011 single and multi-family residential units, approximately 136 acres of Open Space, 15.7 acres of neighborhood parks, a 7-acre school site, 2.6 acres of utilities sites, and 19.3 acres for commercial development (City of Roseville 2021). The open spaces within the specific plan area consist of rolling grasslands and riparian vegetation along the Pleasant Grove Creek corridor. Housing is currently being constructed in the southwest portion of the Creekview Specific Plan area. The West Roseville Specific Plan area to the south of the project site is planned primarily as a residential community supplemented by a mix of support and employment uses. A mixed-use village center will be located in the center of the plan area, along with the Regional Sports Park to the east. The plan area visually defines the western limits of the

City with an open space buffer that creates a visual transition between urban uses and uses in unincorporated Placer County. The overall design intent of the plan area is to highlight the recreational amenities provided and the historic land uses with architecture that incorporates traditional styles unique to the early history of the California region (City of Roseville 2004). The visual vividness of the Creekview and West Roseville Specific Plan areas are low to moderate. Both plan areas will be developed into residential communities with commercial, recreational, and open space opportunities. The number of striking or distinctive visual patterns in the landscape is generally low due the visual similarity of new development; the visual memorability to the landscape is also low for this reason. The visual intactness of the Creekview and West Roseville Specific Plan areas is also low to moderate. Both plan areas exist in transition zones at the City's urban border; therefore, the visual integrity of the human-built landscape is interrupted by the agricultural lands directly to the west. The visual unity of both plan areas is moderate to high given the and it should be noted that design guidelines have been and will continue to be implemented during development of these areas to ensure visual coherence and compositional harmony of the landscape considered as a whole.

The Amoruso Ranch Specific Plan to the north of the project site will result in the development of a mix of uses, including 337 acres of low, medium, and high-density residential land developed with 2,827 dwelling units. The land use plan also includes three commercial parcels totaling 51 acres, a 9.6-acre elementary school site, seven neighborhood parks, and a 3-acre fire station/public facilities site. Approximately 135 acres of the site will be set aside as open space preserve (City of Roseville 2016). Within the project site, the topography generally consists of rolling terrain generally trending west and south. The majority of the Amoruso Ranch Specific Plan area is characterized by wide expanses of flat to rolling grasslands. The northeast portion of the specific plan area includes a small ranch house, associated out buildings, and previously irrigated cropland. Minor drainages flow in a radial pattern from a slight rise in the northeast quadrant of the property. The vividness of the Amoruso Ranch Specific Plan area is moderate because the change in topography characterized by the rolling grasslands create a distinct visual pattern. The visual intactness and unity of the Amoruso Ranch Specific Plan area are moderate to high. The rolling grasslands are contiguous with the surrounding agricultural land creating visual unity in the landscape as a whole. Human-caused visual disturbances within the plan area are minimal, which contributes to the moderate to high visual intactness.

LOCAL SETTING

Visual Character and Quality of the Project Site

Long-range views within the project site include portions of the Sierra Nevada to the east, and Mount Diablo and the Coast Range to the west. The project site is composed of undeveloped grazing land in the northwest corner of the City of Roseville. The land is predominantly flat with some sparsely vegetated, low hills. Annual grasslands, including remnant cultivated grain species and sparse, ruderal, nonnative plant species, cover the majority of the project site. Due to the annual species present on the project site, the views transition from green grasslands in the winter and spring to dry, golden-colored grasslands in the summer and fall. Pleasant Grove Creek traverses the property in an east–west direction, bisecting the site into a north and south parcel, and an irrigation ditch is present on the northern boundary of the project site. Valley oak riparian woodland habitat is present along the creek channels, creating a visually prominent landmark during the summer months, when the dark foliage of the oak trees contrasts starkly with the golden-colored grassland. A human-made flood channel is present in the southern half of the project site. The vegetation surrounding the flood channel is wetland-dominant and includes curly dock (*Rumex crispus*) and sedges (*Carex spp*.), creating a visual transition from the annual grassland vegetation that covers the majority of the project site. The only structures identified within the project site are two water wells, one located along the southern edge of the property and one along the eastern edge of the property.

The visual vividness of the landscape within the project site is moderate. While the majority of the project site is covered in annual grassland that is contiguous with close-by agricultural parcels, several unique visual patterns are present, including the vegetation transitions marked by Pleasant Grove Creek and the human-made flood channel. Given the annual nature of the grasslands, the landscape transitions into golden-covered fields in the summer and fall, but the vegetation associated with the creek and flood channel remains green, creating a distinctive change in the landscape. Pleasant Grove Creek and the human-made flood channel combine with the annual grassland

landscape in striking visual patterns which add to the moderate visual vividness of the project site. The visual intactness and unity of the project site are also moderate. The rural, undeveloped landscape is generally free of encroaching human-made elements, as the only structures present are two water wells. The visual integrity and compositional harmony of the undeveloped parcel is moderate due to the transitioning habitat types of the creek and flood channel. The overall visual character of the project site is moderate based on the moderate vividness, intactness, and unity.

Viewer Sensitivity

Viewer sensitivity is a measure of public expectation or concern for changes to scenic quality. Numbers of viewers, viewer activity, view duration, distance from seen objects (i.e., foreground versus background), and special planning designations such as scenic routes are used to characterize viewer sensitivity.

Sensitive viewers are people located near the project site who may be affected by visual changes caused by the project. Sensitive viewers are described in terms of exposure to the project and level of sensitivity. Viewer exposure takes into account viewer location, the number of viewers, and duration and frequency of views.

lists viewer groups that would be exposed to the project's visual changes; defines their geographic proximity to the project; qualitatively estimates the volume of viewers, duration of views, and frequency of views; and identifies the viewer sensitivity of each general viewer group. Visual sensitivity associated with views in a particular area is the combination of viewer sensitivity and viewer exposure.

Table 3.13-2 Sensitive Viewer Groups Near the Project Site

Viewer Group	Viewer Exposure				Viewer Sensitivity
	Area	Usage Volume	Duration of Views	Frequency of Views	
Residents	To the south of the project site within the West Roseville Specific Plan area	High	High	High	High
Recreationists	Accessing the Al Johnson Wildlife Area to the northeast of the project site	Moderate	High	Moderate	High
Motorists	Using roads adjacent to the project site including Blue Oaks Boulevard and Phillip Road	Moderate	Moderate	Moderate	Moderate

Source: Compiled by Ascent in 2021.

SCENIC ROADWAY

A scenic road is defined as a highway, road, drive, or street that provides opportunities for the enjoyment of natural and human-made scenic resources, in addition to its transportation function. Scenic roads direct views to areas of exceptional beauty, natural resources or landmarks, or historic or cultural interest. There are no officially designated state scenic highways, or eligible state scenic highways, located in the vicinity of the project site or the greater City of Roseville (Caltrans 2019).

SCENIC VISTA

Scenic vistas are generally considered to be locations from which the public can experience unique and exemplary high-quality views, including panoramic views of great breadth and depth, often from elevated vantage points. No designated scenic vistas are present in the project area or the greater City of Roseville (City of Roseville 2020).

NIGHTTIME LIGHT AND DAYTIME GLARE

No sources of light or glare are present on the undeveloped project site. Sources of nighttime light around the project site are minimal. Residential neighborhoods associated with the West Roseville Specific Plan area create some

nighttime light that can be seen from the project site. Occasional glare occurs from vehicles accessing roads adjacent to the project site.

SHADOWS

The evaluation of shading and shadows in this Draft EIR is limited to daytime shadows cast by objects blocking sunlight. The angle of the sun, and hence the character of shadows, varies depending on the time of year and the time of day; however, in the Northern Hemisphere, the sun always arcs across the southern portion of the sky. During the winter, the sun is lower in the southern sky, casting longer shadows compared to other times of year. During the summer months, the sun is higher in the southern sky, resulting in shorter shadows. During the summer, the sun can be almost directly overhead at midday, resulting in almost no shadow being cast. During all seasons, as the sun rises in the east in the morning, shadows are cast to the west; at mid-day, the sun is at its highest point and shadows are their shortest, and cast to the north; and as the sun sets in the west in the afternoon/evening, shadows are cast to the east.

With the exception of the two water wells, no structures are present on the project site that create shadows. The trees surrounding Pleasant Grove Creek provide shade to the creek and shadows on the project site.

3.13.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

This visual impact analysis is based on field observations, a review of site plans and aerial photographs, photographs of the project site, and computer simulations of the completed development. Simulations were created by Benchmark Resources. The EIR team reviewed the simulations, including comparing them to the site plan, to ensure they were representative of the expected views of development on the site.

Assessment of impacts to aesthetics and visual resources is based on an objective evaluation of the proposed project's effects on the visual environment of the site and its surroundings. This includes consistency with local ordinances and policies adopted for visual integrity of the community, impacts on viewsheds and scenic areas identified as important or valuable to the community, and changes in visual character of the site as compared to existing conditions.

The analysis uses photo simulations of the proposed project for the four representative views of the project site. The location of the viewpoints used for simulations is shown in Figure 3.13-1. The existing conditions photographs paired with the simulations showing the proposed project are provided in Figures 3.13-2 through 3.13-5.

Photo locations for the simulations were selected in coordination with City staff to express representative viewpoints of the proposed project from a variety of locations. Photos to be used as the basis for the simulations were taken by Benchmark with the location recorded using maps, aerial photos, and GPS. Benchmark then began post-processing of the site panoramic photos to include the architectural elements of the proposed project. Benchmark created a digital elevation model based on geo-located site contour data, site aerial data, and site boundary data from the project applicant. Building models were created by Benchmark from the architectural data for the 15 proposed buildings and an on-site electrical substation. Building modeling focused on footprints extruded out to given heights to form a building "shell," with minimal architectural detail.

As the overall model of the project site was developed, the building renderings were given "surfacing" such as color, concrete and glass elements, and shading and shadow. Landscaping elements (e.g., trees, groundcover) were added consistent with landscaping plans provided by the applicant. The final simulations reflect a simulated rendering of the proposed project as it would be expected to be seen by an observer standing in the location where the source photo was taken. The simulations are based on full buildout of the project (all four phases). Hardscape details such as parking lot lines, curbs, etc., are not included in the simulations, but instead, a general groundcover distinction between vegetation and paved areas is simulated. Trees are depicted after approximately 10 to 15 years of growth.

The simulations do not depict the new concrete masonry wall that would be installed along the project's eastern perimeter (up to Pleasant Grove Creek and then continuing north of the creek to the site's northern perimeter) to visually shield the project from the Creekview Specific Plan area, which is currently under development. This wall would be 8 feet tall. The wall was not simulated because the purpose of the analysis is to provide a worst-case situation where someone is looking over the wall. Additionally, the simulations do not depict the proposed electrical substation or related infrastructure. Although substation design is not completed yet, the substation would likely be a steel structure, approximately 40 feet tall with 65 feet tall steel poles and would be located in the northwest corner of the south parcel. A 14-foot-tall masonry wall would be constructed around the substation for site security. The wall would be similar in material and appearance to the 8-foot wall along the project site's eastern perimeter. A new 65-foot-tall overhead 60 kilovolt (kV) double circuit line would be constructed to supply power to the substation (see Figure 3.14-1 in Section 3.14," Utilities and Service Systems," for proposed off-site alignment, primarily along Blue Oaks Boulevard). The electrical substation and related infrastructure were not simulated because these design details were not known at the time the simulations were prepared.

Visual Simulations

Visual simulations of four perspectives of the project site were created using site panoramic photos digitally edited to include the architectural elements of the proposed project. Modeling of proposed project buildings focuses on footprints extruded out to given heights to form a building "shell," with minimal architectural detail, to give perspective of the size of each building.

Representative Viewpoint Descriptions

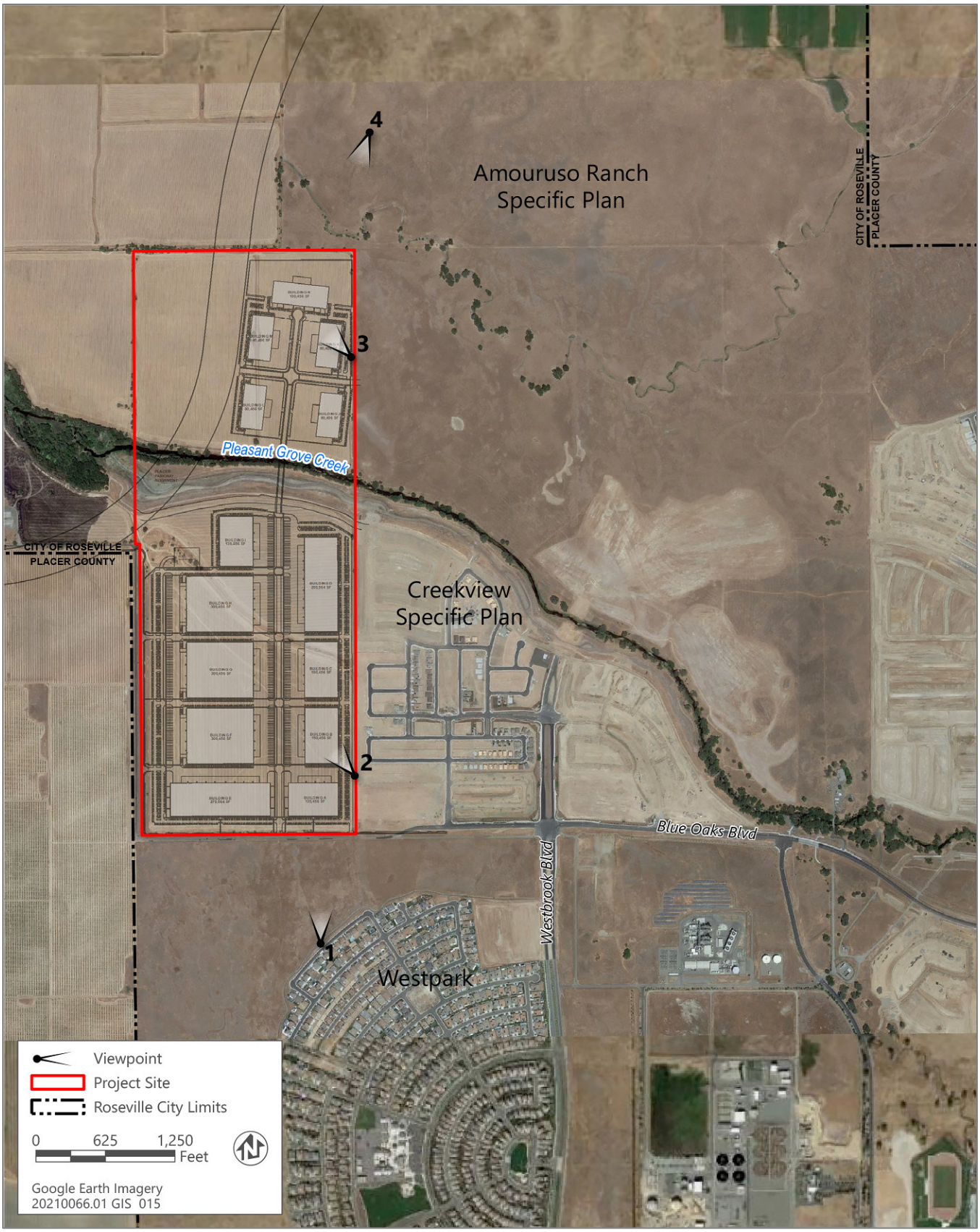
The following is a description of viewpoints that provide representative views of the project site from nearby locations. The selected views include those typically seen by the public, as well as those from residential (or future residential) areas that would be seen most frequently by the residents in the area. The location of the viewpoints is shown in Figure 3.13-1, and photographs from these viewpoints are provided in Figures 3.13-2 through 3.13-5.

Viewpoint 1

Viewpoint 1 is taken from the northern portion of the developed segment of the Westpark Specific Plan area, as shown in Exhibit 3.13-2. Vividness from Viewpoint 1 is low. The landscape is largely composed of flat grassland with a metal fence, trail, and road in the foreground and some sparsely arranged trees in the background that surround Pleasant Grove Creek. The memorability and visual power of the landscape is low due to the lack of striking and distinctive visual patterns. Intactness from Viewpoint 1 is moderate. The visual integrity of the landscape is fairly high due to the general lack of human-built elements. The grassland landscape is largely undisturbed with the exception of the human-built elements (fence, road, and trail) in the foreground. The unity is also moderate because of the visual coherence and compositional harmony of the landscape, which is similar to other agricultural and undeveloped portions of the City of Roseville. The grassland area is bounded by the metal fence, similar to other undeveloped areas in the region. Overall, the visual quality is moderately low. The visual character is a fairly unremarkable grassland, with little variation in the topography and other visual aspects.

Viewpoint 2

Viewpoint 2 is taken from the dirt road that extends parallel to the eastern boundary of the project site, facing the project site itself, as shown in Figure 3.13-3. Vividness from Viewpoint 2 is low. Similar to Viewpoint 1, the landscape is composed of flat grassland, with the dirt road in the foreground and trees in the background that surround Pleasant Grove Creek. The lack of striking and distinctive features, such as changes in topography or vegetation type, make the memorability and visual power of the landscape low. Intactness from Viewpoint 2 is high. The visual integrity of the landscape is high due to the lack of human-built elements. The grassland landscape is largely undisturbed with the exception of the dirt road in the foreground. The unity is also moderate because of the visual coherence and compositional harmony of the landscape, which is similar to other agricultural and undeveloped portions of the City of Roseville. The grassland area is bisected by the dirt road, common of agricultural/undeveloped areas in the region. Overall, the visual quality is moderately low. The visual character is a fairly unremarkable grassland, with little variation in the topography and other visual aspects.



Source: Provided by Benchmark in 2021; adapted by Ascent in 2021.

Figure 3.13-1 Overview of Viewpoint Locations

Source: Provided by Benchmark in 2021.

Figure 3.13-2 Viewpoint 1 from the Westpark Specific Plan Area Looking North

Source: Provided by Benchmark in 2021.

Figure 3.13-3 Viewpoint 2 from the Creekview Specific Plan Area Looking Northwest (Without Proposed Masonry Wall)

Source: Provided by Benchmark in 2021.

Figure 3.13-4 Viewpoint 3 from North of Pleasant Grove Creek Looking Northwest (Without Proposed Masonry Wall)

Source: Adapted by Ascent in 2021.

Figure 3.13-5 Viewpoint 4 from the Amouruso Ranch Specific Plan Area Looking South

Viewpoint 3

Viewpoint 3 is taken further north from the same dirt road as Viewpoint 2, on the northern side of Pleasant Grove Creek, facing the project site itself, as shown in Figure 3.13-4. Vividness from Viewpoint 3 is low. The landscape is composed of flat grassland, with the dirt road in the foreground and trees in the background that surround an agricultural ditch. The lack of striking and distinctive features, such as changes in topography or vegetation type, make the memorability and visual power of the landscape low. Intactness from Viewpoint 3 is high. The visual integrity of the landscape is high due to the lack of human-built elements. The grassland landscape is largely undisturbed with the exception of the dirt road in the foreground. The unity is also moderate because of the visual coherence and compositional harmony of the landscape, which is similar to other agricultural and undeveloped portions of the City of Roseville. The grassland area is bisected by the dirt road, common of agricultural/undeveloped areas in the region. Overall, the visual quality is moderately low. The visual character is a fairly unremarkable grassland, with little variation in the topography and other visual aspects.

Viewpoint 4

Viewpoint 4 is taken from the western portion of the Amouruso Ranch Specific Plan area facing the northern portion of the project site, as shown in Figure 3.13-5. The visual vividness from Viewpoint 4 is low to moderate. The landscape is largely composed of flat grassland; however, in the background are an array of trees associated with the minor drainages in the northeast quadrant of the plan area. The number and variation of trees in the background of the viewpoint increase the memorability of landscape. The intactness of Viewpoint 4 is high. No human-made elements are visible and the landscape is free from encroaching elements. The unity of Viewpoint 4 is moderate. The visual coherence and composition of the landscape considered as a whole is similar to other agricultural and undeveloped portions within the City. Overall, the visual quality is moderate. The visual character is a fairly unremarkable grassland, with little variation in the topography and other visual aspects; however, the presence of trees associated with the minor drainages which comprises a larger portion of the viewshed in comparison to the other three viewpoints increases the visual quality to some extent.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to aesthetics if it would:

- have a substantial adverse effect on a scenic vista;
- damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- substantially degrade the existing visual character or quality of public views of the site and its surroundings;
- would 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.

ISSUES NOT DISCUSSED FURTHER

Views of the project site and surrounding area are dominated by farmland and undeveloped grazing land. There are no scenic vistas within the project site or visible from the project site. Further, as discussed above, the City has not identified or designated scenic vistas within the City. Therefore, the proposed development of the site would not adversely affect a scenic vista, and this issue is not discussed further.

No designated or eligible state scenic highways are in the vicinity of the project site, and the project site is not visible from any officially designated or eligible state or locally designated scenic highway. Further, the City of Roseville does not have any locally designated scenic highways. Thus, there would be no impact, and this issue is not discussed further.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.13-1: Substantially Degrade the Existing Visual Character or Quality of the Site or its Surroundings

Development of the project site would convert approximately 180 acres of currently undeveloped grazing land to industrial uses. The proposed industrial park would be an active, industrial site, with increased truck traffic entering and exiting the project site throughout the day. The introduction of industrial uses and infrastructure in an area that is currently undeveloped would change the existing visual character of the area. However, the proposed industrial facilities would be designed to be visually consistent with surrounding specific plan area development and other industrial development in Roseville, and proposed landscaping would soften the industrial character of the project site. Further, the project would comply with General Plan policies related to community design and the City's Community Design Guidelines, which would ensure that the project would not substantially degrade the visual character of the project area. For these reasons, this impact would be **less than significant**.

The project site consists of undeveloped grazing land in northwest Roseville. The land is predominantly flat with some sparsely vegetated, low hills. Annual grasslands cover the majority of the project site. Pleasant Grove Creek traverses the property in an east–west direction, bisecting the site into a north and south parcel, and an irrigation ditch is present on the northern boundary of the project site. Valley oak riparian woodland habitat is present along the creek channels. A human-made flood channel is present in the southern half of the project site. The vegetation surrounding the flood channel is wetland dominant and includes curly dock (*Rumex crispus*) and sedges (*Carex spp*.), creating a visual transition from the annual grassland vegetation that covers the majority of the project site. The only structures identified within the project site are two water wells, one located along the southern edge of the property and one along the eastern edge of the property.

Development of the project site would change the existing visual character of the area both temporarily during construction and permanently during operation of the proposed industrial park. These impacts are discussed below.

Short-term Construction Impacts

Construction activities would reduce the vividness, unity, and intactness of the project site's existing visual character by introducing encroaching human elements into the natural landscape. Construction equipment and materials would be present in the project area and visible to sensitive viewer groups, including recreationists, motorists, and residents. The type and quantity of equipment would fluctuate throughout construction but would generally include earthmoving equipment; concrete mix trucks and concrete pumps; a crane for erection of panels; semi-trucks and other trucks for deliveries; and a variety of crew trucks, gradealls, boom lifts, scissor lifts, trenchers, generators, and personal autos. Building materials and equipment would be staged in various locations on the project site throughout the duration of construction and would vary as the phases are constructed. Therefore, it is anticipated that construction staging could occur in all four of the viewpoints described above in Section 3.13.2, "Environmental Setting." While construction activities would reduce the vividness, unity, and intactness of the project site's existing visual character, visual impacts from construction would be temporary and limited to the construction period. As described in Chapter 2, "Project Description," the project is anticipated to be developed in four phases depending on market demand, with the first phase beginning in late fall 2023 and ending 2024. The construction period of Phases 2 through 4 are not known at this time and will be determined based on market readiness and tenant demand. However, following completion of Phase 4, construction activities would cease and the impact to visual resources would be temporary.

The project site is also adjacent to three specific plan areas with ongoing and future plans for development: the Creekview Specific Plan area to the east, the West Roseville Specific Plan area to the south, and the Amoruso Ranch Specific Plan to the north. Construction activities and their associated visual impacts within the project vicinity are common due to the surrounding development; therefore, the addition of the visual impacts associated with the project would be limited to the sensitive viewer groups who experience ongoing development in the vicinity.

Given that the visual impact from construction would be temporary and that construction is already occurring in the vicinity of the project (and is therefore part of the visual landscape), the project would not substantially degrade the visual character of the area during construction. This impact would be **less than significant**.

Long-term Operational Impacts

Located at the junction of agricultural land to the west, a nature preserve (Al Johnson Wildlife Area) to the northwest, and three specific plan areas (the Creekview Specific Plan area to the east, the West Roseville Specific Plan area to the south, and the Amoruso Ranch Specific Plan to the north), the project site is surrounded by both developed and undeveloped land.

The project would develop the site into 15 buildings with a range of industrial uses along with an electrical substation. The proposed buildings would be site cast concrete with embellishments of corrugated metal, glass, aluminum window systems, and steel canopies. The maximum building height would be 44.8 feet. A concrete masonry wall would be installed along the project's eastern perimeter (up to Pleasant Grove Creek and then continuing north of the creek to the site's northern perimeter) to visually shield the project from the Creekview Specific Plan area, which is currently under development. This wall would be 8 feet tall. The proposed electrical substation would be located in the northwest corner of the south parcel. Although substation design is not completed yet, the substation would likely be a steel structure, approximately 40 feet tall with 65 feet tall steel poles. Additionally, a 14-foot-tall masonry wall would be constructed around the substation for site security. The wall would be similar in material and appearance to the 8-foot wall along the project site's eastern perimeter. A 65-foot-tall overhead 60 kilovolt (kV) double circuit line would be constructed to supply power to the substation (see Figure 3.14-1 in Section 3.14," Utilities and Service Systems," for proposed off-site alignment, primarily along Blue Oaks Boulevard). As described in the Methodology section, above, the electrical substation and related infrastructure were not simulated because these design details were not known at the time the simulations were prepared. The substation would be located sufficiently distant from residential areas such that it would not be visible from those areas (and there would be buildings in between the substation and residential areas to further shield views). The overhead electrical lines would be visible along Blue Oaks Boulevard, but these would be visually consistent with the character of this roadway corridor where there are existing overhead lines. On-site landscaping is proposed to include primarily low water-use trees, shrubs, and ground cover; no turf is proposed. Landscape setbacks would be provided around the perimeter of the site as a buffer along the streets, Pleasant Grove Creek, and the neighboring residential development.

Simulated Viewpoint 1 represents the view residents living in the northern portion of the developed Westpark Specific Plan area would have of the project site. From this viewpoint, the project would be visible in the background, within the areas containing the scattered trees associated with Pleasant Grove Creek. The buildings would range in height from approximately 42 to just under 45 feet and would not be substantially taller than the existing trees—some of which are 40 to 50 feet tall—by Pleasant Grove Creek. Additionally, the proposed buildings would be painted a neutral color and have a matte finish to limit the visual disturbance with the surrounding environment. The change in visual character that residents living in the Westpark Specific Plan area would have of the project site would not be substantial given the visual elements of the proposed buildings and the development occurring in the vicinity associated with the aforementioned specific plan areas.

Simulated Viewpoints 2 and 3 represent views from the dirt road that runs parallel to the eastern boundary of the project site. Residents in the western portion of the Creekview Specific Plan would be the most common sensitive receptors from this perspective. The project would result in a substantial change from Viewpoint 2 and 3. The flat grassland and trees in the background that surround Pleasant Grove Creek would be replaced with the proposed buildings, parking lot, and landscaping as shown in Figures 3.13-3 and 3.13-4. However, as described above, the visual character from Viewpoint 2 and 3 is a fairly unremarkable with little variation in the topography and other visual aspects, and the visual quality is rated as moderately low. The proposed project features would not substantially degrade the existing quality of the area given the relatively low visual quality. Additionally, the residents in the Creekview Specific Plan would be privy to views of other development given that the specific plan proposes a 7-acre school site, 2.6 acres of utilities sites, and 19.3 acres for commercial development (City of Roseville 2021). Further, though not depicted in the visual simulations for Viewpoints 2 and 3, an 8-foot-tall, concrete masonry wall would be installed along the site's eastern perimeter to shield views of the project site from the Creekview Specific Plan area.

Simulated Viewpoint 4 represents a view from the western portion of the Amouruso Ranch Specific Plan area facing the northern portion of the project site. Residents in the Amouruso Ranch Specific Plan area would be the most common sensitive receptors from this perspective. From this viewpoint, the project would be visible in the background among the trees associated with the minor drainages in the northeast quadrant of the Amouruso Ranch Specific Plan area. Similar to the visual changes from Viewpoint 1, the proposed buildings would not be substantially taller than the existing trees by Pleasant Grove Creek, and the buildings would be painted a neutral color and have a matte finish to limit the visual disturbance with the surrounding environment. The project would not substantially degrade the visual character and views that residents in the Amouruso Ranch Specific Plan area would have of the project site given the visual elements of the proposed buildings and the development occurring in the vicinity associated with the aforementioned specific plan areas.

The Al Johnson Wildlife Area is located northwest of the site and is used by wildlife and recreationists. As described in Section 3.13.2, "Environmental Setting," views within the Al Johnson Wildlife Area have a high vividness and moderate to high visual intactness and unity. Development of the project site could degrade the Al Johnson Wildlife Area's visual quality by placing urban development adjacent to the nature preserve, especially because there would be an abrupt transition between open space and development. The City of Roseville General Plan includes Policy LU9.9, which states that development proposed on the western edge of the City shall provide a distinctive open space transition to create a physical and visual buffer between the City and County that ensures that the identity and uniqueness of the City and County will be maintained. The project has been designed to concentrate development in the southern portion of the project site, away from the nature preserve, as well as in the northeast portion of the project site on the other side of the future alignment of Placer Parkway. The northwest portion of the project site, which is directly adjacent to the nature preserve, would remain undeveloped, thereby providing an open space transition between the project development and the nature preserve. As described above, residential development in the area is already planned and, in some cases, under construction. Thus, urban development is already part of the visual landscape in this area. Due to its distance from major thoroughfares and the generally flat terrain of the area, there are no public views of the nature preserve that would be obstructed by the project.

As mentioned above in Section 3.13.2, "Environmental Setting," the visual character of the project site is moderate. While the majority of the project site is covered in annual grassland that is contiguous with close-by agricultural parcels, several unique visual patterns are present, including the vegetation transitions marked by Pleasant Grove Creek and the human-made flood channel. Pleasant Grove Creek and the human-made flood channel combine with the annual grassland landscape to create striking visual patterns, which adds to the moderate visual vividness of the project site. Additionally, the rural, undeveloped landscape is generally free of encroaching human-made elements, as the only structures present are two water wells. The proposed development would substantially alter the visual character of the project site from undeveloped grazing land to industrial development. However, the visual character of the project site is moderate, is similar to surrounding agricultural lands, and is generally not unique or distinctive relative to the visual character of the surrounding region, which is also dominated by agricultural land. Furthermore, the project would include landscaping (described above), which would soften the industrial character of the site and provide a buffer between the site and neighboring uses. In addition, given the project site's proximity to the three specific plan areas with varying plans of development from residential to commercial, the proposed industrial facilities would be designed to be visually consistent with surrounding development and other industrial development in Roseville.

Roseville General Plan policies and the City's Community Design Guidelines serve to promote the visual compatibility of developments through the application of community design standards. Specifically, Community Design Guidelines identify site planning and architectural design standards for new development, landscaping and screening techniques to preserve and enhance the visual quality, and lighting design and provisions to promote public safety and reduce glare and light spillover onto adjacent properties. The project would be consistent with the General Plan policies and would adhere to the City's Community Design Guidelines.

For these reasons, operation of the project would not substantially degrade the visual character of the project site and its surroundings. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.13-2: Conflict with Applicable Zoning and Other Regulations Governing Scenic Quality

The project would require a General Plan Amendment (GPA) and rezone to allow for industrial use and a designation of the creek area as open space. However, the existing land use designation—Public/Quasi-Public—does not include designations governing scenic quality. Additionally, the new designations—Light Industrial (LI) and General Industrial (IND)—do not include designations governing scenic quality. The new designation—Open Space (OS) along Pleasant Grove Creek—would allow for uses that are compatible with General Plan policies related to open space and scenic quality. Therefore, with the proposed GPA and rezone, the project would not conflict with a regulation governing scenic quality. This impact would be **less than significant**.

The project would develop the site into an industrial park that would support a range of industrial uses, including light manufacturing, warehousing, and distribution. A GPA and rezone would be required to allow for industrial use of the site and a designation of the creek area as open space. The proposed GPA and rezone would change the land use designation from Public/Quasi-Public, which primarily allows for municipal and governmental facilities to Light Industrial (LI), General Industrial (IND), and Open Space (OS) along Pleasant Grove Creek. The Public/Quasi-Public district is applied to land intended for education, religious assembly, governmental offices, municipal corporation yards, water treatment plants, power generating facilities (including privately owned facilities), and other publicly-owned facilities (City of Roseville 1996). No scenic regulations are associated with this designation. The Light Industrial (LI) and General Industrial (IND) designations allow for light industrial uses such as manufacturing, processing, assembly, high technology, research and development and storage uses and a broad range of industrial uses including manufacturing, assembly, wholesale distribution, and warehousing (City of Roseville 1996). Neither designation contains regulations related to scenic quality. The Open Space designation allows for agriculture, resource protection and restoration, and resource related recreation. As described above in Section 3.13.1, "Regulatory Setting," several aesthetic-related regulations associated with the open space designation are outlined in the City of Roseville General Plan, including Policy LU7.6, which encourages project designs that place a high priority and value on open space, and the preservation, enhancement and incorporation of natural resources and other features including consideration of topography, vegetation, wetlands, and water courses. The new open space designation adjacent to Pleasant Grove Creek would allow for natural lands, passive recreation and minor recreation facilities, walking and bike trails, and resource interpretive facilities. These uses are compatible with the General Plan policies related to open space and scenic quality. (See discussion under Impact 3.13-1 above for a discussion regarding the project's compatibility with General Plan Policy LU9.9 related to providing a distinctive open space transition to create a physical and visual buffer between the City and County.) For these reasons, with the proposed GPA and rezone, the project would not conflict with a regulation governing scenic quality. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.13-3: Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area

Project implementation would result in an incremental increase in the amount of light and glare on the project site, which would affect nighttime views in the area. However, the project would adhere to the City's Community Design Guidelines, which require that lighting sources have cut off lenses and are located to avoid light spillage and glare on adjacent properties and in private spaces. Because the project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, this impact would be **less than significant**.

No sources of light or glare are present on the undeveloped project site. Sources of nighttime light around the project site are minimal. Residential neighborhoods associated with the West Roseville Specific Plan area create some nighttime light that can be seen from the project site. Occasional glare occurs from vehicles accessing roads adjacent

to the project site. With the exception of the two water wells, no structures are present on the project site that create shadows. The trees surrounding Pleasant Grove Creek provide shade to the creek and shadows on the project site

Development of the project site would result in an incremental increase in the amount of light and glare on the project site, which would affect nighttime views in the area both temporarily during construction and permanently during operation of the proposed industrial park. These impacts are discussed below.

Short-term Construction Impacts

Glare would be introduced to the project area during construction from windshields of vehicles and construction equipment. These would be small sources of glare, would be at ground level, and would not adversely affect daytime views of the area. Additionally, construction activities would occur during daytime hours. Security lighting may be used on site at night and would represent a new source of lighting. As described in Section 2.5, "Project Construction," the project is anticipated to be developed in four phases, with the first phase beginning in late fall 2023 through 2024. The construction period of Phases 2 through 4 is not known at this time and will be determined based on market readiness and tenant demand. Following completion of Phase 4, construction actives would cease and the impact associated from glare and lighting would be temporary. Additionally, active construction associated with the surrounding specific plans is occurring directly adjacent to the project site, and this is expected to coincide with project construction. The surrounding construction would include glare/lighting during both the day and night; therefore, the project's increase to this lighting would be incremental. Given the temporary nature of construction and the surrounding development, project construction would have a **less-than-significant impact** related to light or glare.

Long-term Operational Impacts

The project would add metal and other reflective surfaces (e.g., glass) associated with the industrial facilities and parked cars in the parking lot. These industrial facilities would also include exterior night lighting, including parking lot lighting and lighting of the electrical substation. The proposed buildings would be site cast concrete with embellishments of corrugated metal, glass, aluminum window systems, and steel canopies. Site cast concrete has no glare. Corrugated metal, aluminum window systems, and steel canopies are all matte finish and built specifically with no glare. Glass is the only reflective surface and would be used sparingly. The addition of reflective surfaces would increase daytime glare on the project site, which is currently void of light and glare sources. The project facilities would also include exterior nighttime lighting, including parking lot lighting and lighting of the electrical substation. The addition of nighttime lighting from the project could result in skyglow and light pollution if lights are cast in an upward direction.

To reduce the impact of glare and lighting from operation, a lighting plan has been prepared for the project that conforms with the City's Community Design Guidelines, and specifically for Office and Industrial Development (City of Roseville 2008). Lighting sources would have cut off lenses and would be located to avoid light spillage and glare on adjacent properties and in private spaces. The lighting plan would be reviewed and approved by the City prior to project implementation. With implementation of the lighting plan, the project would have a **less-than-significant impact** related to light or glare.

Mitigation Measures

No mitigation is required.

3.14 ENERGY

This section was prepared pursuant to the State CEQA Guidelines Section 15126 and Appendix F of the State CEQA Guidelines, which require that all CEQA documents include a discussion of the potential energy impacts of projects. The analysis considers whether the project would result in inefficient, wasteful, and unnecessary consumption of energy. This section also describes potential impacts related to existing electric and natural gas infrastructure, including whether the project would require or result in the relocation or construction of new or expanded electric or natural gas infrastructure, the construction or relocation of which could cause significant environmental effects.

No comment letters regarding energy were received in response to the notice of preparation (see Appendix A).

3.14.1 Regulatory Setting

Energy conservation is embodied in many federal, state, and local statutes and policies. At the federal level, energy standards apply to numerous products (e.g., the US Environmental Protection Agency's [EPA] EnergyStar™ program) and transportation (e.g., fuel efficiency standards). At the state level, Title 24 of the California Code of Regulations sets forth energy standards for buildings. Further, the state provides rebates/tax credits for installation of renewable energy systems and offers the Flex Your Power program promotes conservation in multiple areas. At the local level, individual cities and counties establish policies in their general plans and climate action plans (CAPs) related to the energy efficiency of new development and land use planning and to the use of renewable energy sources.

FEDERAL

Energy Policy and Conservation Act, and CAFE Standards

The Energy Policy and Conservation Act of 1975 established nationwide fuel economy standards to conserve oil. Pursuant to this Act, the National Highway Traffic and Safety Administration, part of the US Department of Transportation (DOT), is responsible for revising existing fuel economy standards and establishing new vehicle economy standards.

The Corporate Average Fuel Economy (CAFE) program was established to determine vehicle manufacturer compliance with the government's fuel economy standards. Compliance with the CAFE standards is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the country. EPA calculates a CAFE value for each manufacturer based on the city and highway fuel economy test results and vehicle sales. The CAFE values are a weighted harmonic average of the EPA city and highway fuel economy test results. Based on information generated under the CAFE program, DOT is authorized to assess penalties for noncompliance. Under the Energy Independence and Security Act of 2007 (described below), the CAFE standards were revised for the first time in 30 years.

Energy Policy Act of 1992 and 2005

The Energy Policy Act of 1992 (EPAct) was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain federal, state, and local government and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in EPAct. Federal tax deductions are allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the act to consider a variety of incentive programs to help promote AFVs. The Energy Policy Act of 2005 provides renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a federal purchase requirement for renewable energy.

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 is designed to improve vehicle fuel economy and help reduce US dependence on oil. It represents a major step forward in expanding the production of renewable fuels, reducing dependence on oil, and confronting global climate change. The Energy Independence and Security Act of 2007 increases the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard requiring fuel producers to use at least 36 billion gallons of biofuel in 2022, which represents a nearly five-fold increase over current levels; and reduces US demand for oil by setting a national fuel economy standard of 35 miles per gallon by 2020—an increase in fuel economy standards of 40 percent.

By addressing renewable fuels and the CAFE standards, the Energy Independence and Security Act of 2007 builds upon progress made by the Energy Policy Act of 2005 in setting out a comprehensive national energy strategy for the 21st century.

STATE

Warren-Alquist Act

The 1975 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The Act established state policy to reduce wasteful, uneconomical, and unnecessary uses of energy by employing a range of measures. The California Public Utilities Commission (CPUC) regulates privately-owned utilities in the energy, rail, telecommunications, and water fields.

State of California Energy Action Plan

CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The first Energy Action Plan (EAP) emerged in 2003 from a crisis atmosphere in California's energy markets. The state's three major energy policy agencies (CEC, CPUC, and the Consumer Power and Conservation Financing Authority [established under deregulation and now defunct]) came together to develop one high-level, coherent approach to meeting California's electricity and natural gas needs. It was the first time that energy policy agencies formally collaborated to define a common vision and set of strategies to address California's future energy needs and emphasize the importance of the impacts of energy policy on the California environment.

In the October 2005 *Energy Action Plan II*, CEC and CPUC updated their energy policy vision by adding some important dimensions to the policy areas included in the original EAP, such as the emerging importance of climate change, transportation-related energy issues and research and development activities. CEC adopted an update to the EAP II in February 2008 that supplements the earlier EAPs and examines the state's ongoing actions in the context of global climate change.

The current plan is the 2019 California Energy Action Plan which was published in November 2019. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access (CEC 2019).

Assembly Bill 2076: Reducing Dependence on Petroleum

Pursuant to Assembly Bill (AB) 2076 (Chapter 936, Statutes of 2000), CEC and the California Air Resources Board (CARB) prepared and adopted a joint agency report in 2003, *Reducing California's Petroleum Dependence.* Included in this report are recommendations to increase the use of alternative fuels to 20 percent of on-road transportation fuel use by 2020 and 30 percent by 2030, significantly increase the efficiency of motor vehicles, and reduce per capita VMT (CEC 2003). Further, in response to the CEC's 2003 and 2005 *Integrated Energy Policy Reports*, Governor Davis directed CEC to take the lead in developing a long-term plan to increase alternative fuel use. A performance-based

goal of AB 2076 was to reduce petroleum demand to 15 percent below 2003 demand by 2020 and maintaining that level for the foreseeable future.

Integrated Energy Policy Report

Senate Bill (SB) 1389 (Chapter 568, Statutes of 2002) required CEC to: "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices. The Energy Commission shall use these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (Public Resources Code [PRC] Section 25301[a]). This work culminated in the Integrated Energy Policy Report (IEPR).

CEC adopts an IEPR every two years and an update every other year. The 2020 IEPR is the most recent IEPR, which was adopted March 2021. The 2020 IEPR provides a summary of priority energy issues currently facing the state, outlining strategies and recommendations to further the state's goal of ensuring reliable, affordable, and environmentally responsible energy sources. Energy topics covered in the report include progress toward statewide renewable energy targets and issues facing future renewable development; efforts to increase energy efficiency in existing and new buildings; progress by utilities in achieving energy efficiency targets and potential; improving coordination among the state's energy agencies; streamlining power plant licensing processes; results of preliminary forecasts of electricity, natural gas, and transportation fuel supply and demand; future energy infrastructure needs; the need for research and development efforts to statewide energy policies; and issues facing California's nuclear power plants (CEC 2020a).

Senate Bill 1078: California Renewables Portfolio Standard Program

SB 1078 (Chapter 516, Statutes of 2002) establishes a renewable portfolio standard (RPS) for electricity supply. The RPS requires that retail sellers of electricity, including investor-owned utilities and community choice aggregators, provide 20 percent of their supply from renewable sources by 2017. This target date was moved forward by SB 1078 to require compliance by 2010. In addition, electricity providers subject to the RPS must increase their renewable share by at least 1 percent each year. The outcome of this legislation will affect regional transportation powered by electricity. As of 2019, the state has reported that 36 percent of electricity is sourced from certified renewable sources (CEC 2020b).

Senate Bill X1-2: California Renewable Energy Resources Act

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014-2016 compliance period, and at least 75 percent for 2016 and beyond.

Senate Bill 100: California Renewables Portfolio Standard Program

SB 100 requires that all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, supply 44 percent of retail sales from renewable resources by December 31, 2024, 50 percent by December 31, 2026, 52 percent by December 31, 2027, and 60 percent by December 31, 2030. The law requires that eligible renewable energy resources and zero-carbon resources supply 100 percent of retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all state agencies by December 31, 2045.

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

Assembly Bill 1007: State Alternative Fuels Plan

AB 1007 (Chapter 371, Statues of 2005) required CEC to prepare a state plan to increase the use of alternative fuels in California. CEC prepared the State Alternative Fuels Plan (SAF Plan) in partnership with CARB and in consultation with other state, federal, and local agencies. The SAF Plan presents strategies and actions California must take to increase the use of alternative non-petroleum fuels in a manner that minimizes the costs to California and maximizes the economic benefits of in-state production. The SAF Plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuel use, reduce greenhouse gas (GHG) emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality.

California Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the state's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Code was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2019 California Energy Code was adopted by CEC on May 9, 2018 and will apply to projects constructed after January 1, 2020. The 2019 California Energy Code is designed to move the state closer to its zero-net energy goals for new residential development. It does so by requiring all new residences to install enough renewable energy to offset all the electricity needs of each residential unit (California Code of Regulations [CCR] Title 24, Part 6, Section 150.1(c)4). CEC estimates that the combination of mandatory on-site renewable energy and prescriptively required energy efficiency standards will result in a 53 percent reduction in new residential construction as compared to the 2016 California Energy Code. Non-residential buildings are anticipated to reduce energy consumption by 30 percent as compared to the 2016 California Energy Code primarily through prescriptive requirements for high-efficiency lighting (CEC 2018). The Energy Code is enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided that these standards exceed those provided in the California Energy Code.

Assembly Bill 32, Senate Bill 32, and Climate Change Scoping Plan and Update

In December 2008, CARB adopted its Climate Change Scoping Plan, which contains the main strategies California will implement to achieve reduction of approximately 118 million metric tons (MMT) of carbon dioxide-equivalent (CO_2e) emissions, or approximately 21.7 percent from the state's projected 2020 emission level of 545 MMT of CO_2e under a business-as-usual scenario (this is a reduction of 47 MMT CO_2e, or almost 10 percent, from 2008 emissions). In May 2014, CARB released and has since adopted the *First Update to the Climate Change Scoping Plan* to identify the next steps in reaching AB 32 goals and evaluate progress that has been made between 2000 and 2012 (CARB 2014). According to the update, California is on track to meet the near-term 2020 GHG limit and is well positioned to maintain and continue reductions beyond 2020 (CARB 2014). The update also reports the trends in GHG emissions from various emissions sectors (e.g., transportation, building energy, agriculture).

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the state's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050. Achievement of these goals will have the co-benefit of reducing California's dependency of fossil fuels and making land use development and transportation systems more energy efficient.

California's 2017 Climate Change Scoping Plan (2017 Scoping Plan), prepared by CARB, outlines the main strategies California will implement to achieve the legislated GHG emission target for 2030 and "substantially advance toward our 2050 climate goals" (CARB 2017: 1, 3, 5, 20, 25–26). It identifies the reductions needed by each GHG emission sector (e.g., transportation, industry, electricity generation, agriculture, commercial and residential, pollutants with high global warming potential, and recycling and waste). In 2015, electricity generation accounted for 11 percent of the state's GHG emissions. California plans to significantly reduce GHG emissions from the energy through the development of renewable electricity generation in the form of solar, wind, geothermal, hydraulic, and biomass generation. The state was on target meet the SB X1-2-33 percent renewable energy target by 2020 and will continue to increase statewide renewable energy to 50 percent by 2030, as directed by SB 350. Additionally, the state will further its climate goals through improving the energy efficiency of residential and non-residential buildings by continual updates (i.e., every three years) to the California Energy Code, which contains mandatory and prescriptive energy efficiency standards for all new construction.

More details about the statewide GHG reduction goals and 2017 Scoping Plan measures are provided in the regulatory setting of Section 3.5, "Greenhouse Gas Emissions and Climate Change."

Executive Order B-30-15

On April 20, 2015, Governor Brown signed Executive Order B-30-15 to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. The Governor's executive order aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California has met the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the US to limit global warming below 2 degrees Celsius, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Advanced Clean Cars Program

In January 2012, CARB approved the Advanced Clean Cars program which combines the control of GHG emissions and criteria air pollutants, as well as requirements for greater numbers of zero-emission vehicles, into a single package of standards for vehicle model years 2017 through 2025. The new rules strengthen the GHG standard for 2017 models and beyond. This will be achieved through existing technologies, the use of stronger and lighter materials, and more efficient drivetrains and engines. The program's zero-emission vehicle regulation requires battery, fuel cell, and/or plug-in hybrid electric vehicles to account for up to 15 percent of California's new vehicle sales by 2025. The program also includes a clean fuels outlet regulation designed to support the commercialization of zero-emission hydrogen fuel cell vehicles planned by vehicle manufacturers by 2015 by requiring increased numbers of hydrogen fueling stations throughout the state. The number of stations will grow as vehicle manufacturers sell more fuel cell vehicles. By 2025, when the rules will be fully implemented, the statewide fleet of new cars and light trucks will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions than the statewide fleet in 2016 (CARB 2016).

LOCAL

City of Roseville General Plan 2035

The City of Roseville General Plan 2035 contains a number of policies applicable to the proposed project that address energy (City of Roseville 2020). Key provisions from the Air Quality and Climate Change Element are summarized below.

Air Quality and Climate Change Element Policies

- **Policy AQ1.11** Promote local purchase and use of electric vehicles through incentives and strategic expansion of charging infrastructure.

- **Policy AQ1.17** Conserve energy and reduce air pollutant emissions by encouraging energy efficient building designs and transportation systems and promoting energy efficiency retrofits of existing structures.
- **Policy AQ1.18** Promote building and transportation energy efficiency in new residential and commercial development by encouraging and incentivizing implementation measures early in the design and development process.
- **Policy AQ1.19** Encourage energy efficiency by identifying potential cost savings, resource, and health benefits.

General Plan Implementation Measures

Appendix A of the General Plan identifies the General Plan's implementation measures, which are proactive activities designed to implement General Plan polices. The following may apply to the project:

Development Review Process

Project review should address energy efficient building and site designs, as well as the proper storage, use, and disposal of hazardous materials.

Air Quality and Climate Change Mitigation Strategies - Area and Stationary Sources (Ongoing)

Require area and stationary source projects that generate significant amounts of air pollutants to incorporate air quality mitigation in their design, including the use of best available control technology for stationary industrial sources; clean fuel sources for heating and cooling; clean fuel technology at fueling stations; and other strategies, in consultation with PCAPCD.

Air Quality and Climate Change Mitigation Strategies - Mobile Sources (Ongoing)

Implement mitigation strategies to reduce air pollutant and greenhouse gas emissions from motor vehicles. These strategies, which may consist of improvements and refinements to the transportation and circulation infrastructure, may include, but are not limited to:

- Promoting commercial/industrial project proponent sponsorship of van pools or club buses;
- Encouraging commercial/industrial project day care and employee services at the employment site;
- Encouraging the provision of transit, especially for employment-intensive uses;
- Providing subscription bus service to major trip generators or events;
- Providing incentives for the use of transportation alternatives; and
- Locate point sources, such as manufacturing and extracting facilities, in areas designated for industrial development and separated from residential areas and other sensitive receptors (e.g., homes, schools, and hospitals).

Air Quality and Climate Change Mitigation Strategies - Land Use (Ongoing)

Encourage development to be located and designed to minimize greenhouse gas and air pollutant emissions and avoid exposure to substantial pollutant concentrations by doing the following:

- Provide for mixed-use and transit-supportive development that reduces the length and frequency of vehicle trips or reduces the need for vehicle trips by providing practical pedestrian, bicycle, and transit options.

The City of Roseville General Plan 2035 (City of Roseville 2020) contains the following policies applicable to the proposed project that address electric resources and privately owned utilities:

Public Facilities Element Policies

- **Policy PF4.1:** Secure supply-side and demand-side electric resources, as necessary, to meet forecasted demand and reserve requirements.
- **Policy PF4.2:** Provide improvements to the sub-transmission and distribution system, consistent with facility planning studies, to maintain a reliable source of electricity.
- **Policy PF4.3:** Develop siting and land use compatibility standards for energy facilities.

- **Policy PF4.4:** Comply with federal, state, and local greenhouse gas reduction targets, renewable portfolio standards and carbon-free electricity requirements.
- **Policy PF4.5:** Maintain an Integrated Resource Plan, incorporating energy efficiency, demand- and supply-side management, greenhouse gas reduction, renewable portfolio standard compliance, conservation, load management, and reliability strategies.
- **Policy PF4.6:** Pursue reasonable and cost-effective energy efficiency, conservation, and load management programs that provide benefits to the community.
- **Policy PF4.7:** Pursue effective measures to enhance reliability through interconnection of the electric utility system with the region-wide grid.
- **Policy PF4.8:** Require new development to pay a fair share of the cost of new sub-transmission and distribution needed to serve the development and to dedicate sites and easements needed for substations, transmission, sub-transmission, and distribution.

City of Roseville Communitywide Sustainability Action Plan

The Roseville Communitywide Sustainability Action Plan (SAP) sets forth a comprehensive strategy to reduce GHG emissions and improve energy efficiency, as well as to promote economic growth based on clean technology and sustainable practices (City of Roseville 2010). While the 2035 General Plan includes goals and policies that guide the City's approach to addressing sustainability and climate change, the SAP serves as a more detailed strategy to implement the City's sustainability and climate change policies. The following are some of the energy measures suggested by the SAP that are relevant to the project.

Measure E-1.2

- Qualifying existing commercial buildings should strive to achieve ENERGY STAR performance criteria. This rating denotes that the building's estimated energy use is intended to be in the top 25% compared to similar buildings throughout the nation.
- For building types not qualifying for ENERGY STAR, the design should strive for a 15% reduction in the overall energy budget over California Title 24 performance standards.

Measure E-1.4

- Qualifying new commercial construction should strive to achieve ENERGY STAR performance criteria. This denotes that the building's estimated energy use is intended to be in the top 25% compared to similar buildings throughout the nation. Once the building is built and operating for at least one year, it may qualify to receive an ENERGY STAR plaque.
- For new commercial construction projects not qualifying for ENERGY STAR, building designs should strive for a 15% reduction in the overall energy budget over California Title 24 performance standards.

Measure E-1.5

- Continue to explore innovative ways to promote energy efficiency and renewable energy use in the community.

3.14.2 Environmental Setting

PHYSICAL SETTING

Energy Facilities and Services in the Project Area

Roseville Electric is the electrical utility provider for the project area. The City's utility obtains power from variety of sources. In 2020, Roseville Electric consisted of 31.9 percent renewable which consisted of solar, wind, hydroelectric, geothermal, and biomass (Roseville Electric 2020).

Energy Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. One-third of energy commodities consumed in California is natural gas. In 2014, approximately 35 percent of natural gas consumed in the state was used to generate electricity. Residential land uses represented approximately 17 percent of California's natural gas consumption with the balance consumed by the industrial, resource extraction, and commercial sectors (EIA 2017). Power plants in California generate approximately 70 percent of the in-state electricity demand, with large hydroelectric in the Pacific Northwest and power plants in the Southwestern US generating the remaining electricity (CEC 2017). The contribution of in- and out-of-state power plants depends on the precipitation that occurred in the previous year, the corresponding amount of hydroelectric power that is available, and other factors.

Alternative Fuels

A variety of alternative fuels are used to reduce demand for petroleum-based fuel. The use of these fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard, AB 32 Scoping Plan). Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many transportation fuels, including:

- biodiesel,
- electricity,
- ethanol (E-10 and E-85),
- hydrogen,
- natural gas (methane in the form of compressed and liquefied natural gas),
- propane,
- renewable diesel (including biomass-to-liquid),
- synthetic fuels, and
- gas-to-liquid and coal-to-liquid fuels.

California has a growing number of alternative fuel vehicles through the joint efforts of CEC, CARB, local air districts, federal government, transit agencies, utilities, and other public and private entities. As of January 2022, California contained nearly 14,460 alternative fueling stations (AFDC 2022).

COMMERCIAL AND RESIDENTIAL ENERGY USE

Homes built between 2000 and 2015 used 14 percent less energy per square foot than homes built in the 1980s, and 40 percent less energy per square foot than homes built before 1950. However, the increased size of newer homes has offset these efficiency improvements. Primary energy consumption in the residential sector total 21 quadrillion British thermal units (Btu) in 2009 (the latest year the EIA's *Residential Energy Consumption Survey* was completed), equal to 54 percent of consumption in the buildings sector and 22 percent of total primary energy consumption in the US. Energy consumption increased 24 percent from 1990 to 2009. However, because of projected improvements in building and appliance efficiency, the EIA 2017 Annual Energy Outlook forecast a 5 percent increase in energy consumption from 2016 to 2040 (EIA 2017).

In aggregate, commercial buildings consumed 46 percent of building energy consumption and approximately 19 percent of US energy consumption. In comparison, the residential sector consumed approximately 22 percent of US energy consumption (US Department of Energy 2016).

ENERGY USE AND CLIMATE CHANGE

Scientists and climatologists have produced evidence that the burning of fossil fuels by vehicles, power plants, industrial facilities, residences, and commercial facilities has led to an increase of the earth's temperature. For an analysis of greenhouse gas production and the project's impacts on climate change, refer to Section 3.5, "Greenhouse Gas Emissions and Climate Change."

ELECTRICAL AND NATURAL GAS INFRASTRUCTURE

Roseville Electric provides electrical service to customers within the City limits. Roseville Electric consists of transmission and generation facilities, sub-transmission and substation facilities, and distribution facilities that serve existing development. The Pacific Gas and Electric Company (PG&E) is the natural gas service provider for the City. PG&E's underground transmission pipelines are located throughout City rights-of-way to serve existing development. Expansion of electrical and natural gas facilities would be required to serve the proposed project.

3.14.3 Impacts and Mitigation Measures

METHODOLOGY

Levels of construction- and operation-related energy consumption by the project were estimated and measured in megawatt-hours of electricity, therms of natural gas, gallons of gasoline, and gallons of diesel fuel. Energy consumption estimates for construction and operational activities were calculated using the proposed phasing of the project, the California Emissions Estimator Model (CalEEMod) version 2020.4.0 computer program, and fuel consumption rates obtained from CARB's EMission FACtors (EMFAC) model for Placer County. Where project-specific information was not known, CalEEMod default values based on the project's location were used. Table 3.14-1 summarizes the levels of energy consumption for each year of construction and Table 3.14-2 summarizes the levels of energy consumption for the first year of operation during the buildout year of 2030. Table 3.14-3 summarizes the gasoline and diesel consumption estimated for the project in 2030.

Impacts related to electrical and natural gas service systems that would result from project implementation were evaluated by comparing existing infrastructure, its available capacity, and ability to serve future demand on electrical and natural gas service systems that would be caused by the project. The project's electrical and natural gas demands were calculated, as described above. The analysis determines whether the increased demand would result in the need for new or expanded facilities, the construction of which could possibly result in adverse impacts on the physical environment.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to energy if it would:

- result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation; or
- conflict with or obstruct a state or local plan for renewable energy or energy efficiency; or
- require or result in the relocation or construction of new or expanded electric power or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

ISSUES NOT DISCUSSED FURTHER

All issues related to energy listed under the significance criteria above are addressed in this section.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.14-1: Wasteful, Inefficient, or Unnecessary Consumption of Energy, During Project Construction or Operation

Implementation of the project would increase fuel (gasoline and diesel) and electricity consumption. Construction-related energy consumption would be temporary and would not require additional capacity or increased peak or base period demands for electricity or other forms of energy. The project would primarily be an industrial facility with mostly warehousing and some light manufacturing uses. Implementation of mitigation measures included in Section 3.5, "Greenhouse Gas Emissions and Climate Change," would result in increases in energy (building and transportation) efficiency and would increase the percent of renewable energy use over what is currently required by local or state laws. Thus, energy consumption associated with development of the project would not result in wasteful, inefficient, or unnecessary consumption of energy; this impact would be **less than significant.**

Appendix F of the State CEQA Guidelines requires the consideration of the energy implications of a project. CEQA requires mitigation measures to reduce "wasteful, inefficient and unnecessary" energy usage (PRC Section 21100, subdivision [b][3]). Neither the law nor the State CEQA Guidelines establish criteria that define wasteful, inefficient, or unnecessary use. Compliance with CCR Title 24 Energy Efficiency Standards would result in energy-efficient buildings. However, compliance with building codes does not adequately address all potential energy impacts during construction and operation. For example, various fuel types and energy sources would be required during construction activities and the project would result in increased use of gasoline at fueling stations.

Construction-Related Energy

Energy would be required to construct, operate, and maintain construction equipment and to produce and transport construction materials associated with construction of the project. The project would be constructed in four phases which would occur from 2023 to 2029. The one-time energy expenditure required to construct the physical buildings and infrastructure associated with the project would be nonrecoverable. Most energy consumption would result from operation of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks supplying materials. See Table 3.14-1 for an estimate of fuel needed for construction activities.

Although construction activities would require fuel and other energy sources, increases would be temporary. Construction contractors strive to complete construction projects in an efficient manner to meet project schedules and minimize cost (to maximize their profitability). Thus, only the necessary amount of fuel would be consumed to complete construction of the proposed project.

Table 3.14-1 Construction Energy Consumption

Phase	Year	Diesel (Gallons)	Gasoline (Gallons)
1	2023	32,920	36,481
2	2024	30,290	36,463
3	2026	30,447	41,335
4	2028	35,013	36,849
Total		128,671	151,129

Notes: Gasoline gallons include on-road gallons from worker trips. Diesel gallons include off-road equipment and on-road gallons from worker and vendor trips.

Source: Calculations by Ascent Environmental in 2022.

Building Energy

Operation of project buildings would be typical regarding use of electricity for lighting, space and water heating, appliances, and landscape maintenance activities. Indirect energy use would include wastewater treatment and solid waste removal. Implementation of the project would increase electricity consumption in the region relative to existing

conditions. The project would also include installation of an electric substation, which would be used to meet energy requirement for the future tenants. See Table 3.14-2 for an estimate of project operational energy needs.

Table 3.14-2 Operational Energy Consumption

Land Use/Energy Type	Energy Consumption	Units
Roseville Industrial Park		
Electricity	23,392,700	kWh/year
Natural Gas	394,721	therms/year

Notes: kWh/year = kilowatt-hours per year; therms/year = energy consumption from natural gas per year.

Source: Calculations by Ascent Environmental in 2022.

All new buildings would be constructed in accordance with the most recent and applicable building codes (e.g., Title 24) at the time of construction, which includes energy efficiency requirements. Further, the project does not include residential units; thus, the project would not result in an increase in permanent residents or result in new population growth such that added energy demand would occur that the local utility would have to accommodate. The project would also install a new substation, which would reduce the load on the nearby utilities due to its energy use.

In addition, Mitigation Measure 3.5-1a and 3.5-1b in Section 3.5, "Greenhouse Gas Emissions and Climate Change," would result in reductions in energy consumption. Specifically, on-site GHG-reduction measures would require on-site solar panel systems for energy demand, which would replace the sources like natural gas and electricity with the use of on-site renewable energy. Mitigation Measure 3.5-1a would also reduce electricity consumption from the use of high efficiency appliances and fixtures.

Transportation and Off-Road Equipment Energy

The estimated weekday VMT (8,160 miles) is based on trip generation rates and trip distances included in the traffic study conducted for the project (see Section 3.3, "Transportation and Circulation"). Annual VMT associated with the project would be 28,314,816 and would result in additional fuel demand of 233,176 gallons of gasoline per year and 1,014,157 gallons of diesel per year (Table 3.14-3).

The project would also consume energy during operations due to the use off-road equipment like yard trucks, forklifts, diesel generators, and Transport Refrigeration Units (TRUs). All the inputs considered to calculate the fuel consumption from the off-road equipment are from the CalEEMod defaults. For TRUs, the inputs are considered based on a combustion engine found on a typical TRU system. Refer to Appendix D for detailed inputs and calculations for the fuel consumption from off-road equipment operation. The off-road equipment would result in the consumption of 1,755,325 gallons of diesel per year (Table 3.14-3). Operational transportation-related fuel estimates are summarized in Table 3.14-3.

Table 3.14-3 Gasoline and Diesel Consumption in 2030

Vehicle Category	Gasoline (gal/year)	Diesel (gal/year)
Passenger Vehicles	938,136	0
Heavy Duty Vehicles	76,021	233,176
Off-Road Equipment	0	1,755,325
Total (All Vehicle Types)	**1,014,157**	**1,988,501**

Notes: gal/year = gallons per year.

Source: Calculations by Ascent Environmental in 2022.

Implementation of Mitigation Measure 3.5-1a and 3.5-1b in Section 3.5, "Greenhouse Gas Emissions and Climate Change," and Mitigation Measure 3.4-2 in Section 3.4, "Air Quality," would result in reductions to transportation-related energy consumption. The inclusion of 110/208-volt power outlets would reduce diesel consumption by supplying auxiliary equipment power through electricity for truck and TRU idling. Further, mitigation measures would also reduce fuel consumption with installation of electric vehicle (EV)-ready parking for 10 percent of the total parking

spaces, which promotes the use of electricity for vehicles, a cleaner alternative to fossil fuels. Implementation of Mitigation Measure 3.4-2 in Section 3.4, "Air Quality," would also result in reduction of fuel consumption by replacing the off-road equipment with non-fossil fuel options.

Summary

The project would increase energy demand for temporary construction activities related to vehicle use and material transport. However, construction activities would be relatively minor and would not increase long-term energy or fuel demand. Construction activities would consume the necessary amount of fuel/energy to complete work in an efficient and timely manner.

According to Appendix F of the State CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall per capita energy consumption, decreasing reliance on oil, and increasing reliance on renewable energy sources.

With Mitigation Measures 3.5-1a and 3.5-1b in Section 3.5, "Greenhouse Gas Emissions and Climate Change," all project energy requirements would be met without the use of natural gas. In addition, 10 percent of the parking spaces would be EV-ready to promote use of electric vehicles. Also, Mitigation Measure 3.4-2 in Section 3.4, "Air Quality," would result in less consumption of diesel and gasoline by restricting truck and TRU idling and replacing the diesel-based equipment with clean alternatives. Therefore, project energy consumption for building operation, and transportation would not be considered wasteful, inefficient, or unnecessary. Also, the construction activities would be temporary, and the equipment used would become more efficient in the future which would not be considered wasteful, inefficient, or unnecessary. This impact would be **less than significant.**

Mitigation Measures

No mitigation is required.

Impact 3.14-2: Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency

On-site renewable energy generation from the implementation of project, would result in an increase in renewable energy use, which would directly support the goals and strategies in the state's Energy Efficiency Action Plan and the City of Roseville General Plan. Construction and operation of project buildings in compliance with the California Energy Code would improve energy efficiency compared to buildings built to earlier iterations of the code. Further, applicable mitigation measures would reduce on-site building-related fossil fuel use by requiring all building energy demand to be met through renewable sources. Therefore, construction and operation of the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the impact would be **less than significant**.

Relevant plans that pertain to the efficient use of energy include the Energy Efficiency Action Plan, which focuses on energy efficiency and building decarbonization (CEC 2019) as well as the City of Roseville General Plan and Communitywide SAP, which seeks to increase on-site renewable energy generation, exceed RPS requirements, increase energy efficiency, and provide alternative transportation and use alternative fuels to meet GHG reduction goals (City of Roseville 2020, 2010).

As discussed in Impact 3.14-1, although implementation of the project has the potential to result in the overall increase in consumption of energy resources during construction and operation of new buildings and facilities, implementation of the Mitigation Measures 3.5-1a and 3.5-1b in Section 3.5, "Greenhouse Gas Emissions and Climate Change," and Mitigation Measure 3.4-2 in Section 3.4, "Air Quality," would ensure that various energy conservation and generation features would be incorporated into new development, including the installation of renewable energy features, installation of energy efficient appliances, EV chargers, electrification of loading docks and off-road equipment, which would align with the Energy Efficiency Action Plan and City of Roseville's General Plan and SAP Plan. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Thus, the impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Impact 3.14-3: Require or Result in the Relocation or Construction of New or Expanded Utilities and Service Systems Facilities, the Construction of Which Could Cause Significant Environmental Effects

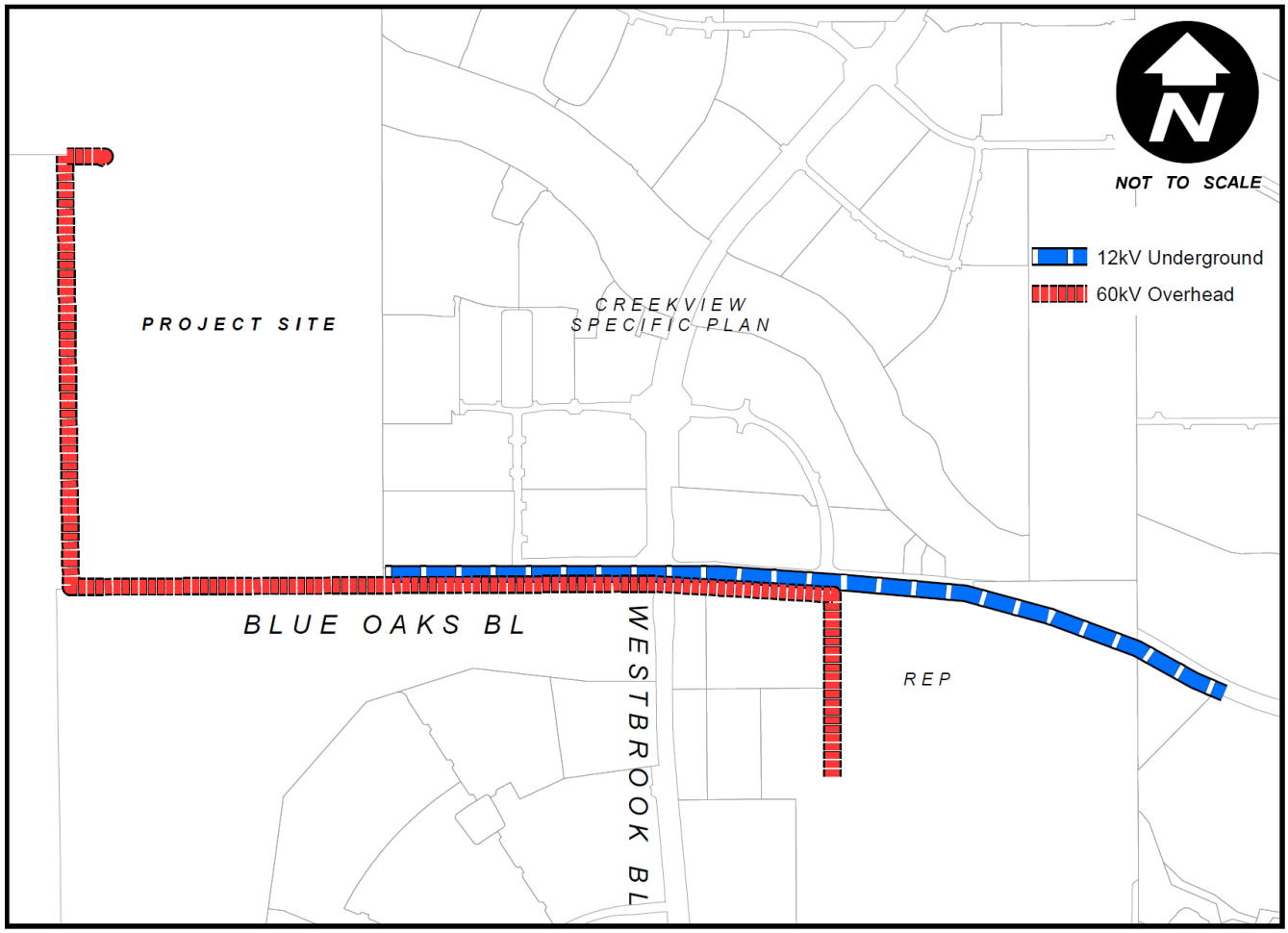
Project implementation would require the construction of new or expanded electrical and natural gas infrastructure. In particular, the project includes the construction of an electrical substation to meet the project's electrical demands. Additionally, the project would require extension of electrical and natural gas lines to serve the project site; these would be extended from existing, nearby connections. The impacts of construction of these facilities have been analyzed throughout this EIR and mitigation measures have been identified, where necessary, that would reduce or avoid most impacts to a less-than-significant level. Therefore, the impact would be **less than significant**.

As shown in Table 3.14-2, above, it is estimated that at buildout, project operation would require 23,392,700 kWh/year of electricity and 394,721 therms/year of natural gas. The project would require construction of new or expanded electrical and natural gas infrastructure to meet this demand.

Roseville Electric has determined that there is 5 megavolt-amperes (MVA) of power available for the project; however, the project would require an additional 15 MW of power at final buildout to achieve a total of 20 MW. To provide the initial 5 MW of power, the extension of two 12 kilovolt (kV) underground distribution circuits to the site are required. To meet this additional demand, the project includes construction of an electrical substation with a capacity to serve the additional 15 MW. The substation would be constructed on the project site by Roseville Electric during either Phase 2 or 3 depending on the specific level of electricity demand of the future tenants.

To obtain the initial 5 MVA of capacity to serve this project, two 12 kV underground distribution circuits would be extended from near the intersection of Blue Oaks Boulevard and Citra Drive (see Figure 3.14-1). Once the electrical demand of the site exceeds 5 MVA, the substation would be constructed (assumed to be during either Phase 2 or 3 depending on the specific level of electricity demand of the future tenants). The substation will consist of two 46 MVA transformers (Roseville Electric's standard size 60/12 kV transformer), multiple 40-foot-tall steel structures, steel poles up to 65 feet tall, five 60 kV circuit breakers, a 12kV metal-clad switchgear with up to twelve 12kV breakers and a 14-foot-high masonry wall for security. As part of the substation construction, existing 60 kV overhead lines would be extended to the substation site (see Figure 3.14-1 for proposed alignment). This will consist of a 65-foot-tall double-circuit, single pole construction, overhead 60 kV line extension from near the existing Roseville Energy Park 60 kV switchyard (located at 5120 Phillip Road) to the project site.

The construction of this new or expanded infrastructure could have adverse effects on the physical environment. New or expanded electrical and natural gas infrastructure would be constructed on or adjacent to the project site. Impacts associated with new or expanded utilities and service systems are identified throughout this EIR. For example, installation of aboveground infrastructure (electrical substation, surrounding wall, and overhead electrical lines) could change the aesthetic environment in the vicinity of the electrical substation. It is possible that improvements could adversely affect biological resources present or with potential to occur on the project site (see Section 3.7, "Biological Resources"). Construction activities could disturb previously known or unknown subsurface prehistoric and historic resources, human remains, and tribal cultural resources and generate criteria air pollutant emissions, precursors, and greenhouse gas (GHG) emissions (see Section 3.8, "Cultural Resources," Section 3.15, "Tribal Cultural Resources," Section 3.4, "Air Quality," and Section 3.5, "Greenhouse Gas Emissions and Climate Change"). Routine maintenance activities and ongoing operations of the new or expanded infrastructure would generate criteria air pollutant emissions, precursors, and GHG emissions, as well. Existing regulations would likely prevent significant adverse effects to groundwater or surface water quality (see Section 3.12, "Hydrology and Water Quality"). Physical environmental impacts associated with construction and operation of new or expanded electrical and natural gas infrastructure are evaluated throughout this EIR and mitigation measures are identified, where necessary, that would reduce or avoid most impacts to a less-than-significant level. Thus, the impact would be **less than significant**.



Source: Provided by City of Roseville in 2022.

Figure 3.14-1 Off-Site Extension of Electrical Infrastructure

Mitigation Measures

No mitigation is required.

3.15 TRIBAL CULTURAL RESOURCES

This section evaluates the potential impacts of the project on known and unknown Tribal cultural resources. Tribal cultural resources, as defined by Assembly Bill (AB) 52, Statutes of 2014, in Public Resources Code (PRC) Section 21074, are sites, features, places, cultural landscapes, sacred places and objects, with cultural value to a tribe. A tribal cultural landscape is defined as a geographic area (including both cultural and natural resources and the wildlife therein), associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values.

Two comment letters regarding Tribal cultural resources were received in response to the notice of preparation (see Appendix A). The Native American Heritage Commission (NAHC) requested AB 52 and Senate Bill (SB) 18 compliance information; SB 18 is not a CEQA requirement and, therefore, is not discussed in this EIR. AB 52 compliance is described below. The United Auburn Indian Community of Auburn Rancheria (UAIC) requested the evaluation of Tribal cultural resources in a separate report or chapter to discuss tribal cultural resources so that tribal values could be separate and distinct from archaeological values and requested to consult on the landscaping for the project. This section of the EIR is separated from Section 3.8, "Cultural Resources," to evaluate and analyze Tribal cultural resources, as requested; consultation, including for proposed landscaping for the project, is ongoing and discussed below.

3.15.1 Regulatory Setting

FEDERAL

There are no federal regulations that apply to Tribal cultural resources.

STATE

California Register of Historical Resources

All properties in California that are listed in or formally determined eligible for listing in the National Register of Historic Places (NRHP) are also listed in the California Register of Historical Resources (CRHR); a definition of the NRHP is given in Section 3.8.1. The CRHR is a listing of State of California resources that are significant in the context of California's history. It is a Statewide program with a scope and with criteria for inclusion similar to those used for the NRHP. In addition, properties designated under municipal or county ordinances are also eligible for listing in the CRHR.

A historical resource must be significant at the local, state, or national level under one or more of the criteria defined in the California Code of Regulations Title 15, Chapter 11.5, Section 4850 to be included in the CRHR. The CRHR criteria are tied to CEQA because any resource that meets the criteria below is considered a significant historical resource under CEQA. As noted above, all resources listed in or formally determined eligible for listing in the NRHP are automatically listed in the CRHR.

The CRHR uses four evaluation criteria:

Criterion 1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States.

Criterion 2. Is associated with the lives of persons important to local, California, or national history.

Criterion 3. Embodies the distinctive characteristics of a type, period, region, or method of construction; represents the work of a master; or possesses high artistic values.

Criterion 4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

Similar to the NRHP, a historical resource must meet one of the above criteria and retain integrity to be listed in the CRHR. The CRHR uses the same seven aspects of integrity used by the NRHP.

California Environmental Quality Act

CEQA requires public agencies to consider the effects of their actions on "Tribal cultural resources." PRC Section 21084.2 establishes that "[a] project with an effect that may cause a substantial adverse change in the significance of a Tribal cultural resource is a project that may have a significant effect on the environment."

Tribal Cultural Resources

CEQA requires lead agencies to consider whether projects will affect Tribal cultural resources. PRC Section 21074 states:

a) "Tribal cultural resources" are either of the following:

   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.

b) A cultural landscape that meets the criteria of subdivision (a) is a Tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape.

c) A historical resource described in Section 21084.1, a unique archaeological resource as defined in subdivision (g) of Section 21083.2, or a "nonunique archaeological resource" as defined in subdivision (h) of Section 21083.2 may also be a Tribal cultural resource if it conforms with the criteria of subdivision (a).

Public Resources Code Section 21080.3

AB 52, signed by the California Governor in September of 2014, established a new class of resources under CEQA: "Tribal cultural resources," defined in PRC Section 21074 (described above). Pursuant to PRC Sections 21080.3.1, 21080.3.2, and 21082.3, lead agencies undertaking CEQA review must, upon written request of a California Native American Tribe, begin consultation before the release of an EIR, negative declaration, or mitigated negative declaration.

PRC Section 21080.3.2 states:

> Within 14 days of determining that a project application is complete, or to undertake a project, the lead agency must provide formal notification, in writing, to the tribes that have requested notification of proposed projects in the lead agency's jurisdiction. If it wishes to engage in consultation on the project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. The lead agency must begin the consultation process with the tribes that have requested consultation within 30 days of receiving the request for consultation. Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a Tribal cultural resource, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached.

LOCAL

City of Roseville's 2035 General Plan

The City of Roseville existing General Plan (2035) includes the following policies related to Tribal cultural resources that may be applicable to the project:

- Policy OS4.1 Consult with local Native American Tribes that are traditionally and culturally affiliated with resources that could be affected by City plans or projects, identify areas that may be of cultural or Tribal cultural significance, and determine appropriate treatment for the areas.
- Policy OS4.2 When items of historical, cultural, or archaeological significance are discovered within the City, a qualified archaeologist or historian shall be called to evaluate the find and to recommend proper action.
- Policy OS4.4 The City shall coordinate with the appropriate federal, state, local agencies, and Native American Most Likely Descendant (MLD) Tribes upon discovery of artifacts. The City shall offer the Maidu Museum & Historic Site as a temporary housing location for artifacts that are discovered and subsequently determined to be removable.

3.15.2 Environmental Setting

The following information is from the *Cultural Resources Assessment Report for the Roseville Industrial Park Project*, which is included as Appendix F (Ascent 2021).

ETHNOGRAPHY

The Native Americans who occupied the project area at the time of Euro-American contact (ca. 1850s) are known as the Nisenan, also referred to as the Southern Maidu. Several ethnographers have studied the Maidu people and generally agree that Nisenan territory included the drainages of the Bear, American, Yuba, and southern Feather rivers. Their permanent settlements were generally located on ridges separating parallel streams, either on crests, knolls, or terraces, part way up these ridges.

A typical village consisted of several conical houses covered with bark slabs. The nearest ethnographic village in relationship to the project was called *Pichiku*. The name *Pich-u-gut* is also given for a village site in Roseville. Many long-time residents of Roseville indicate that a village was in the vicinity of present-day Roseville Square off Douglas Boulevard. Also, a village site has been identified and preserved at Maidu Park in Roseville.

Nisenan territory offered abundant year-round food sources. Food gathering was based on seasonal ripening, but hunting, gathering, and fishing went on all year, with the greatest activity in late summer and early fall. They gathered many different staples, not depending on one crop.

Seasonal harvests were gathered for both communal and personal family use. Most activities and social behaviors such as status, sharing, trading, ceremonies, and disagreements were important adjuncts to the gathering and distribution of food. Extended families or whole villages of hill Nisenan would gather acorns. Men would hunt while women and children gathered the acorns knocked from the trees. Buckeye nuts, sugar and digger pine nuts, and hazelnuts were also gathered. Acorns were cracked on an acorn anvil and shelled. They were then ground into flour using a bedrock mortar (grinding rock) and a soaproot brush to control scattering the resulting flour. The flour was leached to remove the tannin then cooked in watertight baskets. Cooking was done with fire heated stones that were lifted with two sticks, dipped in water to clean them, and then dropped into the cooking basket. Enough soup and mush were usually prepared to last several days.

Roots were dug with a digging stick in the spring and summer and were eaten raw, steamed, baked, or dried and pounded in mortars and pressed into cakes to be stored for winter use. Wild onion (*chan*), sweet potato (*sí kum*), and "Indian potato" (*dúbus*) were the most desired. Wild carrot (*ba*) was used as medicine while wild garlic was used to wash the head and body.

Grasses, herbs, and rushes provided food and material for clothing and baskets. Clover (*Trifolium willdenovii*) was an important food for Nisenan people as it was the first fresh herb available after winter and its emergence set the timing of the Nisenan spring flower dance. Seeds were gathered using a seed beater and tray. They were then parched, steamed, dried, or made into mush. Many varieties of wild plums, native berries, grapes, and other native fruits were eaten. Manzanita berries were often traded to the valley or made into a cider-like drink.

Deer drives were common, with several villages participating and the best marksman doing the killing. The animals were often driven into a circle of fire then killed. Deer were also hunted using deadfalls, snares, and deerskin and antler decoys. Sometimes they were run down on soft ground or snow. Antelope were taken by surround, drives, and flag decoys while elk were usually killed along waterways on soft ground. The bear hunt was very ceremonial. Black bears were usually hunted in the winter. Lighted brands were often used to drive them from their dens. Grizzlies that lived on the valley floor were greatly feared and rarely hunted. Wildcats and California mountain lions were hunted for food and their skins. Rabbits and other small game were killed with blunted arrows and sticks. Traps, nets, snares, fire, and rodent hooks were also used. In the foothills and valley nets were made into a fence where driven rabbits were entangled and clubbed. Drives generally took place in the late spring. The man in charge of the drive divided the catch. Other small animals were often caught and killed, with exception to the coyote. Game meat was baked, roasted, or dried.

Weirs, traps, harpoons, nets, and gorge hooks, as well as tule balsas and log canoes were used in fishing. Fish were poisoned using turkey mullein and soaproot or driven into shallow water and caught by hand. Freshwater mussels were obtained in the larger rivers. On the lower courses, sturgeon and salmon were netted and speared. Whitefish, suckers, and trout were caught at higher elevations. Waterfalls were eel fishing (freshwater lamprey) stations; Salmon Falls, on the south fork of the American River was one such location.

Birds were taken with nets, arrows, snares, traps, and nooses. Owls, vultures, and condors were not killed. Bird skins and feathers were used for regalia, clothing, and decoration. Salt was acquired from springs near Lincoln, Cool, and Latrobe. It was also acquired from a plant with cabbage-like leaves gathered in the summer.

The Nisenan hunting and gathering cycle was altered drastically with the discovery of gold in Coloma in 1848. As miners poured into the Roseville and Auburn areas, the Native Americans were forced out of their winter villages, land was fenced, streams were silted, and food resources became increasingly difficult to procure. Despite this, many Nisenan continued to remain in their homeland, working for Euro-Americans in mines or on ranches. Within the project vicinity, some ranchers, such as the Kasebergs and Fiddyments, also allowed Maidu families to continue to collect acorns, tubers, and grasshoppers on the lands they now owned along Pleasant Grove Creek. Today, descendants of the Nisenan continue to strive to maintain kinship and cultural ties to their ancestral lands despite continual disruptions to time-honored lifeways.

CONTEMPORARY NATIVE AMERICAN SETTING

As archaeologists routinely focus on traditional Native American lifeways and ignore current and vibrant Native American culture, a sufficient context or set of values maintained by the current Native American community related to their history and the landscape is often ignored. To help remedy this for the project site, a discussion of the contemporary Native American setting is also included here.

UAIC is the closest contemporary Native American community to the project site. Other nearby largely Maidu communities include the Tsi Akim Maidu and Colfax-Todd Valley Consolidated Tribe. Descendants of Nisenan and other Maidu peoples are also present within the project vicinity, the Sacramento River Valley, and beyond.

UAIC is a federally recognized Tribe comprised of both Miwok and Maidu (Nisenan)Tribal members who are traditionally and culturally affiliated with the project area. The Tribe has a deep spiritual, cultural, and physical ties to their ancestral land and are contemporary stewards of their culture and landscapes. The Tribal community represents a continuity and endurance of their ancestors by maintaining their connection to their history and culture. It is the Tribe's goal to ensure the preservation and continuance of their cultural heritage for current and future generations.

The contemporary history of UAIC has similarities to those of many other California Native American tribes in the Sacramento River Valley and throughout the State. In 1917, the United States acquired land in trust for the Auburn Band (the predecessor of the UAIC) near the city of Auburn and formally established a reservation, known as the Auburn Rancheria. Tribal members continue to live on this reservation as a community despite great adversity.

In 1953, the United States Congress enacted the Rancheria Acts, authorizing the termination of federal trust responsibilities to a number of California Indian tribes including the Auburn Band. Except for a 2.8-parcel containing a tribal church and a park, the government sold the land comprising the Auburn Rancheria. The United States terminated federal recognition of the Auburn Band in 1967. Finally, in 1970, President Nixon declared the policy of termination a failure. In 1976, both the United States Senate and House of Representatives expressly repudiated this policy in favor of a new federal policy titled "Indian Self-Determination."

In 1991, surviving members of the Auburn Band reorganized their tribal government as the UAIC and requested that the United States formally restore their federal recognition. In 1994, Congress passed the Auburn Indian Restoration Act, which restored the Tribe's federal recognition. The Act provided that the Tribe may acquire land in Placer County to establish a new reservation.

Today, as throughout their history, many Native American tribes, such as the UAIC, consider themselves contemporary stewards of their culture and the landscape. These tribal communities represent a continuum from the past to the present. They are resilient, vibrant, and active in the community. Tribes maintain their connection to their history and ongoing culture by practicing traditional ceremonies, engaging in traditional practices (e.g., basketry), and conducting public education and interpretation. The acknowledgement of Native American history and the persistence of tribes cannot be overlooked and should be recognized. Indeed, Native American communities of the Sacramento River Valley and their history are commemorated in the city of Sacramento, on the grounds of the Capitol, and at Sacramento City Hall. Collaboration and consultation with tribes to identify their perspective and incorporate their stewardship ethic to the fullest extent feasible in research is the best way to acknowledge the presence and contributions of Native Americans in both the past and the present, as well as paving a respectful and inclusive pathway to the future.

ARCHAEOLOGICAL SENSITIVITY

Three geologic units are present in the project site: the Turlock Lake Formation, the Riverbank Formation, and Holocene alluvium. A preliminary geotechnical study of the project site (Gularte & Associates 2021) found that alluvial silty sands comprise approximately the upper 6 to 13 feet of the project site. Below 13 feet, the project site is underlain with very stiff to hard silt and silty clay with minor beds of very dense silty sand down to approximately 50 feet. North of Pleasant Grove Creek, the soils are composed of interbedded stiff to hard silt, sandy silt, and silty clay with minor beds of very dense silty sand.

In 2008, a comprehensive geoarchaeological study was prepared for the California Department of Transportation (Caltrans), District 3, which includes Placer County (Meyer and Rosenthal 2008). The study found that due to the mid-Pleistocene age of the Turlock Lake Formation (450,000 to 600,000 years ago) and the Riverbank Formation (150,000 to 450,000 years ago), the presence of buried deposits in these formations is extremely unlikely. Conversely, the potential for buried deposits in Holocene alluvium is considered moderate to high depending on the exact age of the deposit. The Caltrans study concluded that the Sacramento River Valley in general has moderate potential for buried sites associated with latest Holocene geological units (Qha). These Holocene soils are typically associated with sites dating to the Upper Archaic and Emergent Periods.

Therefore, because the Riverbank and Turlock Lake formation comprise approximately 90 percent of the project site, the majority of the project site has very low sensitivity for buried deposits. The exception to this is the areas at the west and east ends of the segment of Pleasant Grove Creek (see Figure 3.8-1) and under the 13 feet of fill on the north bank of the creek. Although the south bank is composed of the same fill as the north bank, the south area was disturbed past the 13 feet of fill when it was reconfigured into a retention basin. Therefore, the south area of fill has low potential for intact deposits; the south bank of Pleasant Grove Creek remains sensitive. Figure 3.8-1, in

Section 3.8, "Cultural Resources," depicts the area of buried resource sensitivity within the project site. These areas should be considered to have a moderate sensitivity for buried deposits.

RECORDS SEARCH, SURVEY, AND CONSULTATION

Records Search

On May 28, 2021, a search of records concerning the project site and a one-half-mile radius around the project area was conducted at the North Central Information Center (NCIC), at California State University, Sacramento (PLA-21-36). The following information was reviewed as part of the records search:

- site records of previously recorded cultural resources,
- previous cultural studies,
- NRHP and CRHR listings,
- the California Historic Resources Inventory,
- Built Environment Resource Directory for Placer County, and
- Historical Maps (USGS Topographic and GLO Plat maps).

The records search revealed no previously recorded resources within the project site or within a one-half-mile radius. The search also found that one previous investigation included the entirety of the project area, four previous investigations included only a portion of the project area, and six investigations have occurred within one-half-mile.

Survey

Field work for the project was conducted on July 6 and 7, 2021 by Ascent cultural resources staff. Overall, the survey found no presence of anthropogenic soils (i.e., midden), hearth features, or concentrations of shell, bone, or lithic materials that would have indicated the presence of a pre-contact indigenous deposit. Only two isolated archaeological objects were recorded as a result of the survey: a handstone and a concrete pad. Isolates are defined as one or two artifacts occurring by themselves and not associated with an archaeological or historical site. Because they have no historical context, isolates are generally not eligible for listing in CRHR or NRHP and, therefore, were not evaluated for significance and not discussed further in this Draft EIR.

Sacred Lands File Search

On May 26, 2021, a letter was sent to the NAHC requesting a search of the Sacred Lands File for the project area. Negative results were returned on June 29, 2021 indicating that no cultural resources significant to local Native American tribes had been previously reported to the NAHC as being present on the project site or its immediate vicinity.

Native American Consultation

On June 14, 2021, the City of Roseville sent AB 52 notification letters to the following tribal representatives:

- United Auburn Indian Community, Gene Whitehouse, Chairman
- Ione Band of Miwok Indians, Sara D. Setshwaelo, Cultural Committee Chair
- Tsi Akim Maidu, Don Ryberg, Chairperson
- Shingle Springs Band of Miwok Indians, Nicholas Fonseca, Chairperson

On June 28, 2021, UAIC responded, requesting consultation and to review the cultural report for the project site. UAIC also conducted a records search for the identification of Tribal Cultural Resources. Although UAIC did not identify any Tribal cultural resources in the area, the Tribe did state that the area was sensitive. On November 7, 2022, UAIC and City staff conducted a site visit as a part of the consultation process. At this time, consultation is still ongoing pending recommendations from UAIC. No other tribe responded to the AB 52 notification.

3.15.3 Environmental Impacts and Mitigation Measures

METHODOLOGY

Information related to Tribal cultural resources is based on findings reported in the NAHC Sacred Lands File database search, the records search results (NCIC File Number PLA-21-36), as well as the results of Native American consultation under AB 52. The analysis is also informed by the provisions and requirements of state and local laws and regulations that apply to Tribal cultural resources.

Additionally, UAIC conducted a records search for the identification of Tribal Cultural Resources for this project which included a review of pertinent literature and historic maps, and a records search using UAIC's Tribal Historic Information System (THRIS). UAIC's THRIS database is composed of UAIC's areas of oral history, ethnographic history, and places of cultural and religious significance, including UAIC Sacred Lands that are submitted to the NAHC. The THRIS resources shown in this region also include previously recorded indigenous resources identified through the NWIC as well as historic resources and survey data."

PRC Section 21074 defines "Tribal cultural resources" as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American [T]ribe" that are listed or determined eligible for listing in the CRHR, listed in a local register of historical resources, or otherwise determined by the lead agency to be a Tribal cultural resource.

For the purposes of this impact discussion, "historical resource" is used to describe historic-period, built-environment resources. Tribal cultural resources, which may qualify as "historical resources" pursuant to CEQA, are analyzed separately from built-environment historical resources.

THRESHOLDS OF SIGNIFICANCE

Thresholds of significance are based on Appendix G of the State CEQA Guidelines. The project would cause a significant impact related to Tribal cultural resources if it would:

- cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
  - Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
  - A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

ISSUES NOT DISCUSSED FURTHER

All potential Tribal cultural resources issues identified in the above thresholds are evaluated below.

ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impact 3.15-1: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource

Although consultation and the NCIC and NAHC record searches did not result in the identification of any Tribal cultural resources, UAIC expressed concern that resources could be discovered during ground-disturbing activities. Therefore, impacts to Tribal cultural resources would be **potentially significant**.

Neither the NAHC Sacred Land File search nor the NCIC record search indicated the presence of indigenous sites within the project site or within a one-half-mile radius. As detailed above, the City sent AB 52 notification letters to four tribal representatives; only UAIC responded. Consultation with UAIC has not resulted in the identification of any Tribal cultural resources as defined by PRC Section 21074. However, UAIC did express concern that the area around Pleasant Grove Creek was sensitive.

As discussed previously, the areas at the west and east ends of the segment of Pleasant Grove Creek and below the 13 feet of fill on the north bank of the creek have a moderate sensitivity for buried archaeological deposits. These areas are of Holocene age and represent locations Native Americans could have used in the past. For these reasons, there is potential for ground disturbance during project construction in this area to encounter previously undiscovered Tribal cultural resources. These activities could damage or destroy Tribal cultural resources, and this would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 3.15-1a: Implement Mitigation Measure 3.8-1a

The project applicant shall implement Mitigation Measure 3.8-1a.

Mitigation Measure 3.15-1b: Unanticipated Discovery of Tribal Cultural Resources

If any suspected Tribal cultural resources, including midden soil, artifacts, chipped stone, exotic rock (nonnative), or unusual amounts of baked clay, shell, or bone, are discovered during ground disturbing construction activities, all work shall cease within 100 feet of the find. Appropriate tribal representative(s) shall be immediately notified and shall determine if the find is a Tribal cultural resource (pursuant to PRC Section 21074). The tribal representative will make recommendations for further evaluation and treatment, as necessary.

Preservation in place is the preferred alternative under CEQA and the Tribes' protocols, and every effort shall be made to preserve the resources in place, including through project redesign. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project vicinity where they will not be subject to future impacts. The Tribe does not consider curation of Tribal cultural resources to be appropriate or respectful and request that materials not be permanently curated, unless approved by the Tribe. Treatment that preserves or restores the cultural character and integrity of a Tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Significance after Mitigation

Implementation of Mitigation Measures 3.15-1a and 3.15-1b would reduce impacts associated with Tribal cultural resources to a **less-than-significant** level by training workers to properly handle inadvertent discovery of sensitive resources and requiring appropriate treatment and proper care of significant Tribal cultural resources, in the case of a discovery.

4 CUMULATIVE IMPACTS

4.1 CEQA REQUIREMENTS

Section 15130(a) of the State CEQA Guidelines requires a discussion of the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Cumulatively considerable, as defined in CEQA Guidelines Section 15065(a)(3), means that the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." The State CEQA Guidelines Section 15355 defines a cumulative impact as two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

4.2 CUMULATIVE IMPACT APPROACH

CEQA Guidelines Section 15130 identifies two basic methods for establishing the cumulative environment in which a project is considered: the use of a list of past, present, and probable future projects or the use of adopted projections from a general plan, other regional planning document, or a certified EIR for such a planning document. This cumulative analysis uses a combination of the "list" approach and the "projections" approach to identify the cumulative setting. The effects of past and present projects on the environment are reflected by the existing conditions in the project area.

In the case of the proposed Roseville Industrial Park Project, the project area has been modified from its natural conditions by human activity, primarily residential development (actual and planned). While the project site includes undeveloped grazing land, surrounding uses include several large specific plan areas (namely, Amoruso Ranch, Creekview, West Roseville, and Sierra Vista specific plan areas) that are in various stages of build-out. The area to the west of the project site is largely undeveloped, but is part of the City's Infill Area and, like the project site, is designated for Public/Quasi-Public land uses.

A list of probable future projects is provided below. Probable future projects are those in the project vicinity that have the possibility of interacting with the project to generate a cumulative impact and either:

1. are partially occupied or under construction;
2. have received final discretionary approvals;
3. have applications accepted as complete by local agencies and are currently undergoing environmental review, or
4. have been discussed publicly by an applicant or otherwise have become known to the lead agency, provided sufficient information is available about the project to allow at least a general analysis of environmental impacts and an evaluation of the likelihood of implementation.

The analysis also considers planning efforts that address regional environmental issues, such as water quality improvement programs, and potential effects associated with climate change. These plans, programs, and effects are discussed in relevant resource discussions below.

4.2.1 Geographic Scope

The geographic area that could be affected by implementation of the proposed Roseville Industrial Park Project varies depending on the type of environmental resource being considered. When the effects of the project are considered in combination with those other past, present, and probable future projects to identify cumulative impacts, the other projects that are considered may also vary depending on the type of environmental effects being assessed. Table 4-1 presents the general geographic areas associated with the different resources addressed in this analysis.

Table 4-1 Geographic Scope of Cumulative Impacts

Resource Topic	Geographic Area
Land Use and Agricultural Resources	Local (limited to project site) for land use and Placer County for agricultural resources
Population, Employment, and Housing	Local (population, employment, and housing near the project site)
Transportation and Circulation	Regional and local
Air Quality	Regional (pollutant emissions that affect the air basins) and immediate project vicinity (pollutant emissions that are highly localized)
Greenhouse Gas Emissions and Climate Change	Global
Noise and Vibration	Local (immediate project vicinity where project-generated noise could be heard concurrently with noise from other sources)
Biological Resources	Regional, Placer County, City of Roseville
Cultural Resources	Local (limited to project site), with regional implications
Hazardous Materials, Wildfire, and Other Hazards	Local (limited to project site)
Public Services	Regional and local service areas
Utilities and Service Systems	Local service areas
Hydrology and Water Quality	Pleasant Grove Creek watershed, City of Roseville
Aesthetics	Local (project site and surrounding public viewpoints)
Energy	Pacific Gas and Electric Company service area
Tribal Cultural Resources	Local (limited to project site), with regional implications

Source: Compiled by Ascent Environmental in 2021.

4.2.2 Regional Planning Environment

The *City of Roseville General Plan 2035*, adopted by the City Council in August 2020, establishes the land use pattern and goals for development and growth in the City of Roseville. Additionally, the City has 16 subareas that have been planned for urban development, including the Infill Area, the North Industrial area, and 14 specific plan areas (some of the specific plans are described below). These plans were relied upon in preparing the cumulative impact analysis. The documents are available for review online at https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8740544 and at the City of Roseville Development Services, Planning Department at 401 Vernon Street, Roseville, CA 95678.

4.2.3 Related Projects

This cumulative impacts analysis considers the environmental effects of growth in the region, as represented by adopted planning documents and proposals currently under consideration, as well as implementation of the proposed Roseville Industrial Park Project. Development considered in this cumulative analysis includes:

- Build-out of City of Roseville (existing City including approved specific plans);
- Campus Oaks (Hewlett Packard [HP] Campus Rezone) project including the extension of HP Way from Foothills Boulevard through the HP Campus northwesterly to Blue Oaks Boulevard;
- Build-out of the Regional University Specific Plan (RUSP);
- Build-out of Phase 1 of Placer Vineyards;
- 2035 levels of residential market absorption in City of Lincoln;
- Build-out of residential and 2035 market absorption levels of non-residential in City of Rocklin;

- Sacramento Area Council of Governments (SACOG) 2035 market absorption for specific projects outside of South Placer County including the Elverta Specific Plan (ESP) (Sacramento County), Johnson Ranchos (City of Wheatland), and Sutter Pointe (Sutter County);
- Partial build-out of the Placer Ranch area (50 percent residential, 25 percent non-residential, and 25,000-student University);
- Extension of Placer Parkway westerly as a four-lane roadway from Foothills Boulevard to Santucci Boulevard; and
- Build-out of the Dry Creek/West Placer Community Plan (Placer County, south of Baseline Road).

PROPOSED AND ANTICIPATED DEVELOPMENT

City of Roseville Approved Specific Plans

Creekview Specific Plan

The Creekview Specific Plan (CVSP) was approved on September 19, 2012 for the 501-acre area located immediately east of the project site. The land was annexed into the City on April 18, 2013. A total of 2,011 dwelling units would be distributed as follows: 826 low-density, single-family units; 665 medium-density units; and 520 high-density, multi-family units. Approved land uses include a total of 136 acres that would set aside as permanent open space, 15.7 acres for neighborhood parks, a 7-acre elementary school site, 2.6 acres of utilities sites, and 19.3 acres for commercial development. The CVSP is in early stages of buildout, and home construction is underway for subdivisions immediately to the east of the project site.

Sierra Vista Specific Plan

The Sierra Vista Specific Plan (SVSP) includes 2,064 acres west of Fiddyment Road, north of Baseline Road. The SVSP area was annexed into the City of Roseville from unincorporated Placer County. The SVSP as amended in 2012 includes 8,679 single and multi-family units, including approximately 259 acres of commercial, 106 acres of park, 304 acres of open space, and 56 acres for schools. Additionally, the SVSP included a large Urban Reserve area that did not participate in the specific plan process. At build-out, the SVSP area is expected to accommodate approximately 20,045 residents and provide 9,000 jobs.

The SVSP was adopted in May 2010 and annexed into the City in January 2012. The SVSP was amended in June 2012 to entitle land uses on 397 acres of the SVSP area including: 141 acres (705 units) of low-density residential, 79 acres (635 units) of medium-density residential, and 28 acres (689 units) of high-density residential. In addition, 6 acres of commercial mixed use, 37 acres of general commercial uses, 11 acres of public/quasi-public uses including an elementary school, 16 acres of parks, and 36 acres of open space are proposed. The SVSP is approximately 30 percent built out.

West Roseville Specific Plan

The West Roseville Specific Plan (WRSP) includes 3,162 acres west of Fiddyment Road, generally north of Pleasant Grove Boulevard. The WRSP is a mixed-use development that includes 8,792 single and multifamily units, 704 age-restricted units, 57 acres of commercial, 109 acres of industrial, 255 acres of parks, 705 acres of open space, and 108 acres of schools. At build-out, the plan area is expected to accommodate approximately 22,332 residents and provide 3,726 jobs. The WRSP was adopted in February 2004. The WRSP is 60 percent built out.

Amoruso Ranch Specific Plan

The Amoruso Ranch Specific Plan (ARSP) area is located on 694 acres northwest of the current City limits, south of West Sunset Boulevard, and approximately 1.5 miles west of Fiddyment Road. The ARSP would include the development of a mix of uses, including 337 acres of low-, medium-, and high-density residential land developed with 2,827 dwelling units. The land use plan also includes three commercial parcels totaling 51 acres, a 9.6-acre elementary school site, seven neighborhood parks, and a 3-acre fire station/public facilities site. Approximately 135

acres of the site will be set aside as open space preserve. The ARSP was adopted by the City Council on June 15, 2016. Phase A1 of the ARSP is in early stages of buildout., with mass grading of the site beginning in October of 2021.

Riolo Vineyards Specific Plan

Originally approved on May 12, 2009, the Riolo Vineyards Specific Plan (RVSP) is proposed as a residential community with open space, recreational, and commercial components and encompasses approximately 525 acres. The development would include a total of 933 residential units consisting of low-, medium- and high- density as well as rural and agricultural residences. An amendment to the RVSP was approved on March 24, 2015. Mass grading has been completed for portions of the RVSP, and the first subdivisions are under construction.

Curry Creek Community Plan

The Curry Creek Community Plan (CCCP) area is located west of the SVSP and WRSP. Although the RUSP, described below, lies within the CCCP Area, it is independent of the CCCP. While the Board of Supervisors gave direction to County Staff to proceed with studying the area for future development in 2003, no formal community plan is pending at this time.

Hewlett Packard Campus Oaks Project

In August 2015, the City received approved an application from BBC Roseville for a Rezone, General Plan Amendment, Master Plan Amendment and Development Agreement for a 189-acre portion of the HP property located approximately three miles southeast of the ARSP. BBC Roseville proposes developing the site as a mixed-use project referred to as "Campus Oaks" that would include residential uses of varying densities, commercial and office/tech uses, parks, and a fire station. The Planning Commission approved the HP Campus Oaks Master Plan Design Guidelines on March 9, 2017. The Plan area completed development entitlements and is actively under construction, with approximately 50 percent built out.

Regional University Specific Plan

The RUSP is 1,157 acres located immediately west of the WRSP Area. Access to the site would be through an extension of Watt Avenue. It will include a 600-acre private university campus on the western portion of the plan area, and a 557.5 urban community on the eastern portion of the site. Approximately 3,232 residential units and a private high school for 1,200 students would be included in the development. The RUSP was approved by Placer County in December 2008. The RUSP was last amended in May of 2019; however, to date, development of RUSP has not yet commenced.

Placer Vineyards Specific Plan

The Placer Vineyards Specific Plan (PVSP) Area is located south of the SVSP, (south of Baseline Road), and was originally approved by Placer County in July 2007 and includes development on 5,230 acres. At build-out, Placer Vineyards would include 14,132 dwelling units, 274 acres of commercial development, 919 acres of park and open space land and 851 acres of quasi-public uses, and roadways. To date, development of PVSP has not yet commenced.

2035 Levels of Residential Market Absorption in City of Lincoln

Twelve Bridges Specific Plan

The Twelve Bridges Specific Plan includes 5,700 acres in western Placer County, within the southern portion of the City of Lincoln. The Specific Plan would include 10,146 residential units and 180 acres of commercial and business uses. The Specific Plan was adopted by the City of Lincoln in April 1993. The Twelve Bridges Specific Plan is nearly built out, with several residential community areas under construction or slated for future development. A majority of the construction is occurring in the Bella Breeze loop, which will include single-family and multi-family residential development. The remaining vacant parcels in the Twelve Bridges Specific Plan are zoned commercial.

Village 1 Specific Plan

The Village 1 Specific Plan includes 1,832 acres in western Placer County, within the northeast portion of the City of Lincoln. The Village 1 Specific Plan would create a mix of land uses including residential (5,639 units), mixed use

commercial, two elementary schools, and parks and open space. The Village 1 Specific Plan was adopted by the City of Lincoln in July 2013. Only a small portion of the Village 1 Specific Plan is under construction. The majority of construction is occurring along State Route (SR) 193. Approximately 1,300 single-family dwelling units are entitled and under construction.

Village 5 Specific Plan

The Village 5 Specific Plan includes 4,787 acres in western Placer County, immediately west of the City of Lincoln. The project site is located within the adopted Sphere of Influence of (and would be annexed into) the City of Lincoln. The Village 5 Specific Plan would create a mix of land uses including residential (8,206 units), retail commercial, office/business professional, recreational, open space, and public/quasi-public, consistent with development patterns in Lincoln. The Village 5 Specific Plan was adopted by the City of Lincoln on December 5, 2017. A Partially Recirculated EIR was subsequently prepared and certified on September 14, 2021. No construction activity has occurred in the Village 5 Specific Plan area.

Village 7 Specific Plan

The Village 7 Specific Plan includes 703 acres in south Placer County, within the southwest portion of the City of Lincoln. The 703-acre Village 7 Specific Plan includes four planning areas for future development. Development includes a mix of low, medium, and HDR, a school, a community park, a fire station, a recreation center, neighborhood-serving retail uses, and park and open space amenities. The Village 7 Specific Plan was adopted by the City of Lincoln on September 10, 2013. The Lincoln City Council recently recommended that the City initiate the annexation process for the un-incorporated portion of Village 7 Specific Plan and the approved Village 7 Pre-Zone.

Build-out of Residential and 2035 Market Absorption Levels of Non-residential in City of Rocklin

Northwest Rocklin General Development Plan (Whitney Ranch)

The Northwest Rocklin General Development Plan (Whitney Ranch) includes 1,871 acres in western Placer County, in the City of Rocklin. The Plan would include 4,424 residential units, commercial, business professional, light industrial, recreation, and public uses (schools). The Northwest Rocklin Annexation Area Final EIR was certified and adopted by the Rocklin City Council on July 9, 2002. The most recent amendment of the plan was approved in 2019.

Sacramento Area Council of Governments 2035 Market Absorption for Specific Projects Outside of South Placer County

Elverta Specific Plan

The ESP includes 1,744 acres in the north-central portion of Sacramento County, immediately south of PVSP. Approximately 881 acres would accommodate 4,950 residential units, and 552 acres would include agricultural/rural land use. It also would include 19 acres of commercial and office professional units. The ESP was approved by Sacramento County in August 2008. No development activity has occurred to date.

Johnson Rancho Project

The Johnson Rancho Project consists of 3,357 acres and was annexed, along with the Hop Farm Property, into the City of Wheatland in 2014. Development includes a mix of low, medium, and high residential, commercial, employment/office, parks, open space, and schools. The City of Wheatland expects development activity to commence during the 2021-2029 planning period.

Sutter Pointe Specific Plan

The Sutter Pointe Specific Plan (SPSP) encompasses approximately 7,528 acres of land in south Sutter County, adjacent to the Placer County line. It includes approximately 3,600 acres of commercial and industrial uses, 2,900 acres for residential uses, and 1,000 acres of parks, recreation, and open space. The SPSP was originally approved by Sutter County in June 2009. On October 28, 2014, the Board of Supervisors approved an amendment to the SPSP affecting the eastern plan area located south of Sankey Road, north of Riego Road and east of Pacific Avenue. The first phase of development, called Lakeside at Sutter Pointe, was approved by the Board of Supervisors in November

of 2020. This phase includes approximately 3,402 single-family homes, 399 multi-family units, 46.1 acres of employment center, 25 acres of commercial, 61.3 acres of parkland, 54.9 acres of open space, and a K-8 school.

Sunset Area Plan and Placer Ranch Specific Plan

The Sunset Area Plan (SAP) is a Placer County-initiated update to its 1997 Sunset Industrial Area Plan. The SAP also incorporates the Placer Ranch Specific Plan (PRSP). The SAP area encompasses 8,497 acres located in unincorporated south Placer County west of the Highway 65 corridor, situated between the Cities of Lincoln to the north, Rocklin to the east, and Roseville to the south. The PRSP area constitutes 2,213 acres within the southern portion of the SAP area.

The SAP will bring forward new land use designations, including: General Commercial, Entertainment/Mixed Use; Business Park; Innovation Center; Eco-Industrial; Light Industrial; Public Facility; and Urban Reserve. The PRSP is a mixed-use community consisting of 5,636 residential units, including a university and an age-restricted community; an elementary school, middle school, neighborhood parks, and open space; and commercial and mixed uses, and campus park (office, research and development, light industrial, and commercial). The proposed university and non-residential land uses are intended as a catalyst for employment-generating development in Placer County's overall Sunset Area.

On December 10, 2019, the Board of Supervisors certified the Final EIR and approved the SAP/PRSP. Construction is expected to start in 2021 or 2022.

Placer Parkway

The Placer Parkway is to be an approximate 15-mile long, high-speed transportation facility, which will connect SR 65 in western Placer County to SR 70/99 in south Sutter County. It will link existing and planned development near some of the region's fastest growing communities while improving access to the I-5 corridor, downtown Sacramento, and SMF. The Federal Highway Administration (FHWA), California Department of Transpiration (Caltrans), and South Placer Regional Transportation Authority (SPRTA) completed a Tier 1 Environmental Impact Statement (EIS)/EIR which analyzed the five corridor alignment alternatives identified by SPRTA. The Final Tier 1 EIS/EIR, released in November 2009, identified Alternative 5 as the Preferred Alternative and the Environmentally Superior Alternative subject to approvals by FHWA and SPRTA. As discussed throughout this EIR and shown on Figure 2-3, the Placer Parkway alignment extends through the Roseville Industrial Park Project site. The first phase of Placer Parkway, from SR 65 to Foothills Boulevard North, was approved by Placer County in 2015 (SCH# 2015052032).

Dry Creek/West Placer Community Plan

The Dry Creek/West Placer Community Plan area encompasses approximately 9,200 acres in the southwest corner of Placer County. It is bounded by Baseline Road on the north, Sutter County to the west, Sacramento County to the south, and the City of Roseville to the east. This Community Plan area encompasses other specific plans such as Placer Vineyards and Riolo Vineyards, which are in early stages of buildout.

Other Cumulative Projects

Pleasant Grove North Retention Basin

The Pleasant Grove Retention Basin Facility (formerly Reason Farms) at the Al Johnson Wildlife Area, is located southwest of the ARSP. The EIR for the Pleasant Grove Retention Basin Facility was certified in 2003 and evaluated full build-out of the regional retention basin to 2,350 acre-feet (AF) capacity. (Note: the Pleasant Grove Retention Basin Facility was also evaluated in the SAP/PRSP EIR.) At build-out, the Retention Basin Project will provide retention storage in two basins, a south basin with 1,850 AF of storage and a north basin with 680 AF of storage. The south basin has been constructed and it is anticipated that the north basin will be constructed in the future to accommodate cumulative development in the City. The City is currently collecting drainage impact fees from new development projects to fund construction of this project, which will be constructed as funds are made available.

4.3 CUMULATIVE IMPACT ANALYSIS

For purposes of this EIR, the proposed Roseville Industrial Park Project would result in a significant cumulative effect if:

- the cumulative effects of related projects (past, current, and probable future projects) are not significant and the incremental impact of implementing the proposed Roseville Industrial Park Project is substantial enough, when added to the cumulative effects of related projects, to result in a new cumulatively significant impact; or
- the cumulative effects of related projects (past, current, and probable future projects) are already significant, and implementation of the proposed Roseville Industrial Park Project makes a considerable contribution to the effect. The standards used herein to determine a considerable contribution are that either the impact must be substantial or must exceed an established threshold of significance.

Significance criteria, unless otherwise specified, are the same for cumulative impacts and project impacts for each environmental topic area. This cumulative analysis assumes that all mitigation measures identified in Chapter 3 to mitigate project impacts are adopted. The analysis herein analyzes whether, after adoption of project-specific mitigation, the residual impacts of the project would cause a cumulatively significant impact or would contribute considerably to existing/anticipated (without the project) cumulatively significant effects.

4.3.1 Land Use and Agricultural Resources

Impacts related to consistency with land use plans or policies would generally be localized and would not generally combine to result in cumulative impacts. The threshold of significance for land use impacts is whether a project would conflict with any applicable land use plan or policy adopted for the purpose of reducing or avoiding environmental impacts. Such conflicts are inherently site specific and are addressed by individual projects. As discussed in Section 3.1, "Land Use and Agricultural Resources," with approval of the General Plan Amendment, the proposed Roseville Industrial Project would be consistent with the *City of Roseville General Plan*, and with approval of rezoning within the project site, the project would be consistent with the City of Roseville Zoning Ordinance. Therefore, the project **would not result in a considerable contribution** to a cumulative impact related to land use.

The cumulative context for agricultural resources includes the project region (i.e., project site, the city of Roseville, Placer County). Cumulative agricultural land impacts could occur in conjunction with development proposed in the City of Roseville and Placer County. While the *City of Roseville General Plan EIR* states that buildout of the General Plan would have no impact on Farmland because the only Prime Farmland within the city is not proposed for conversion to non-agricultural uses, development within the county would result in the continued loss of farmland in the region. However, conversion of the project site from Farmland of Local Importance and grazing land to non-agricultural uses is not considered a significant impact. Therefore, the project **would not result in a considerable contribution** to a cumulative impact related to agricultural resources.

4.3.2 Population, Employment, and Housing

For population, employment, and housing, the cumulative setting includes the City of Roseville. Table 3.2-1 in Section 3.2, "Population, Employment, and Housing," presents the growth forecast prepared by the City as part of the 2035 General Plan. With buildout of the General Plan in 2035, Roseville is estimated to have a total population of approximately 198,000 (an increase of 62,200 residents from the 2016 population), with approximately 75,200 dwelling units, 60 million square feet of non-residential building square footage, and between 120,000 and 150,000 local jobs (City of Roseville 2020a). Development of the proposed Roseville Industrial Park Project would generate 1,938 new jobs at full buildout, which represents 1.2 to 1.6 percent of the City's jobs forecast.

Numerous past, present, and probable future projects should be considered as part of the cumulative setting because they contribute to the existing conditions against which the proposed project's and each probable future project's environmental effects are compared. Section 4.2.3, "Related Projects," describes these projects. Major projects close to the project area include Roseville's Creekview Specific Plan and West Roseville Specific Plan, which

would add 2,011 and 9,496 dwelling units, respectively, as well as office and other non-residential uses (see Section 4.2.3, "Related Projects,"). Other large developments approved farther from the project site, but within Roseville, include (to name a few) Sierra Vista Specific Plan, Amoruso Ranch Specific Plan, Riolo Vineyards Specific Plan, Curry Creek Specific Plan, and Hewlett Packard Campus Oaks Project. All of these approved plans would result in the continued development of Roseville and surrounding areas, including residential, commercial, and industrial development.

Buildout of the proposed Roseville Industrial Park Project in conjunction with buildout of projects in the area would result in a substantial number of employment opportunities; however, the proposed project would not include the development of new residences. Within the City, 6,496 workers were employed in the manufacturing, transportation, and warehousing industries in 2019. At full buildout, the project would employ 1,938 workers, which is approximately 30 percent of the total manufacturing, transportation, and warehousing workers employed in Roseville in 2019 (Table 3.2-8). Given the existing number of workers within Roseville and the future buildout of the Creekview and West Roseville Specific Plans as well as other specific plan areas within Roseville, the project would not contribute to substantial unplanned population growth.

In Roseville, the jobs to dwelling units ratio is 1.55 and is estimated to increase to 1.6 to 2.0 with buildout of the General Plan in 2035 (City of Roseville 2020a). This means that there are more jobs than residents in Roseville, and this trend is projected to continue. As described in the City of Roseville 2035 General Plan EIR, the City's estimated jobs-housing ratio at General Plan buildout is higher than the target ratio of 1.0 (City of Roseville 2020b). The General Plan EIR further states on page 4.2-12, "The City's estimate of total jobs reflects the anticipated addition of new industries and businesses in Roseville on sites designated for commercial, office, industrial, and civic uses. The City's intent is to increase the number and diversity of locally available jobs that could be filled from the local employment pool, including the unemployed and those commuting to jobs outside of the city." The proposed project would add 1,938 more jobs, contributing to the "jobs-rich" nature of Roseville. As explained in the General Plan EIR, it is not possible at this time for the City to predict the residential location of future employees of Roseville employers and it is possible that new jobs generated by the project and other planned projects in the area could draw employees from outside Roseville (City of Roseville 2020b: 4.2-12). Buildout of the proposed Roseville Industrial Park Project would have a modest contribution to overall employment projections, but would not induce substantial population growth. Further, the project site is directly adjacent to multiple specific plan areas that will include thousands of new residential units at buildout. Thus, the project would not have a considerable contribution to any significant cumulative impact related to population, employment, and housing

4.3.3 Transportation and Circulation

The cumulative transportation setting contains buildout of various land uses and construction of numerous planned improvements in Roseville and unincorporated Placer County. Land use growth and planned transportation system improvements are described below.

Land Use Growth

- Buildout of the Sierra Vista, West Roseville, Creekview, and Amoroso Specific Plans in the City of Roseville.
- Buildout of the Regional University and Placer Vineyards Specific Plans in unincorporated Placer County.
- Considerable levels of development (but not full buildout) of the Placer Ranch Specific Plan / Sunset Industrial Area properties in unincorporated Placer County.

The model also includes planned development in other communities including Rocklin, Lincoln, Sacramento County, and Sutter County.

Planned Transportation System Improvements

Figure 4-1 shows the planned improvements in the project vicinity. A number of existing roadways would be widened and new roadways constructed. Blue Oaks Boulevard would be widened to three lanes in each direction from west of

Fiddyment Road to its terminus at Santucci Boulevard. Of the various roadway improvements shown in Figure 4-1, several require additional explanations, including:

- Placer Parkway is a planned four-lane expressway that would extend from SR 65 (opposite Whitney Ranch Parkway) in a southwesterly direction, terminating at Blue Oaks Boulevard. It would feature connections at Foothills Boulevard, Fiddyment Road, and Westbrook Boulevard. This roadway is ultimately planned to extend to SR 99, but not by the horizon year of this study.
- Santucci Boulevard is assumed to extend southerly from Blue Oaks Boulevard to Pleasant Grove Boulevard. This improvement is not currently included in the City's Capital Improvement Program (CIP) but is assumed to be in place to provide connectivity for Placer Parkway from SR 65 to Baseline Road.
- Westbrook Boulevard would extend northerly, connecting at Placer Parkway and terminating at Sunset Boulevard West.
- Southerly Road Connections—Santucci Boulevard, Westbrook Boulevard, Market Street, and Upland Drive—would extend southerly from Vista Grande Boulevard, terminating at Baseline Road. This will provide substantial increases in north-south connectivity and capacity compared to current conditions.

Figure 4-2 shows the cumulative plus project average daily traffic (ADT) on various roadways within the study area. These volumes are substantially greater than the existing plus project volumes due to a large amount of assumed land use growth in the area.

Regarding improvements to bicycle and pedestrian facilities in the project vicinity, the most notable planned improvement is the extension of the Pleasant Grove Creek Multi-Use Trail. The trail is planned to extend westerly from its current terminus at Fiddyment Road to the Creekview Specific Plan (i.e., west of Westbrook Boulevard).

Vehicle Miles Traveled

Table 4-2 presents the project's expected vehicle miles traveled (VMT) under cumulative plus project conditions. The project's VMT under cumulative conditions would be about 22 percent less than under existing conditions due to shorter home-to-work trip lengths resulting from substantially greater levels of development in the project vicinity.

Table 4-2 Project (Buildout) VMT – Cumulative Plus Project Conditions

Land Use	1,000 Sq. Ft.	Daily Trips [1]	Average Trip Length [2]	Project VMT
Industrial Park	2,421.7	8,160	8.2 miles	66,912

Notes: VMT = vehicle miles traveled.

[1] Trip generation based on trip rates from *Trip Generation Manual, 11th Edition* (ITE 2021).

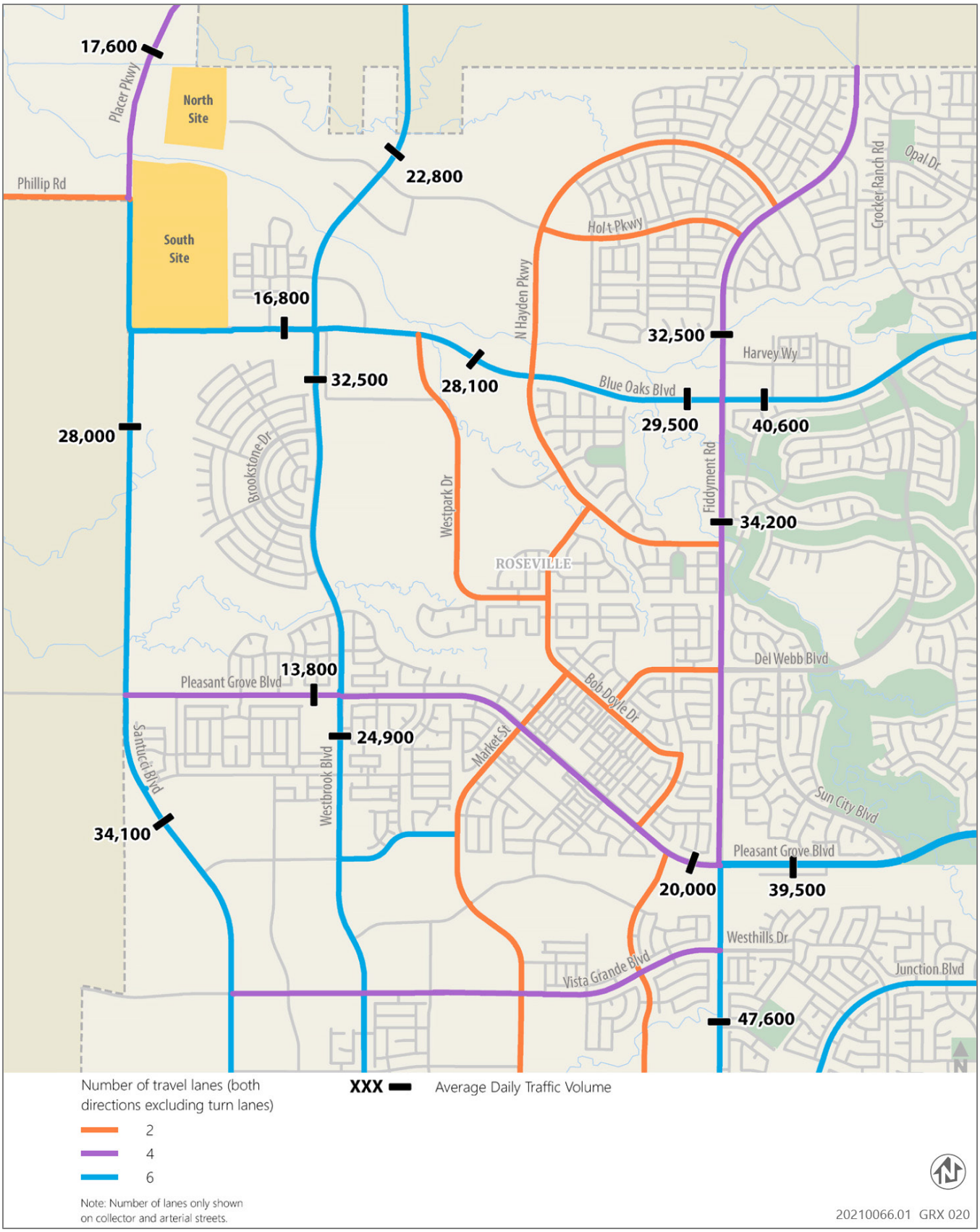
[2] Average trip length based on output from City of Roseville cumulative travel demand model.

Source: Data provided by Fehr & Peers in 2021.

Table 4-3 shows the Citywide VMT per service population from the cumulative (2035) travel demand model. This table also shows the project's cumulative VMT per service population. Refer to Appendix B for detailed calculations. Similar to base year conditions, the project's VMT per service population would be substantially greater than the cumulative Citywide average. However, the degree of the exceedance would be less than under existing conditions due to the expected levels of new development in the project vicinity under cumulative conditions, which result in shorter trip lengths to the project site.

Source: Provided by Fehr & Peers in 2021.

Figure 4-1 Cumulative Roadway Network Improvements



Source: Provided by Fehr & Peers in 2021.

Figure 4-2 Cumulative Roadway Network and Average Daily Traffic Volumes

Table 4-3 Comparison of Project VMT Versus Citywide Cumulative VMT

Measure	Cumulative (2035) Citywide Conditions [1]	Project VMT Under Cumulative (2035) Conditions [7]
VMT [2]	11,030,763	126,922
Residents [3]	190,491	0
Employees [4]	123,405	2,422
Service Population [5]	313,896	2,422
Efficiency Metric (VMT per service population) [6]	35.1	52.4

Notes: KSF = thousand square feet; TAZ = traffic analysis zone; VMT = vehicle miles traveled.

[1] Analyzed using cumulative (2035) City of Roseville Travel Demand Model.

[2] Reported VMT represents all travel generated by Roseville land uses (including full length of the trip beyond City boundaries). VMT associated with trips that are internal-internal (i.e., remain within the City) are counted twice due to use of service population methodology (i.e., because such trips involve two Roseville residents or employees). Accordingly, VMT shown here does not match the project VMT estimate in Table 3.3-4 due to differing VMT calculation methods.

[3] Estimated number of total residents based on average household size estimates for single-family and multi-family units, applied to the number of added units of each type between 2020 and 2035.

[4] Measure represents jobs located in the City. Estimate is based on unit employment yields per KSF of non-residential space based on the cumulative year model land use dataset.

[5] Service population is the sum of residents plus employees.

[6] Efficiency metric is the ratio of VMT to service population.

[7] Project was added to TAZ 1502 with the resulting Citywide VMT calculated in a consistent manner. Per the General Plan, VMT per service population calculations use the same employee yields across different parcels (by land use type) to provide consistency of approach and fairness in VMT reviews. Therefore, the project adds an assumed 2,422 employees (i.e., one employee per KSF of industrial building space).

Source: Data provided by Fehr & Peers in 2021.

As shown in Table 4-3, the project generated VMT would exceed the applicable VMT per service population threshold, which is a 15 percent reduction from the cumulative Citywide average. Implementation of Mitigation Measure 3.3-1 would result in a reduction in VMT associated with implementation of the project. However, the project's VMT per service population would need to decrease by 33 percent (i.e., 1 – 35.1/52.4) to not exceed the applicable VMT per service population threshold and, as discussed under Impact 3.3-1, implementation of Mitigation Measure 3.3-1 would not be sufficient to accomplish this. Therefore, Mitigation Measure 3.3-1 is not expected to reduce VMT to a level that is below applicable significance thresholds. Therefore, the project's contribution to substantial effects related to VMT would be **cumulatively considerable and significant and unavoidable**.

4.3.4 Air Quality

Construction Emissions

Placer County and the Sacramento Valley Air Basin (SVAB) are in nonattainment for ozone (i.e., reactive organic gases [ROG] and oxides of nitrogen [NO_X]) and respirable particulate matter with aerodynamic diameter of 10 micrometers or less (PM_{10}) with respect to the California ambient air quality standards (CAAQS), and in nonattainment for ozone and fine particulate matter with aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$) with respect to the national ambient air quality standards (NAAQS). Construction activities in the region would add particulate matter and ozone emissions into the SVAB that may conflict with attainment efforts. Cumulative development identified in Section 4.2.3, "Related Projects," while required to mitigate for adverse air quality impacts, will contribute to regional emissions, resulting in a significant adverse cumulative impact.

Project-related construction emissions of ROG and NO_X would exceed the applicable mass emission thresholds established by the Placer County Air Pollution Control District (PCAPCD). PCAPCD considers these thresholds to be the criteria for determining whether emissions generated by an individual project would be cumulatively considerable (PCAPCD 2017: 21). Incorporation of Mitigation Measure 3.4-1 would reduce ROG and NO_X to a less-than-significant level. However, because of the scale and extent of construction activities that would occur, as well as the uncertainty of construction activities and timing of different phases, construction activities could overlap, resulting in emissions that exceed PCAPCD's daily construction thresholds. Therefore, project construction emissions would be **cumulatively considerable**. Because no additional mitigation is available beyond that recommended for project-specific construction emissions, the cumulative impact would be **significant and unavoidable**.

Long-term Operational Emissions

Ozone impacts are the result of cumulative emissions from numerous sources in the region and transport from outside the region. Reasonably foreseeable regional development identified in Section 4.2.3, "Related Projects," will add urban development on undeveloped land in the region. All of this regional development will increase emissions that contribute to ozone impacts. Ozone is formed in chemical reactions involving NO_X, ROG, and sunlight. All but the largest individual sources emit NO_X and ROG in amounts too small to have a measurable effect on ambient ozone concentrations by themselves. However, when all sources throughout the region are combined, they can result in ambient concentrations of ozone that exceed the NAAQS and CAAQS.

PM_{10} and $PM_{2.5}$ have similar regional cumulative impacts when particulates are entrained in the air and build to unhealthful concentrations over time. PM_{10} and $PM_{2.5}$ also have the potential to cause significant local problems during periods of dry conditions accompanied by high winds, and during periods of heavy earth disturbing activities. PM_{10} and $PM_{2.5}$ may have cumulative local impacts if, for example, several unrelated grading or earth moving activities are underway simultaneously at nearby sites. Cumulative projects include several, large-scale developments in close enough proximity (e.g., Amoruso Ranch, Creekview Specific Plan, West Roseville Specific Plan, Whitney Ranch, and Twelve Bridges Specific Plan) such that localized PM_{10} and $PM_{2.5}$ effects could occur. Operational PM_{10} and $PM_{2.5}$ are less likely to result in local cumulative impacts as operational sources of PM_{10} and $PM_{2.5}$ tend to be spread throughout the region (i.e., vehicles traveling on roads), not affecting any one receptor. Therefore, emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ from cumulative development are significant in the air basin. The project's contribution to the nonattainment status of the SVAB with respect to the CAAQS and NAAQS would be **cumulatively considerable.** Because no additional mitigation is available beyond that recommended for project-specific operational emissions, the cumulative impact would be **significant and unavoidable**.

Toxic Air Contaminants

Toxic air contaminants (TACs), which are examined under Impact 3.4-4 in Section 3.4, "Air Quality," are also pollutants of localized concern. Diesel particulate matter (diesel PM) emissions are the primary TAC of concern regarding the construction and operation of new urban land uses and infrastructure. The health risk-based significance criteria used to evaluate TACs under Impact 3.4-4 are also inherently cumulative. This impact examines whether implementing the project would result in the exposure of sensitive receptors to TAC emissions that would result in cancer risk of 10 in 1 million or a noncarcinogenic Hazard Index of 1 at any receptor. Thus, the analysis focuses on the incremental increase in health risk from project-related sources of TAC emissions. The contribution of the project to the TAC would be less significant. However, it cannot be determined with certainty that future TAC concentrations would not expose any receptors to levels that exceed 10 in 1 million when combined with other projects. Consequently, the project's contribution to cumulative TACs impact would be **cumulatively considerable**. Hence, the cumulative impact would be **significant and unavoidable**.

Odors

The creation of objectionable odors affecting a substantial number of people, which is examined under Impact 3.4-5 in Section 3.4, "Air Quality," is also an impact of localized concern. Construction and operation of the Roseville Industrial Park Project would not result in the development of new odor sources atypical of developed urban areas and odor-generating construction activity would be temporary. Any new odor sources would be subject to future environmental review, and to PCAPCD Rule 205, Nuisance. Implementation of the project would generate odors from

construction activities which would be temporary and operational activities would generate intermittent odors from the use of truck idling and diesel generator use. These sources would be either used temporarily or would be used for a brief period of time and also dissipate rapidly with distance. Due to the rapid dissipation of the odor with distance, the project would not contribute to cumulative impacts and therefore, the cumulative impact would be **less than significant**.

4.3.5 Greenhouse Gas Emissions and Climate Change

The discussion of greenhouse gas (GHG) emissions associated with the project and related infrastructure for Impacts 3.5-1 and 3.5-2 in Section 3.5, "Greenhouse Gas Emissions and Climate Change," is inherently a cumulative impact analysis. GHG emissions from one project cannot, on their own, result in changes in climatic conditions; therefore, the emissions from one project must be considered in the context of their contribution to cumulative global emissions. The analysis of Impact 3.5-1 concluded that the level of construction and operations-related GHG emissions associated with implementation of the project would exceed PCAPCD's bright line threshold of 10,000 metric tons carbon dioxide-equivalent emissions per year ($MTCO_2e$/year) and, therefore, would be substantial and cumulatively considerable. The analysis of Impact 3.5-2 concluded that the level of construction and operations-related GHG emissions associated with implementation of the project would be substantial and could conflict with the state's ability to meet its statewide GHG targets and, therefore, would be cumulatively considerable. Implementation of on-site GHG reduction measures required by Mitigation Measure 3.5-1a, along with establishment of offsets or purchase of carbon credits, as required by Mitigation Measure 3.5-1b, would not reduce GHG emissions below thresholds for the life of the project. Because of the uncertainty in the availability and affordability of GHG offset credits in the future, the project **would have a considerable contribution** to a significant cumulative GHG impact and the impact would be **significant and unavoidable**.

4.3.6 Noise and Vibration

CONSTRUCTION NOISE

Noise dissipates rapidly from its source; however, cumulative impacts from construction-generated noise could result if construction activities of other planned projects were to take place in close enough proximity to project-generated construction such that noise effects would combine to result in substantial increases in noise at the same sensitive receptors. Several new large developments are planned in the region. See Section 4.2.3, "Related Projects," for a list of reasonably foreseeable projects in the project area. The closest project to the project site, which is most relevant for the cumulative construction noise, includes the Creekview Specific Plan area, which is located immediately east of the project site and includes a total of 2,011 residential units at buildout. The CVSP is in early stages of buildout, and home construction is underway for subdivisions immediately to the east of the project site. Therefore, it is likely that as the Creekview Specific Plan area continues to be constructed, construction activities on the project site could occur simultaneously with construction of the Creekview Specific Plan area.

With regards to cumulative construction noise, and noise in general, the addition of two similar noise levels results in a 3-decibel (dB) increase, which is considered perceptible by most people. And, when a louder noise level is combined with a lower noise level, a less than 3-dB increase would occur (i.e., 65 dB plus 60 dB equals 66 dB). Thus, for a perceptible increase in cumulative construction noise to occur, similar noise levels from two different construction sites would need to combine at the same sensitive receptor to result in a cumulative increase in noise.

Construction associated with the adjacent portions of the Creekview Specific Plan has progressed substantially; site preparation, which is the construction phase that typically involves the most pieces of heavy equipment, appears to have been completed in most of these areas near the project site based on the City's issuance of plans and review of aerial photos. Construction in the Creekview Specific Plan area will likely be further along when project construction begins; therefore, if construction associated with Creekview Specific Plan is still occurring in areas adjacent to the project site, construction noise would generally be limited to the activities that produce the least amount of noise (e.g., finishing,

architectural coatings). At the time of project construction, it is anticipated that construction noise associated with the Creekview Specific Plan (within areas adjacent to the project) would not be substantial. The project's construction noise would not combine with other nearby anticipated development such that a considerable cumulative increase in noise would occur. Therefore, the project **would not result in a considerable contribution** to a cumulative impact related to construction noise.

VIBRATION

Cumulative impacts from construction-generated vibration could result if other future planned construction activities were to take place very close to other construction activities and cumulatively combine with construction vibration from the project. No new long-term vibration sources would result from the project and, thus, this impact focuses on construction vibration.

Vibration associated with construction activities is of primary concern within close proximity (typically within 100 feet) or if nighttime vibration-inducing activities were to occur near sensitive land uses. At increasing distances from the source, vibration levels dissipate rapidly and have less potential to cause disturbance to people or damage to structures. In addition, vibration generated from construction is typically associated with pile-driving activities that only occur during discrete phases of construction and for intermittent and brief periods at a time. For these reasons, even with additional large development projects and plans anticipated for future development, vibration impacts would remain local and would not combine with vibration sources from other construction activities even if construction activities at other future developments were to occur simultaneously with project construction activities. Further, project-generated vibration levels would be below applicable thresholds within the project site. Because vibration levels generated by the cumulative projects would be limited to the vicinity of construction activities for those projects, and because vibration levels of the proposed project would not result in any off-site impacts, cumulative construction-generated vibration impacts would be less than significant. Therefore, the project **would not result in a considerable contribution** to a cumulative impact related to construction vibration.

OPERATIONAL NOISE (STATIONARY AND TRANSPORTATION)

Cumulative noise levels could be affected by additional buildout of surrounding land uses and increases in vehicular traffic on affected roadways.

Regarding stationary noise increases, the proposed project would result in land use development that typically includes stationary noise sources such as noise from heating, ventilation, and air conditioning (HVAC) units, electrical generators, and loading docks. As discussed in Impact 4.6-3 in Section 4.6, "Noise and Vibration," stationary noise sources would be mitigated to below applicable standards with on-site design features such as equipment enclosures and sound barriers; thus, noise from these sources would not combine from other off-site stationary sources to result in considerable increases in noise.

Traffic generated by future planned development in the region would result in additional traffic-related noise on surrounding roadways. In the future cumulative no project scenario, traffic and associated noise levels on existing roadways are anticipated to increase. Based on modeling conducted for the project, existing and existing plus project noise levels would exceed applicable City of Roseville transportation noise standards of 60 A-weighted decibels (dBA) Community Equivalent Noise Level (CNEL). Thus, without the project there would be a future adverse cumulative noise condition. The project's contribution to cumulative traffic increases on existing roads would result in noise increases by as much as 16 dB (on Phillip Road near the project site) and, combined with traffic from other development in the area, could result in additional increases. Thus, the project's contribution to cumulative traffic volumes in the area would result in additional substantial increases in noise as well as additional noise sources within the vicinity. The project **would result in a considerable contribution** to a cumulatively significant impact. Because no additional mitigation is available to reduce the project's contribution, beyond what is identified in this EIR, the impact would be **significant and unavoidable**.

4.3.7 Biological Resources

Sensitive habitats for biological resources in the vicinity of the project site and in the region have been modified, removed, and fragmented over time as land has been developed and converted to agricultural, urban, and residential uses. Historic development in the region has resulted in substantial loss of sensitive habitats, much of which was likely not permitted or mitigated, including riparian habitat, which has been dramatically reduced from its historical extent in the region. This represents an existing significant cumulative impact. Future projects in the region, including projects described in Section 4.2.3, "Related Projects," could continue to result in losses of sensitive habitats and sensitive species. These future projects include planned residential development (i.e., under approved specific plans) and major road improvements (e.g., Placer Parkway), which would contribute to ongoing loss of natural habitat (e.g., vernal pools, grassland, riparian habitat). Although individual projects would be required to mitigate for significant impacts on a project-by-project basis, they may result in residual impacts that combine with the existing adverse condition to create a significant cumulative impact related to special-status species and sensitive habitats.

The project site and vicinity are located in an area of Roseville that is characterized by agricultural land uses and ongoing residential development. Project implementation could result in adverse effects on special-status plants, special-status wildlife, valley oak riparian woodland habitat (also considered a sensitive natural community), waters of the United States and state, and egret or heron rookeries (considered wildlife nursery sites). Additionally, project implementation could result in conflicts with tree preservation requirements in the City of Roseville Municipal Code. Mitigation Measures 3.7-1, 3.7-2a, 3.7-2b, 3.7-2c, 3.7-2d, 3.7-2e, 3.7-2f, 3.7-3, 3.7-4b, 3.7-5a, 3.7-5b, and 3.7-6 would avoid or minimize adverse effects on these resources and would reduce impacts to a less-than-significant level.

Because the project would either have no impact or a very limited impact on biological resources after mitigation, it would not have a considerable contribution to a significant cumulative impact related to biological resources.

4.3.8 Cultural Resources

The cumulative context for cultural resources is the former territory occupied by the Nisenan and the historic period small-scale ranches located near Pleasant Grove Creek. Nisenan territory extended from the area surrounding the current City of Oroville on the north to a few miles south of the American River on the south. The Sacramento River bounded the territory on the west, and in the east, it extended to a general area located along the crest of the Sierras west of Lake Tahoe. Historic period ranches near Pleasant Grove Creek included those of the Lee, Boutwell, Dunlap, and Kasberg, and the Fiddyments. Lee and Boutwell, Dunlap, and Kasberg used the land around Pleasant Grove Creek for livestock grazing while the Fiddyments also used the land for livestock grazing, a turkey farm in the 1920s, and more recently for pistachio farming. Today cattle grazing is still practiced on the project site and a pistachio orchard is present to the southwest.

Because all significant cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. The loss of any one significant archaeological site could affect the scientific value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources, rather than on a single project or parcel boundary.

Proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing our understanding of past environmental conditions and cultures by recording data about sites discovered and preserving the artifacts found. Federal, state, and local laws are also in place, as discussed in Section 3.8, "Cultural Resources," that protect these resources in most instances. Even so, it is not always feasible to protect these resources, particularly when preservation in place would make projects infeasible, and for this reason the cumulative effects of past and present projects in the City of Roseville, including the projects listed in Section 4.2.3, "Related Projects," could result in a potentially significant cumulative impact on archaeological resources. Without mitigation, implementation of the proposed Roseville Industrial Park Project has the potential to

cause a substantial change in the significance of archaeological resources that are unique and nonrenewable members of finite classes. With implementation Mitigation Measures 3.8-1a and 3.8-1b, adverse effects on known archaeological resources and potentially newly discovered archaeological resources would be avoided. Further, it is reasonable to assume the City of Roseville would take similar actions to avoid, record, or otherwise treat unique archaeological resources appropriately, in accordance with pertinent laws and regulations. Therefore, the project would not result in a considerable contribution to a cumulatively significant loss of cultural resources.

4.3.9 Hazardous Materials, Wildfire, and Other Hazards

Hazardous materials impacts associated with the past or current uses of a project site usually occur on a project-by-project basis and are site-specific rather than regional in nature. Any hazardous materials uncovered during construction activities would be managed consistent with applicable federal, state, and local laws to limit exposure and clean up the contamination. In addition, the use, storage, transport, and disposal of hazardous materials would be managed in accordance with applicable federal and state requirements to limit risk of exposure. Other projects in the vicinity of the project would create similar hazardous material effects during standard construction activities. Current and reasonably foreseeable projects, including those described in Section 4.2.3, "Related Projects," would also be required to comply with measures that would minimize and/or avoid exposure of hazardous materials to people or the environment (similar to Mitigation Measures 3.9-1a and 3.9-1b) recommended for the proposed project). Therefore, there would be no cumulative impact associated with hazardous materials use, storage, transport, or accidental spills.

Project construction would not impair an adopted emergency response plan or emergency evacuation plan; however, construction activities would involve truck traffic that could result in temporary lane closures, increased traffic, and other roadway conditions that could interfere with or slow down emergency vehicle access and services. Implementation of Mitigation Measure 3.9-2 would reduce potential impacts to emergency access such that they would not be cumulatively considerable. Additionally, the project has the potential to increase wildland fire hazards during construction; however, implementation of Mitigation Measures 3.9-3a and 3.9-3b would reduce potential wildfire hazards such that they would not be cumulatively considerable. Current and reasonably foreseeable projects, including those described in Section 4.2.3, "Related Projects," would also be required to comply with measures that would minimize and/or avoid impacts related to emergency access and wildfire risk.

Therefore, the project would not have a considerable contribution to a cumulative impact related to hazards and hazardous materials or wildfire.

4.3.10 Public Services

Existing fire protection and emergency response services in the project area are sufficient to meet existing demand. Cumulative development described in Section 4.2.3, "Related Projects," would result in continued development Roseville and surrounding areas, including residential, commercial, and industrial development. This cumulative growth that would place additional demand on existing fire protection and emergency response services, resulting in a potentially significant cumulative impact on existing fire protection services and facilities. According to the City of Roseville General Plan EIR, future Fire Station #11 is planned to be located in the Amoruso Ranch Specific Plan area, to the northeast of the project site (City of Roseville 2020b: 4.11-3). This new fire station would be expected to be funded through development fees (including from the proposed project) as well as funding from other sources. New stations would be built commensurate with new development in those areas.

Fire services are provided based on policies in the *City of Roseville General Plan* (2020a) and requirements of the Roseville Fire Department. Cumulative development projects described in Section 4.2.3, "Related Projects," are either located outside of the service area of Fire Station #9, are located within the city limits for Lincoln or Rocklin and are served by their respective fire departments or would be annexed into one of these cities. Therefore, implementation of the project would not cumulatively combine with other projects to result in a significant cumulative impact on fire protection and emergency response services. As described in Impact 3.10-1, fire services are a general fund

department funded primarily by sales tax and property tax revenue. As part of project operation, sales tax and property tax revenue generated by the project would help fund existing and future fire protection needs. Additionally, the Development Agreement for the project will include a requirement for the applicant to pay a Fire Service Construction Tax, which is used to fund the construction, reconstruction, or repair of fire facilities, or the acquisition, repair, or maintenance of fire equipment (Rizzi, pers. comm., 2021). The project would adhere to all applicable requirements related to fire protection, would generate sales tax revenue used to fund general fund departments such as the Fire Department, is within the Fire Department's existing service area, and, most importantly, and would not require the need for new or expanded facilities. Therefore, the project **would not result in a considerable contribution** to a cumulative impact on fire protection and emergency response services.

Existing law enforcement services in the project area are also sufficient to meet existing demand. Cumulative development described in Section 4.2.3, "Related Projects," would result in growth that would place additional demand on existing law enforcement services, resulting in a potentially significant cumulative impact on existing law enforcement services and facilities. However, police services are a general fund department funded primarily by sales tax and property tax revenue, and these development projects (as well as the proposed project) would help fund existing and future law enforcement needs through the generation of sales tax and property tax revenue. As described in Impact 3.10-2, the Roseville Police Department's Fiscal Year 2021/2022 budget provides funding to support 211 positions, including three new positions (City of Roseville 2021a: B-51). These new positions would help expand the Police Department's current staffing to better serve the City, including the project. As part of the General Plan EIR, the City determined that existing police facilities would be sufficient to accommodate demand anticipated with buildout of the General Plan (City of Roseville 2020b). Thus, the addition of new staff would not result in the need for new or physically altered police protection facilities, the construction of which could potentially have adverse impacts on the physical environment. Because the project would generate sales tax and property tax revenue used to fund general fund departments such as the Police Department and the project would not result in an increased need for new or expanded facilities, the project **would not result in a considerable contribution** to a cumulative impact on law enforcement services.

4.3.11 Utilities and Service Systems

For utilities and service systems, the cumulative context includes the service areas of the various service providers.

UTILITY INFRASTRUCTURE

Water supply and wastewater service is provided by the City of Roseville Environmental Utilities. Future development in Roseville would increase the demand for new and expanded utility infrastructure, the relocation or construction of which could cause significant environmental effects. As described under Impact 3.11-1 in Section 3.11, "Utilities and Service Systems," the project would require utility infrastructure extensions to serve the project's water supply and wastewater demands. All of the water and wastewater infrastructure, would be installed within the disturbance area of the project site or within existing roadways (e.g., Blue Oaks Boulevard) and impacts associated with construction of new or extended utility infrastructure are analyzed throughout this EIR. The project's anticipated water demand and wastewater output would be within the capacity of the existing utility infrastructure. Similarly, cumulative development would be required to demonstrate an adequate capacity of utilities and services, including water supply and wastewater infrastructure, before project approval. Cumulative development would be required to contribute fair share funding to fund necessary expansion of utility infrastructure and conduct appropriate CEQA analyses to evaluate potential environmental impacts of utility relocation, construction, or expansion. Because of these requirements and the project's small percent of the remaining capacity of the existing utility infrastructure, the project **would not result in a considerable contribution** to a cumulative impact related to utility infrastructure.

WATER SUPPLY

The geographic scope for the cumulative water supply analysis is the City of Roseville. Population growth and local regulation of associated development within the city prevent the occurrence of existing cumulative utilities and service system impacts by implementing the *City of Roseville General Plan* that includes a policy framework that ensures adequate capacity exists to support proposed development.

The City of Roseville's 2020 Urban Water Master Plan (UWMP) describes the availability of water and discusses water use, recycled water use, and water conservation through buildout of the General Plan in 2035 (City of Roseville 2021b). As described in the General Plan EIR, water supply is projected to be sufficient in normal water years over the UWMP's 20-year planning period (i.e., 2015 to 2035). The UWMP shows that in single-dry years and some multiple-dry years, water supply would be insufficient to meet demand within the City's service area over the 20-year planning period; however, water conservation and/or groundwater use would ensure sufficient water supplies to meet demands. Therefore, the City would have sufficient water supplies available to serve buildout of the General Plan from existing or permitted entitlements in normal, single-dry, and multiple-dry water years (City of Roseville 2020b).

At the time the 2020 UWMP was prepared, the proposed project was not considered in the City's water demand projections. Therefore, a water supply assessment (WSA) was prepared for the project to ensure that long term water supplies are sufficient to meet the project's demands in normal, single dry, and multiple dry years for a period of 20 years. As described under Impact 3.11-2 in Section 3.11, "Utilities and Service Systems," implementation of the proposed project would increase demand for water supplies; however, with implementation of water conservation measures, the City is expected to have adequate water supplies to serve the project in all water year types (City of Roseville 2022). In addition, in the drier and driest years, the City has an agreement with the Placer County Water Agency (PCWA) to release an additional 20,000 acre-feet per year (afy) of water down the American River on the City's behalf that is not part of the City's contracted supply of 66,000 afy, which would further increase the City's water supplies. Therefore, the project **would not result in a considerable contribution** to a cumulative impact related to water supply.

SOLID WASTE

The cumulative setting for solid waste services consists of the Western Placer Waste Management Authority (WPWMA) service area, including unincorporated western Placer County and the cities of Rocklin, Lincoln, Roseville, Loomis, Auburn, and Colfax. Future development in the region, described in Section 4.2.3, "Related Projects," would increase the amount of waste processed at the Material Recovery Facility (MRF) and disposed of at the Western Regional Sanitary Landfill. Buildout of the WPWMA service area would contribute to increased demand for processing at the MRF and for disposal of solid waste at the landfill. Although the capacity of the landfill and the MRF are anticipated to serve existing and future development within the WPWMA service area, implementation of cumulative projects could reduce the life of the MRF and landfill, which would require expansion of these facilities. Because the cumulative projects would contribute to the need to expand the MRF and landfill or solid waste would need to be transported elsewhere, cumulative demand for solid waste services would be a potentially significant cumulative impact.

As of June 30, 2017, the landfill had a remaining disposal capacity of approximately 24.5 million cubic yards. Based on projected waste disposal, which assumes a 2 percent average annual increase in municipal solid waste, the landfill is currently estimated to reach the end of its life in 2058 (City of Roseville 2020b). Expansion of the landfill to extend the life an additional 43 to 52 years is currently under environmental review. This expansion, if approved would expand the permitted capacity of the landfill to between 45.1 and 50.2 million cubic yards (WPMA 2021). As described under Impact 3.11-3 in Section 3.11, "Utilities and Service Systems," the project's anticipated solid waste production of 7.9 tons per day would comprise 0.7 percent of the remaining daily capacity for the Western Regional Sanitary Landfill. Cumulative development in the WRSL service area would be required to pay collection fees, a portion of which could be used to service bonds necessary to fund expansion of the WRSL. Further, cumulative development would be required to demonstrate an adequate capacity of utilities and services, including solid waste disposal, before project approval. Because of these requirements, the planned expansion of the landfill, and the project's small percent of the remaining daily capacity of the landfill, the project's contribution to cumulative solid waste disposal **would not be cumulatively considerable.**

4.3.12 Hydrology and Water Quality

Previous, on-going, and future development in the City of Roseville and Placer County, including projects discussed in Section 4.2.3, "Related Projects," have contributed to additional demands on groundwater resources and available water supply, surface and groundwater water quality impacts, and regional increases in peak drainage flows from increased impervious surfaces associated with development.

As identified in Impact 3.12-1 in Section 3.12, "Hydrology and Water Quality," all earth disturbing activities during construction would be subject to the National Pollutant Discharge Elimination System (NPDES) permit program that would require the project applicant to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ). The NPDES Construction General Permit identifies limits on discharge, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality or people's health. Compliance with these provisions, including preparation of a stormwater pollution prevention plan (SWPPP) and implementation of best management practices (BMPs), the construction impacts associated with water quality and waste discharge requirements would be minimized. The project would also comply with the City's Urban Stormwater Quality Management and Discharge Control Ordinance, West Placer Storm Water Quality Design Manual, PCFCWCD's Stormwater Management Manual, and Section 16.20.040 of the Roseville Municipal Code that include measures to control, prevent, remove, or reduce pollution. Similar requirements would be placed on other developments in Roseville and surrounding areas to reduce water quality impacts. Therefore, the project's contribution to cumulative water quality impacts **would not be cumulatively considerable.**

The project would not directly use groundwater; however, it would be served by the City of Roseville, which uses surface and groundwater sources for the City's water supply. The project site is undeveloped land and implementation of the project would add approximately 175 acres of impervious surface to the site; however, this would account for less than 0.1 percent of the surface area of the North American River subbasin. Therefore, the project would not substantially decrease groundwater levels nor interfere with groundwater recharge. The project would not substantially deplete groundwater supplies, and the project's contribution to potential groundwater use under cumulative conditions **would not be cumulatively considerable**.

Future development of the project site would increase the quantity of impervious surfaces, which would alter the drainage pattern and increase the rate or amount of surface runoff. This would result in increased runoff and potentially an increase in flooding. In addition, portions of the project site are designated as 100-year floodplain and 500-year floodplain for Pleasant Grove Creek. However, the project would be required to comply with City Improvement Standards, the City's Stormwater Quality Design Manual, and Placer County Flood Control and Water Conservation District's Stormwater Management Manual that require stormwater drainage facilities be designed with adequate capacity for stormwater flows from the project site. The project would also be required to obtain a Letter of Map Revision from FEMA. With implementation of these measures, the project's contribution to cumulative drainage impacts **would not be cumulatively considerable.**

4.3.13 Aesthetics

Aesthetic and visual resources impacts are project-specific and highly localized. Aesthetic impacts of projects visible from the same areas where the proposed project would be visible were evaluated to determine whether there would be significant cumulative aesthetic and visual impacts. The geographic extent for considering cumulative impacts on aesthetics includes projects within the same viewshed (i.e., area visible from viewer's location) of the proposed project, which is a conservative estimate of the likely maximum distance from which the project would be visible, particularly considering the flat terrain of the project area that does not afford elevated viewpoints with very expansive views.

As described in Section 4.2.3, "Related Projects," cumulative projects in surrounding communities would result in construction of a substantial number of residential units and commercial development. The project site is adjacent to

three specific plan areas: the Creekview Specific Plan area to the east, the West Roseville Specific Plan area to the south, and the Amoruso Ranch Specific Plan to the north. Due to their proximity, these specific plan areas would be visible in the same viewshed as the proposed project. Some of these developments are already under construction, and construction of developments could overlap with construction in the project area. This analysis focuses on the proposed project after it is built out because the precise timing and location of construction of individual projects and structures within the project area is not known.

VISUAL CHARACTER AND QUALITY

The cumulative projects involve substantial residential, commercial, and other development and would result in similar visual changes as the proposed project. For example, many of the cumulative developments would be adjacent to agricultural/grazing and open space areas and could degrade visual quality by placing urban development adjacent to these areas. The developments and the proposed project would therefore together cause substantial degradation of visual quality, especially where there would be abrupt transitions between open space and agricultural/grazing areas and development. These would be cumulatively significant impacts on visual quality and character. As described for the proposed project, the proposed industrial facility would be designed to be visually consistent with surrounding specific plan area development and other industrial development in Roseville, and proposed landscaping would soften the industrial character of the project site. Further, the project would comply with General Plan policies related to community design and the City's Community Design Guidelines, which would ensure that the project would not cause a substantial change in visual character. Similar design requirements would be placed on other developments in Roseville to reduce visual impacts. However, the project would combine with other projects to develop urban land uses adjacent to agricultural/grazing and open space areas, which would substantially degrade the area's visual quality. Therefore, the project **would result in a considerable contribution** to a significant cumulative impact related to visual character or quality of a site. This impact would be **significant and unavoidable**.

LIGHT AND GLARE

The cumulative projects involve substantial residential, commercial, and other development and would result in creation of daytime glare and nighttime light sources similar to the proposed project. For example, many of the cumulative developments have extensive residential development that would together create geographically extensive sources of glare and light pollution in areas that currently have scattered and dispersed sources of daytime glare and nighttime lighting. The developments and the proposed project could cumulatively create a substantial source of daytime glare and nighttime light. These would be cumulatively significant impacts. As described for Impact 4.13-3, to reduce the impact of glare and lighting from operation, a lighting plan has been prepared for the project that conforms with the City's Community Design Guidelines, and specifically for Office and Industrial Development (City of Roseville 2008). Lighting sources would have cut off lenses and would be located to avoid light spillage and glare on adjacent properties and in private spaces. Similar lighting plans would be required of other developments in Roseville to reduce lights and glare impacts. However, the project would combine with other projects to develop urban land uses in areas that currently have scattered and dispersed sources of daytime glare and nighttime lighting. Therefore, the project **would result in a considerable contribution** to a significant cumulative impact related to light and glare. This impact would be **significant and unavoidable**.

4.3.14 Energy

Several other currently planned and approved projects identified in Section 4.2.3, "Related Projects," would also require electricity and natural gas service. These projects would also consume energy related to transportation and construction. These projects would be required to implement energy-efficiency measures in accordance with Title 24 to reduce energy demand. Given the large amount of development identified in the region, it is possible that even with implementation of Title 24 measures, inefficient and wasteful energy consumption could occur. As described in Impact 3.14-1, in Section 3.14, "Energy," according to Appendix F of the State CEQA Guidelines, the means to achieve the goal of conserving energy include decreasing overall per capita energy consumption, decreasing reliance on

natural gas and oil, and increasing reliance on renewable energy sources. As described in Impact 3.14-1, the proposed project would not result in wasteful or inefficient use of energy. Because the project would not result in wasteful or inefficient use of energy and, therefore, would not contribute to a significant cumulative impact, the project **would not result in a considerable contribution** to a significant cumulative impact related to energy use.

In terms of cumulative impacts, appropriate service providers are responsible for ensuring adequate provision of utilities and service systems within their service boundaries. Electrical service would be provided by the City of Roseville Electric Department (Roseville Electric) and the project would not require natural gas service. Project implementation would require construction of new or expanded electrical infrastructure to meet the project's electrical demands. The physical environmental impacts associated with construction and operation of new or expanded electrical infrastructure are evaluated throughout this EIR and mitigation measures are identified, where necessary, that would reduce or avoid most impacts to a less-than-significant level. As part of the approval process for new projects in Roseville, project proponents would be required to provide proof from Roseville Electric and Pacific Gas and Electric Company (if other projects would require natural gas service) that the proposed developments would be served by these utility providers. Additionally, project proponents would be required to comply with CEQA, which would include evaluating the potential impacts of relocating or constructing new or expanded utility infrastructure and mitigating those impacts, where necessary. Therefore, the project **would not result in a considerable contribution** to a cumulative impact related to the construction of new or expanded electrical infrastructure.

4.3.15 Tribal Cultural Resources

The cumulative context for Tribal cultural resources is the former territory occupied by the Nisenan. The territory extended from the area surrounding the current City of Oroville on the north to a few miles south of the American River on the south. The Sacramento River bounded the territory on the west, and in the east, it extended to the crest of the Sierras west of Lake Tahoe.

Because all significant Tribal cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. The loss of any one significant archaeological site could affect the scientific value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources, rather than on a single project or parcel boundary.

Proper planning and appropriate mitigation can help to capture and preserve knowledge of such resources and can provide opportunities for increasing our understanding of the past environmental conditions and cultures by recording data about sites discovered and preserving artifacts found. Federal, state, and local laws are also in place, as discussed in Section 3.15, "Cultural Resources," that protect these resources in most instances. Even so, it is not always feasible to protect these resources, particularly when preservation in place would make projects infeasible, and for this reason the cumulative effects of past and present projects in the City of Roseville, including the projects listed in Section 4.2.3, "Related Projects," could result in a potentially significant cumulative impact related to Tribal cultural resources. Without mitigation, implementation of the proposed Roseville Industrial Park Project has the potential to cause a substantial change in the significance of Tribal cultural resources that are unique and nonrenewable members of finite classes. With implementation of Mitigation Measures 3.15-1a and 3.15-1b, adverse effects on known and potentially newly discovered Tribal cultural resources would be avoided. Further, it is reasonable to assume the City of Roseville would take similar actions to require appropriate treatment and proper care of significant Tribal cultural resources, in the case of a discovery, in accordance with pertinent laws and regulations. Therefore, the project **would not result in a considerable contribution** to a cumulatively significant loss of Tribal cultural resources.

5 OTHER CEQA SECTIONS

5.1 GROWTH-INDUCING IMPACTS

5.1.1 CEQA Requirements

CEQA specifies that growth-inducing impacts of a project must be addressed in an EIR (CCR Section 21100[b][5]). Specifically, Section 15126.2(d) of the State CEQA Guidelines states that the EIR shall:

> Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a wastewater treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also, discuss the characteristics of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

Direct growth inducement would result if a project involved construction of new housing, which would facilitate new population to an area. Indirect growth inducement would result, for instance, if implementing a project resulted in any of the following:

- substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises);
- substantial short-term employment opportunities (e.g., construction employment) that indirectly stimulates the need for additional housing and services to support the new temporary employment demand; and/or
- removal of an obstacle to additional growth and development, such as removing a constraint on a required public utility or service (e.g., construction of a major sewer line with excess capacity through an undeveloped area).

The State CEQA Guidelines do not distinguish between planned and unplanned growth for purposes of considering whether a project would foster additional growth. Therefore, for purposes of this EIR, to reach the conclusion that a project is growth-inducing as defined by CEQA, the EIR must find that it would foster (i.e., promote, encourage, allow) additional growth in economic activity, population, or housing, regardless of whether the growth is already approved by and consistent with local plans. The conclusion does not determine that induced growth is beneficial or detrimental, consistent with Section 15126.2(d) of the State CEQA Guidelines.

If the analysis conducted for the EIR results in a determination that a project is growth-inducing, the next question is whether that growth may cause adverse effects on the environment. Environmental effects resulting from induced growth (i.e., growth-induced effects) fit the CEQA definition of "indirect" effects in Section 15358(a)(2) of the State CEQA Guidelines. These indirect or secondary effects of growth may result in significant environmental impacts. CEQA does not require that the EIR speculate unduly about the precise location and site-specific characteristics of significant, indirect effects caused by induced growth, but a good-faith effort is required to disclose what is feasible to assess. Potential secondary effects of growth could include consequences – such as conversion of open space to developed uses, increased demand on community and public services and infrastructure, increased traffic and noise, degradation of air and water quality, or degradation or loss of plant and wildlife habitat – that are the result of growth fostered by the project.

5.1.2 Growth-Inducing Impacts of the Project

AREA NOT PLANNED FOR PRIVATE DEVELOPMENT

The project site is part of the City-owned property known as Reason Farms, which totals approximately 1,500 acres. The City purchased the property in 2003 for a retention basin project (which was originally known as the Reason Farms Retention Basin Facility and was later renamed to the Pleasant Grove Retention Facility). The City is the project proponent for the retention facility, which is designed and approved but not yet constructed. The EIR (SCH# 2002072084) for the retention facility was certified in 2003. The project site is in an area that is no longer needed for the retention basin project. Additionally, the City conducted a feasibility analysis of the site in 2006 for a potential job center, which assumed 18 buildings totaling 1,080,000 square feet [sf]; however, this concept was later abandoned and in 2019 the City declared the property as surplus because there are no identified future City needs for the parcel and the property is underutilized. Thus, while the City has identified the Reasons Farms property for development for at least the past 10 years, the City did not envision industrial land uses being developed on the project site.

The proposed project differs substantially from the retention basin project envisioned in the 2003 EIR. Specifically, the proposed project includes development of up to 15 buildings (totaling up to 2,430,000 sf) that would support a range of industrial uses, including light manufacturing, warehousing, and distribution uses, and an electrical substation.

The existing General Plan land use designation for the project site is Public/Quasi-Public, which primarily allows for municipal and governmental facilities. The project site is also zoned as Public/Quasi-Public (P/QP), which establishes areas for municipal, governmental, or public facilities. As part of the project, a General Plan Amendment (GPA) would be required to allow for industrial use of the majority of the site as well as designation of the creek area as open space. The proposed GPA would change the land use designation from Public/Quasi-Public to Light Industrial (M1), General Industrial (M2), and Open Space (OS). Additionally, the site would be rezoned for industrial uses (M1 and M2) and open space.

In summary, the project would be developed on land that is not planned for development, and it would not be consistent with the General Plan. Therefore, the project would be growth inducing in this respect because it would result in urban development on land that is currently designated as Public/Quasi-Public in the adopted General Plan.

EXTENSION OF INFRASTRUCTURE

Utility service is not currently available at the project site. Thus, the project will require the extension of nearby water, wastewater, recycled water, stormwater, and electrical infrastructure to serve the future development of the site. The project includes construction of an electrical substation to provide the additional 15 megawatts of power needed for the project. This infrastructure would be sized to meet the utility demands of the project and, with the exception of the electrical infrastructure, would not provide additional capacity to support other development in the City. The proposed substation would use the standard transformers used by the City (46 megavolt-amperes [MVA]) so that transformers can be easily repaired and/or replaced with common parts, as necessary throughout the City. While these transformers could provide additional capacity beyond the 15 megawatts needed for the project, the additional capacity would be held in reserve and would not, in itself, support other development in the City such that an obstacle to further growth would be eliminated. The substation is needed to provide electricity to the project site and would be installed with standard transformers, per City requirements, to allow compatibility of parts throughout the City. The project applicant would be required to pay its fair share of various utility infrastructure improvements as development proceeds, consistent with project conditions of approval and mitigation measures included in this EIR. The above would represent an extension of utility infrastructure to an area not currently served by such systems. However, the project site is located adjacent to two specific plan areas—the Creekview Specific Plan area (adopted by the City in 2011) to the east and the West Roseville Specific Plan area (adopted by the City in 2004) to the south—which are both in various stages of development and which both include extension of utility infrastructure to serve their respective communities. Thus, the project would not remove obstacles to further growth in the project area. In this respect, the project would not be growth inducing.

Additionally, the project would include the extension of Blue Oaks Boulevard along the southern frontage of the project. Blue Oaks Boulevard would be constructed in phases, as described in Chapter 2, "Project Description." Ultimately, Blue Oaks Boulevard will consist of six travel lanes, with bike lanes on each side, a median, curb and gutter, and detached sidewalk on both sides of the road. Extending and widening Blue Oaks Boulevard was identified as a capital improvement project in the City's 2035 General Plan Update EIR. This extension is already planned for as part of the West Roseville Specific Plan (adopted by the City in 2004) and, thus, would not be expected to increase growth pressures along this corridor. Improvements would also be made to Phillip Road along the western frontage of the project. Phillip Road will be improved with two lanes, turning lanes, bike lanes, curb and gutter, and sidewalks.

CONSTRUCTION-RELATED GROWTH

Project construction would be conducted over multiple phases of development. For any given phase, there would be a range of 75—125 construction workers for a given shift. Because construction workers typically do not change where they live when they are assigned to a new construction site, it is not anticipated that there would be any substantial relocation of construction workers to Roseville or Placer County associated with the project. Additionally, as of June 2021, 78,100 residents in Placer County are employed in the construction industry (Employment Development Department 2021). Because the existing number of construction workers in the County would likely be sufficient to meet the demand that would be generated by the project, no substantial increase in demand for housing or goods and services would be created by the project and, thus, no growth inducement associated with these workers would occur.

EMPLOYMENT GROWTH

The project would create substantial, permanent employment opportunities in the industrial sector (including manufacturing, warehousing, and distribution). At full buildout, it is assumed that there would be 1 employee per 1,250 sf or 1,600 employees in the south parcel and 338 employees in the north parcel, for a total of 1,938 employees.

In Roseville, 6,496 workers were employed in the manufacturing, transportation, and warehousing industries in 2019 (US Census 2019). At full buildout, the project would employ 1,938 workers, which is approximately 30 percent of the total manufacturing, transportation, and warehousing workers employed in the City in 2019. Immediately to the east of the project site is the Creekview Specific Plan area, which is planned to accommodate 2,011 residential units at buildout. To the south, along the southern edge of the project site, is the future extension of Blue Oaks Boulevard and the West Roseville Specific Plan area, which is 60 percent built out, and will include 9,496 residential units. It is not possible at this time to predict the residential location of future employees of the project. It is possible that the jobs generated by the project could draw employees from outside of Roseville. However, given the existing number of workers within the City and the future buildout of the Creekview and West Roseville Specific Plans as well as other specific plan areas within the City, jobs generated by the proposed project are expected to be filled in large part by the existing resident labor pool in the region. Therefore, any potential increases in housing demand in the City attributable to jobs generated from the proposed project would be minimal, and the project would not be growth inducing in this respect.

5.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

Section 21100(b)(2)(A) of the State CEQA Guidelines provides that an EIR shall include a detailed statement setting forth "in a separate section: any significant effect on the environment that cannot be avoided if the project is implemented." Accordingly, this section provides a summary of significant environmental impacts of the project that cannot be mitigated to a less-than-significant level.

Sections 3.1 through 3.15 of this Draft EIR describe the potential environmental impacts of the project and recommend various mitigation measures to reduce impacts, to the extent feasible. Chapter 4, "Cumulative Impacts," determines whether the incremental effects of this project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects.

After implementation of the recommended mitigation measures, most of the impacts associated with the proposed Roseville Industrial Park Project would be reduced to a less-than-significant level. The following impacts are considered significant and unavoidable; that is, no feasible mitigation is available to reduce the project's impacts to a less-than-significant level.

5.2.1 Transportation and Circulation

Impact 3.3-1: Vehicle Miles Traveled Per Service Population

The project would generate additional vehicles miles traveled (VMT) associated with industrial park land uses, which would include trucks and passenger vehicles. As shown in Table 3.3-4 in Section 3.3, "Transportation and Circulation," the project would have an average VMT per service population under existing plus project conditions of 65.4 miles, which is well above the Citywide average VMT per service population of 32.5 miles. Because the project would exceed the City's VMT per service population threshold, which is a 15 percent reduction from the Citywide average, this impact would be significant.

Mitigation Measure 3.3-1 would require the project applicant to prepare and implement a Transportation Demand Management (TDM) Plan that includes a strategy for reducing project VMT. Implementation of Mitigation Measure 3.3-1 would reduce this impact but not to a less-than-significant level because even with the recommended mitigation, the project's average VMT per service population of 65.4 miles would be well above the applicable threshold of 27.6 miles. Thus, the impact would be **significant and unavoidable**.

Impact 3.3-2: Conflict with Adopted Policies, Plans, or Programs Regarding Pedestrian Facilities

Continuous pedestrian facilities are lacking on Blue Oaks Boulevard and Westbrook Boulevard near the project site. This would be inconsistent with General Plan policies CIRC6.1, CIRC6.3, and CIRC6.5, which call for establishing and maintaining a safe and continuous pedestrian network that encourages walking. Therefore, this impact would be potentially significant.

Implementation of Mitigation Measure 3.3-2 would result in the construction of sidewalks in the areas specified and would lead to consistency with adopted City policies, plans, or programs regarding pedestrian facilities and, thus, would effectively mitigate the impact. However, this mitigation measure would require the project applicant to work with the various property owners where the missing segments are located to obtain permission and the rights to construct temporary sidewalks in these areas. Further, the City does not have the jurisdiction to monitor or enforce this mitigation measure. Thus, while the mitigation would be effective, the extent to which it can be implemented is conditional based on other property owners and is outside the City's jurisdiction to implement. Therefore, after mitigation, this impact would be **significant and unavoidable**.

Impact 3.3-4: Conflict with Adopted Policies, Plans, or Programs Regarding Transit Facilities

The project would add new employees to a site that is not currently served by public transit. The project would construct a bus turnout along its southern frontage (on the north side of Blue Oaks Boulevard) to accommodate future fixed-route bus service. Additionally, the Roseville City Council approved a contract in Fall 2022 to enable Roseville Transit to operate a pilot micro-transit service in the City. Additionally, the Roseville Transit Dial-A-Ride provides curb-to-curb public bus service within the City limits, which includes the project site. However, because transit service is not currently provided along Blue Oaks Boulevard and there are no assurances that adequate transit service would be available to serve the project, the project would not be consistent with General Plan policies related to transit. Until public transit is provided to the project site, this impact would be potentially significant.

Implementation of Mitigation Measure 3.3-4 would result in the project applicant contributing fair share funding to enable the City to prepare a Transit Master Plan and/or a Comprehensive Operational Analysis (COA) for West Roseville, thus enabling the City to plan for expanded transit service to West Roseville, including the project site. However, timing for preparation of this plan is uncertain and would not ensure the provision of transit service to the project site. Therefore, because transit service is not currently provided along Blue Oaks Boulevard and there are no assurances that adequate transit service would be available to serve the project, this impact would be **significant and unavoidable**.

5.2.2 Greenhouse Gas Emissions and Climate Change

Impact 3.5-1: Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment

The project is estimated to generate a total of 3,934 metric tons of carbon dioxide equivalent ($MTCO_2e$) and maximum annual emissions of 1,159 $MTCO_2e$ from construction activities and 25,059 MTCO2e/year during full buildout in 2030. Annual maximum construction emissions of 1,159 $MTCO_2e$ would not exceed PCAPCD's bright line threshold of 10,000 $MTCO_2e$/year; however, operational emissions of 25,059 MTCO2e/year would exceed the Placer County Air Pollution Control District's (PCAPCD) Bright-Line Threshold of 10,000 $MTCO_2e$/year and would result in a considerable contribution to cumulative emissions related to global climate change. This impact would be significant.

Mitigation Measure 3.5-1a would require the project applicant to reduce operational greenhouse gas (GHG) emissions with on-site mitigation measures, based on availability of appropriate technology, as well as considering physical site constraints (e.g., solar is more effective when not obstructed by trees). Implementation of Mitigation Measure 3.5-1a would result in the reduction of GHG emissions of up to 2,709 $MTCO_2e$/year (see Table 3.5-6 in Section 3.5, "Greenhouse Gas Emissions and Climate Change"). To compensate for emissions in excess of 10,000 $MTCO_2e$ for a single year, an additional reduction of 12,350 $MTCO_2e$ of emissions would be required. To achieve this reduction, the applicant shall compensate by purchasing off-site GHG reduction credits for the remaining mass emissions associated with operations to PCAPCD's adopted threshold of 10,000 $MTCO_2e$ (for one year) after implementation of on-site GHG reductions associated with Mitigation Measure 3.5-1a.

Implementation of Mitigation Measures 3.5-1a and 3.5-1b would reduce GHG emissions and could offset a single year of operation-related GHG emissions but would not reduce emissions for the life of the project below PCAPCD thresholds. Additionally, because of the long-term buildout of the project, the availability and affordability of purchasing GHG offset credits in the future is unknown. Thus, the contribution of GHG emissions associated with the project to cumulative GHG emissions would not be reduced to a less-than-significant level and could substantially contribute to a significant cumulative impact. The impact would be **significant and unavoidable**.

Impact 3.5-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

The project would generate emissions that exceed PCAPCD thresholds, and therefore, would be cumulatively considerable. Mitigation measures would reduce emissions to the extent feasible but would not reduce emissions below the applicable thresholds for the life of the project. This impact would be significant.

Implementation of Mitigation Measures 3.5-1a and 3.5-1b (described above) would reduce GHG emissions to the extent feasible but would not reduce emissions for the life of the project below thresholds. Thus, the contribution of GHG emissions associated with the project to cumulative GHG emissions would not be reduced to a less-than-significant level and could substantially contribute to a significant cumulative impact. The impact would be **significant and unavoidable**.

5.2.3 Noise and Vibration

Impact 3.6-2: Exposure of Existing Sensitive Receptors to Excessive Traffic Noise Levels

Project operation would result in an increase in traffic volumes along project-affected roadways, resulting in long-term permanent increases in traffic noise. Traffic noise modeling was conducted for the existing and the existing plus project conditions. Based on modeling conducted and applicable City of Roseville allowable noise increase standards, a significant increase in noise would occur on all project-affected roadways. Therefore, this impact would be significant.

Mitigation Measure 3.6-2 would require the applicant to prepare a design-level acoustical study to identify specific roadway design considerations, which shall be incorporated into final road design and approved by the City. The acoustical study shall include Philip Road, from which the main entry of the project site joins the Blue Oaks Boulevard

Road, and Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway. Even after implementation of Mitigation Measure 3.6-2, this impact would remain significant. Noise barriers are planned as part of the West Roseville Specific Plan and Creekview Specific Plan projects; however, these planned noise barriers would not extend along the full length of the project-affected roadways (i.e., Philip Road from the main entry of the project site to Blue Oaks Boulevard Road, and Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway). Because neither the applicant nor the City has control over the design and construction of sound walls on private property along all affected roadway segments, requiring the installation of noise barriers in all project-affected locations where noise barriers are not currently planned (i.e., Philip Road from the main entry of the project site to Blue Oaks Boulevard Road, and Blue Oaks Boulevard from Westbrook Boulevard to North Hayden Parkway) would not be feasible, and this impact would remain **significant and unavoidable**.

5.2.4 Cumulative Impacts

Transportation and Circulation (Vehicle Miles Traveled)

The project's VMT under cumulative conditions would be about 22 percent less than under existing conditions due to shorter home-to-work trip lengths resulting from substantially greater levels of development in the project vicinity (see Table 4-2 in Chapter 4, Cumulative Impacts"). Similar to base year conditions, the project's VMT per service population would be substantially greater than the cumulative Citywide average (see Table 4-3 in Chapter 4, Cumulative Impacts"). However, the degree of the exceedance would be less than under existing conditions due to the expected levels of new development in the project vicinity under cumulative conditions, which result in shorter trip lengths to the project site. As shown in Table 4-3, the project generated VMT would exceed the applicable VMT per service population threshold, which is a 15 percent reduction from the cumulative Citywide average. Implementation of Mitigation Measure 3.3-1 would result in a reduction in VMT associated with implementation of the project. However, the project's VMT per service population would need to decrease by 33 percent (i.e., 1 – 35.1/52.4) to not exceed the applicable VMT per service population threshold and, as discussed under Impact 3.3-1, implementation of Mitigation Measure 3.3-1 would not be sufficient to accomplish this. Therefore, Mitigation Measure 3.3-1 is not expected to reduce VMT to a level that is below applicable significance thresholds. Therefore, the project's contribution to substantial effects related to VMT would be **cumulatively considerable and significant and unavoidable**.

Air Quality (Construction Emissions)

Placer County and the Sacramento Valley Air Basin (SVAB) are in nonattainment for ozone (i.e., reactive organic gases [ROG] and oxides of nitrogen [NO_X]) and respirable particulate matter with aerodynamic diameter of 10 micrometers or less (PM_{10}) with respect to the California ambient air quality standards (CAAQS), and in nonattainment for ozone and fine particulate matter with aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$) with respect to the national ambient air quality standards (NAAQS). Construction activities in the region would add particulate matter and ozone emissions into the SVAB that may conflict with attainment efforts. Cumulative development identified in Section 4.2.3, "Related Projects," while required to mitigate for adverse air quality impacts, will contribute to regional emissions, resulting in a significant adverse cumulative impact.

Project-related construction emissions of ROG and NO_X would exceed the applicable mass emission thresholds established by PCAPCD. PCAPCD considers these thresholds to be the criteria for determining whether emissions generated by an individual project would be cumulatively considerable (PCAPCD 2017: 21). Incorporation of Mitigation Measure 3.4-1 would reduce ROG and NO_X to a less-than-significant level. However, because of the scale and extent of construction activities that would occur, as well as the uncertainty of construction activities and timing of different phases, construction activities could overlap, resulting in emissions that exceed PCAPCD's daily construction thresholds. Therefore, project construction emissions would be **cumulatively considerable**. Because no additional mitigation is available beyond that recommended for project-specific construction emissions, the cumulative impact would be **significant and unavoidable**.

Air Quality (Long-term Operational Emissions)

Ozone impacts are the result of cumulative emissions from numerous sources in the region and transport from outside the region. Reasonably foreseeable regional development identified in Section 4.2.3, "Related Projects," will add urban development on undeveloped land in the region. All of this regional development will increase emissions that contribute to ozone impacts. Ozone is formed in chemical reactions involving NO_X, ROG, and sunlight. All but the largest individual sources emit NO_X and ROG in amounts too small to have a measurable effect on ambient ozone concentrations by themselves. However, when all sources throughout the region are combined, they can result in ambient concentrations of ozone that exceed the NAAQS and CAAQS.

PM_{10} and $PM_{2.5}$ have similar regional cumulative impacts when particulates are entrained in the air and build to unhealthful concentrations over time. PM_{10} and $PM_{2.5}$ also have the potential to cause significant local problems during periods of dry conditions accompanied by high winds, and during periods of heavy earth disturbing activities. PM_{10} and $PM_{2.5}$ may have cumulative local impacts if, for example, several unrelated grading or earth moving activities are underway simultaneously at nearby sites. Cumulative projects include several, large-scale developments in close enough proximity (e.g., Amoruso Ranch, Creekview Specific Plan, West Roseville Specific Plan, Whitney Ranch, and Twelve Bridges Specific Plan) such that localized PM_{10} and $PM_{2.5}$ effects could occur. Operational PM_{10} and $PM_{2.5}$ are less likely to result in local cumulative impacts as operational sources of PM_{10} and $PM_{2.5}$ tend to be spread throughout the region (i.e., vehicles traveling on roads), not affecting any one receptor. Therefore, emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ from cumulative development are significant in the air basin. The project's contribution to the nonattainment status of the SVAB with respect to the CAAQS and NAAQS would be **cumulatively considerable.** Because no additional mitigation is available beyond that recommended for project-specific operational emissions, the cumulative impact would be **significant and unavoidable**.

Air Quality (Toxic Air Contaminants)

Toxic air contaminants (TACs), which are examined under Impact 3.4-4 in Section 3.4, "Air Quality," are also pollutants of localized concern. Diesel particulate matter (diesel PM) emissions are the primary TAC of concern regarding the construction and operation of new urban land uses and infrastructure. The health risk-based significance criteria used to evaluate TACs under Impact 3.4-4 are also inherently cumulative. This impact examines whether implementing the project would result in the exposure of sensitive receptors to TAC emissions that would result in cancer risk of 10 in 1 million or a noncarcinogenic Hazard Index of 1 at any receptor. Thus, the analysis focuses on the incremental increase in health risk from project-related sources of TAC emissions. The contribution of the project to the TAC would be less significant. However, it cannot be determined with certainty that future TAC concentrations would not expose any receptors to levels that exceed 10 in 1 million when combined with other projects. Consequently, the project's contribution to cumulative TACs impact would be **cumulatively considerable**. Hence, the cumulative impact would be **significant and unavoidable**.

Noise (Stationary and Transportation)

Cumulative noise levels could be affected by additional buildout of surrounding land uses and increases in vehicular traffic on affected roadways.

Regarding stationary noise increases, the proposed project would result in land use development that typically includes stationary noise sources such as noise from heating, ventilation, and air conditioning (HVAC) units, electrical generators, and loading docks. As discussed in Impact 4.6-3 in Section 4.6, "Noise and Vibration," stationary noise sources would be mitigated to below applicable standards with on-site design features such as equipment enclosures and sound barriers; thus, noise from these sources would not combine from other off-site stationary sources to result in considerable increases in noise.

Traffic generated by future planned development in the region would result in additional traffic-related noise on surrounding roadways. In the future cumulative no project scenario, traffic and associated noise levels on existing roadways are anticipated to increase. Based on modeling conducted for the project, existing and existing plus project noise levels would exceed applicable City of Roseville transportation noise standards of 60 dBA CNEL. Thus, without the project there would be a future adverse cumulative noise condition. The project's contribution to cumulative traffic increases on existing roads would result in noise increases by as much as 16 dB (on Phillip Road near the

project site) and, combined with traffic from other development in the area, could result in additional increases. Thus, the project's contribution to cumulative traffic volumes in the area would result in additional substantial increases in noise as well as additional noise sources within the vicinity. The project **would result in a considerable contribution** to a cumulatively significant impact. Because no additional mitigation is available to reduce the project's contribution, beyond what is identified in this EIR, the impact would be **significant and unavoidable**.

Aesthetics (Visual Character and Quality)

The cumulative projects involve substantial residential, commercial, and other development and would result in similar visual changes as the proposed project. For example, many of the cumulative developments would be adjacent to agricultural/grazing and open space areas and could degrade visual quality by placing urban development adjacent to these areas. The developments and the proposed project would therefore together cause substantial degradation of visual quality, especially where there would be abrupt transitions between open space and agricultural/grazing areas and development. These would be cumulatively significant impacts on visual quality and character. As described for the proposed project, the proposed industrial facility would be designed to be visually consistent with surrounding specific plan area development and other industrial development in the City, and proposed landscaping would soften the industrial character of the project site. Further, the project would comply with General Plan policies related to community design and the City's Community Design Guidelines, which would ensure that the project would not cause a substantial change in visual character. Similar design requirements would be placed on other developments in Roseville to reduce visual impacts. However, the project would combine with other projects to develop urban land uses adjacent to agricultural/grazing and open space areas, which would substantially degrade the area's visual quality. Therefore, the project **would result in a considerable contribution** to a significant cumulative impact related to visual character or quality of a site. This impact would be **significant and unavoidable**.

Aesthetics (Light and Glare)

The cumulative projects involve substantial residential, commercial, and other development and would result in creation of daytime glare and nighttime light sources similar to the proposed project. For example, many of the cumulative developments have extensive residential development that would together create geographically extensive sources of glare and light pollution in areas that currently have scattered and dispersed sources of daytime glare and nighttime lighting. The developments and the proposed project could cumulatively create a substantial source of daytime glare and nighttime light. These would be cumulatively significant impacts. As described for Impact 4.13-3, to reduce the impact of glare and lighting from operation, a lighting plan has been prepared for the project that conforms with the City's Community Design Guidelines, and specifically for Office and Industrial Development (City of Roseville 2008). Lighting sources would have cut off lenses and would be located to avoid light spillage and glare on adjacent properties and in private spaces. Similar lighting plans would be required of other developments in Roseville to reduce lights and glare impacts. However, the project would combine with other projects to develop urban land uses in areas that currently have scattered and dispersed sources of daytime glare and nighttime lighting. Therefore, the project **would result in a considerable contribution** to a significant cumulative impact related to light and glare. This impact would be **significant and unavoidable**.

5.3 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

The State CEQA Guidelines requires a discussion of any significant irreversible environmental changes that would be caused by the project. Specifically, the State CEQA Guidelines section 15126.2(c) states:

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible, since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generation to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The project would result in the irreversible and irretrievable commitment of energy and material resources during construction and operation, including the following:

- construction materials, including such resources as soil, rocks, wood, concrete, glass, and steel;
- land area committed to new project facilities;
- water supply for project construction and operation; and
- energy expended in the form of electricity, gasoline, diesel fuel, and oil for equipment and transportation vehicles that would be needed for project construction and operation.

The use of these nonrenewable resources is expected to account for a minimal portion of the region's resources and would not affect the availability of these resources for other needs within the region. Mitigation measures identified in this EIR to reduce GHG emissions would also reduce petroleum consumed during construction. As discussed in Section 3.14, "Energy," construction activities would not result in inefficient use of energy or natural resources. Also, mitigation measures identified in this EIR to reduce operations-related GHG emissions require efficient use of energy during project construction and operation, including requirements for providing onsite renewable energy generation (during operation) (see Mitigation Measures 3.5-1a and 3.5-1b). Therefore, long-term project operation would not result in substantial long-term consumption of energy and natural resources. Irreversible changes associated with accidental spills of hazardous materials near resources (such as waterways) are also addressed in the EIR. As discussed in Section 3.9, "Hazards and Hazardous Materials," all construction and operational activities would be subject to local, state, and federal regulations concerning the use, transportation, storage, and disposal of hazardous materials. Compliance with all local, state, and federal regulations related to the transport, use, disposal, and accidental release of hazardous materials during construction and operation would reduce the risk of significant hazards to the public and protected resources. Therefore, accidental spills during construction would not result in irreversible changes to natural resources.

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6 ALTERNATIVES

6.1 INTRODUCTION

The California Code of Regulations (CCR) Section 15126.6(a) (State CEQA Guidelines) requires EIRs 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. An EIR need not consider every conceivable alternative to a project. Rather, it must consider a range of potentially feasible alternatives that will avoid or substantially lessen the significant adverse impacts of a project and foster informed decision making and public participation. An EIR is not required to consider alternatives that are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason." This section of the State CEQA Guidelines also provides guidance regarding what the alternatives analysis should consider. Subsection (b) further states the purpose of the alternatives analysis is as follows:

> 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.

The State CEQA Guidelines require that the EIR include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. 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 must be discussed, but in less detail than the significant effects of the project as proposed (CCR Section 15126.6[d]).

The State CEQA Guidelines further require that the "no project" alternative be considered (CCR Section 15126.6[e]). The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving the proposed project. If the no project alternative is the environmentally superior alternative, CEQA requires that the EIR "…shall also identify an environmentally superior alternative among the other alternatives." (CCR Section 15126[e][2]).

In defining "feasibility" (e.g., "… feasibly attain most of the basic objectives of the project …"), CCR Section 15126.6(f) (1) states, in part:

> 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). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

In determining what alternatives should be considered in the EIR, it is important to consider the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by the lead agency's decision-making body, here the City of Roseville City Council. (See PRC Sections 21081.5, 21081[a] [3].)

6.2 CONSIDERATIONS FOR SELECTION OF ALTERNATIVES

6.2.1 Attainment of Project Objectives

As described above, one factor that must be considered in selection of alternatives is the ability of a specific alternative to attain most of the basic objectives of the project (CCR Section 15126.6[a]). Chapter 2, "Project Description," articulated the project applicant's objectives for the proposed Roseville Industrial Park Project, which are repeated below:

- construct a high-quality industrial park capable of serving modern warehouse, distribution, and light manufacturing users;
- develop a state-of-the-art employment center designed and operated to achieve the highest and best use of the property;
- create substantial, permanent employment opportunities for residents of Roseville and surrounding areas;
- support City of Roseville's desire to create a job-housing balance, and provide employment generating uses in western Roseville;
- utilize, wherever feasible, alternative energy sources, including solar panels when possible;
- locate the project as near as possible to existing utility infrastructure with anticipated capacity;
- locate the project to be accessible from existing roads and minimize the need for construction of major new roadway improvements;
- phase project construction to be responsive to market demands for light industrial space; and
- minimize environmental impacts to surrounding areas, including residential communities and other sensitive land uses.

6.2.2 Environmental Impacts of the Proposed Roseville Industrial Project

Sections 3.1 through 3.15 of this Draft EIR address the environmental impacts of implementation of the proposed Roseville Industrial Park Project. Potentially feasible alternatives were developed with consideration of avoiding or lessening the significant, and potentially significant, adverse impacts of the project, as identified in Chapter 3 of this Draft EIR and summarized below. If an environmental issue area analyzed in this Draft EIR is not addressed below, it is because no significant impacts were identified for that issue area. In summary, the significant impacts of the project are:

TRANSPORTATION AND CIRCULATION

- Impact 3.3-1: Vehicle Miles Traveled Per Service Population (significant and unavoidable)
- Impact 3.3-2: Conflict with Adopted Policies, Plans, or Programs Regarding Pedestrian Facilities (significant and unavoidable)
- Impact 3.3-4: Conflict with Adopted Policies, Plans, or Programs Regarding Transit Facilities (significant and unavoidable)

AIR QUALITY

- Impact 3.4-1: Construction Emissions of Criteria Air Pollutants and Ozone Precursors (less than significant after mitigation)

- Impact 3.4-2: Long-term Operational Emissions of Criteria Air Pollutants and Ozone Precursors (less than significant after mitigation)
- Impact 3.4-3: Conflict with or Obstruct Implementation of the Applicable Air Quality Plan (less than significant after mitigation)

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

- Impact 3.5-1: Generate Greenhouse Gas Emissions, Either Directly or Indirectly, That May Have a Significant Impact on the Environment (significant and unavoidable)
- Impact 3.5-2: Conflict with an Applicable Plan, Policy, or Regulation Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases (significant and unavoidable)

NOISE AND VIBRATION

- Impact 3.6-2: Exposure of Existing Sensitive Receptors to Excessive Traffic Noise Levels (significant and unavoidable)
- Impact 3.6-3: Long-Term Operational Non-Transportation Noise Levels (less than significant after mitigation)

BIOLOGICAL RESOURCES

- Impact 3.7-1: Result in Disturbance or Loss of Special-Status Plant Species (less than significant after mitigation)
- Impact 3.7-2: Result in Disturbance to or Loss of Special-Status Wildlife Species and Habitat (less than significant after mitigation)
- Impact 3.7-3: Result in Degradation or Loss of Riparian Habitat or Other Sensitive Natural Communities (less than significant after mitigation)
- Impact 3.7-4: Result in Degradation or Loss of State or Federally Protected Wetlands (less than significant after mitigation)
- Impact 3.7-5: Interfere with Wildlife Movement Corridors or Impede the Use of Wildlife Nurseries (less than significant after mitigation)
- Impact 3.7-6: Conflict with Local Policies and Ordinances (less than significant after mitigation)

CULTURAL RESOURCES

- Impact 3.8-1: Cause a Substantial Adverse Change in the Significance of Unique Archaeological Resources (less than significant after mitigation)

HAZARDOUS MATERIALS, WILDFIRE, AND OTHER HAZARDS

- Impact 3.9-2: Impair an Adopted Emergency Response Plan or Emergency Evacuation Plan (less than significant after mitigation)
- Impact 3.9-3: Exacerbate Wildfire Risk as a Result of Installation of Infrastructure (less than significant after mitigation)

TRIBAL CULTURAL RESOURCES

- Impact 3.15-1: Cause a Substantial Adverse Change in the Significance of a Tribal Cultural Resource (less than significant after mitigation)

6.3 ALTERNATIVES CONSIDERED BUT NOT EVALUATED FURTHER

As described above, State CEQA Guidelines Section 15126.6(c) provides that the range of potential alternatives for the project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. Alternatives that fail to meet the fundamental project purpose need not be addressed in detail in an EIR. (*In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165-1167.)

In determining what alternatives should be considered in the EIR, it is important to acknowledge the objectives of the project, the project's significant effects, and unique project considerations. These factors are crucial to the development of alternatives that meet the criteria specified in Section 15126.6(a). Although, as noted above, EIRs must contain a discussion of "potentially feasible" alternatives, the ultimate determination as to whether an alternative is feasible or infeasible is made by lead agency decision-maker(s). (See PRC Section 21081[a][3].) At the time of action on the project, the decision-maker(s) may consider evidence beyond that found in this EIR in addressing such determinations. The decision-maker(s), for example, may conclude that a particular alternative is infeasible (i.e., undesirable) from a policy standpoint, and may reject an alternative on that basis provided that the decision-maker(s) adopts a finding, supported by substantial evidence, to that effect, and provided that such a finding reflects a reasonable balancing of the relevant economic, environmental, social, and other considerations supported by substantial evidence. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 401, 417; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 998.)

The EIR should also identify any alternatives that were considered by the lead agency but were rejected during the planning or scoping process and briefly explain the reasons underlying the lead agency's determination.

The following alternatives were considered by the City but not evaluated further in this Draft EIR, and a brief description of the reasons for the City's determination.

6.3.1 Off-site Alternatives

Off-site alternatives are generally considered in EIRs when one of the means to avoid or eliminate the significant impacts of a project is to develop it in a different available location. Such alternatives are especially appropriate where a proposed project would put a site to uses different than those contemplated in the governing general plan, which presumably reflects land use policies reached after much deliberation and public involvement, and also in instances where there is an ample supply of similarly situated land that could be developed for a project. The existing General Plan land use designation for the project site is Public/Quasi-Public, which primarily allows for municipal and governmental facilities. The project site is also zoned as Public/Quasi-Public (P/QP), which establishes areas for municipal, governmental, or public facilities. Further, the project site is geographically tied to existing roadways and utility infrastructure due to its proximity to existing and planned residential development.

One off-site location that was considered for the Roseville Industrial Park Project is a portion of the Placer Ranch Specific Plan (PRSP) area. The PRSP area includes 2,213 acres in the southern portion of Placer County's Sunset Area. The southern boundary of the PRSP area is contiguous with the existing Roseville City limits, and the northern boundary is defined, in part, by the existing alignment of West Sunset Boulevard west of Fiddyment Road. The PRSP area includes an employment-generating land use known as Campus Park. The PRSP describes this area as follows (Placer County 2019: 04-8):

> As one of Placer Ranch's significant anchors, the Campus Park is a 335-acre job center located adjacent to the university site and Town Center. The land area designated for Campus Park is situated along Placer Parkway, Campus Park Boulevard, and Foothills Boulevard, giving it excellent visibility along major roadway corridors. Office, research and development, commercial/retail, light industrial, and warehousing uses are planned, collectively accommodating approximately 4.5-million square feet.

An off-site location was considered that consists of seven parcels in the northeast corner of the PRSP area, within the Campus Park. The site totals approximately 124 acres. Consistent with the density allowed in the PRSP, the site could

accommodate a 0.31 floor area ratio (FAR) and a total development of 1,666,213 square feet. In comparison, the project site includes 180 acres of developable land and a proposed development of 2.4 million square feet (sf). This site is located closer to a major freeway (Highway 65) than the project site; however, the surrounding PRSP area has not been developed yet and, thus, internal roadways (including the planned Placer Parkway) and utility infrastructure are not currently available. Further, the PRSP site is located outside of the Roseville City limits and, thus, is not within the City's jurisdiction or land use authority.

Based on the project applicant's initial project planning to identify viable projects and properties upon which to develop an industrial park, there are no known sites that are sufficient in size to accommodate the project that would not result in most of the significant impacts that would occur with the project. As noted above, one site was considered, but it is not located within the City of Roseville, is not large enough to accommodate the size of development, and existing infrastructure is not available. The project site represents the only available major land area that is reasonably capable of attaining the project objectives. Therefore, alternative locations for the project are not considered feasible and, thus, these alternatives are not evaluated further in this Draft EIR.

6.4 ALTERNATIVES SELECTED FOR DETAILED ANALYSIS

The following alternatives are evaluated in this Draft EIR.

- Alternative 1: No Project Alternative assumes no development occurs on the project site. The project site would remain in its current condition (undeveloped grazing land).
- Alternative 2: Innovation Mixed-Use Alternative would decrease the amount of light industrial floor area proposed and would replace that floor area with uses that are less truck-intensive, including innovation/research and development (R&D) and office uses. In addition, this alternative would place the office and R&D uses on the eastern side of the project site, which would provide additional distance and shielding between the existing residential uses to the east of the site and the proposed light industrial uses (including associated loading docks and truck staging areas).
- Alternative 3: Reduced Footprint and Floor Area Alternative would eliminate proposed development on the north parcel, which eliminates the need for the bridge across Pleasant Grove Creek and the Pleasant Grove Creek Bypass Channel. This alternative also results in a reduction of light industrial floor area, compared to the proposed project.

Further details on these alternatives, and an evaluation of environmental effects relative to the proposed project, are provided below.

6.4.1 Alternative 1: No Project Alternative

Under Alternative 1, the No Project Alternative, no actions would be taken by the City or applicant and the project site would remain unchanged from current conditions (undeveloped grazing land). The No Project Alternative would not meet the project objectives. However, as required by CEQA, the No Project Alternative is evaluated in this Draft EIR.

Although it is acknowledged that with the No Project Alternative, there would be no discretionary action by the City, and thus no impact, for purposes of comparison with the other action alternatives, conclusions for each technical area are characterized as "impacts" that are greater, similar, or less, to describe conditions that are worse than, similar to, or better than those of the proposed project.

LAND USE AND AGRICULTURAL RESOURCES

Under the No Project Alternative, the proposed industrial park would not be constructed, and the site would continue to be used as undeveloped grazing land. The No Project Alternative would not divide an established community, nor would it conflict with plans adopted for the purpose of avoiding or mitigating a significant effect (including the *City of Roseville General Plan*, and the City of Roseville Zoning Ordinance). Compatibility with adjacent land uses would not

change and this alternative would not alter the present or planned land use of an area. The project site has been used historically for agricultural purposes and is designated by the Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) as Farmland of Local Importance; it is therefore not considered to be "Farmland" pursuant to CEQA. No significant impacts related to land use or agricultural resources were identified for the proposed project; therefore, this alternative would not reduce or avoid any significant impacts related to land use or agricultural resources associated with the project. However, impacts are still considered less because no potential land use conflicts would occur, no rezoning would be required, and no change in agricultural practices would occur under this alternative. *(Less)*

POPULATION, EMPLOYMENT, AND HOUSING

The No Project Alternative would not generate any new residents, jobs, or homes on the project site. Hence, there would be no potential for unplanned population growth, increased demand for new housing, or displacement of existing housing. In comparison, the proposed project would result in minimal population growth associated with the generation of temporary and permanent jobs. Further, the project would require the extension of existing and development of new transportation and utility infrastructure. No significant impacts related to population, employment, and housing were identified for the proposed project. Thus, this alternative would not reduce or avoid any significant impacts associated with the project. However, impacts are still considered less because no temporary or permanent employment opportunities would be created under this alternative. *(Less)*

TRANSPORTATION AND CIRCULATION

This alternative would not result in the development of industrial land uses that would generate vehicle travel or the need for pedestrian or transit facilities. Vehicle trips and vehicle miles traveled (VMT) would not increase above existing levels. This alternative would not add a workforce population that would use pedestrian or transit facilities. Overall, impacts under this alternative would be less than those that would occur with the project. This alternative would avoid the project's significant and unavoidable impacts related to VMT per service population and potential conflicts with General Plan policies related to pedestrian and transit facilities. *(Less)*

AIR QUALITY

Under the No Project Alternative, the proposed industrial park would not be constructed, and the project site would not be developed. Construction emissions of criteria air pollutants, ozone precursors, and toxic air contaminants (TACs) would not increase above existing levels. Further, no long-term air quality impacts would occur because the site would not be developed with industrial uses. This alternative would avoid the project's significant air quality impacts, although project impacts can be mitigated to a less-than-significant level. *(Less)*

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Under the No Project Alternative, the proposed industrial park would not be constructed, and the project site would not be developed. Construction emissions of greenhouse gases (GHG) would not be generated by the project and GHG emissions would remain at existing levels. Thus, the No Project Alternative would generate less GHG emissions compared to the project and would avoid the project's significant and unavoidable impacts related to GHG emissions and conflicts with an applicable plan, policy, or adopted for the purpose of reducing GHG emissions. *(Less)*

NOISE AND VIBRATION

Under the No Project Alternative, the proposed industrial park would not be constructed, and the site would continue to be used as undeveloped grazing land. Therefore, no construction activities would take place and there would be no increases in short-term construction related noise at nearby sensitive receptors. Further, no long-term noise impacts would occur because the site would not be developed with industrial uses. This alternative would avoid the

project's significant and unavoidable impact related to exposure of sensitive receptors to excessive traffic noise levels. Overall, the No Project Alternative would result in less noise impacts compared to the project. *(Less)*

BIOLOGICAL RESOURCES

Under the No Project Alternative, the project site would remain in its existing condition, with the continued use of the site as undeveloped grazing land. This alternative would not result in new impacts to biological resources. Project impacts from the conversion of land and loss of habitat would not occur under this alternative, which, under the proposed project could result in significant impacts to special-status plants, special-status wildlife, valley oak riparian woodland habitat (also considered a sensitive natural community), waters of the United States and state, and egret or heron rookeries (considered wildlife nursery sites), as well as conflicts with tree preservation requirements in the City of Roseville Municipal Code. Because there would be no construction under the No Project Alternative, there would be no biological resources changes within the project site, and the project's significant impacts would be avoided (although project impacts can be mitigated to a less-than-significant level). Overall, impacts to biological resources would be less compared to the project. *(Less)*

CULTURAL RESOURCES

Under the No Project Alternative, no construction would occur; therefore, the proposed industrial park would not be built, and no earthwork or ground-disturbing activities would occur. Because no earth-disturbing activities would occur, there would be no potential for disturbance to archaeological resources. Therefore, implementation of the No Project Alternative would eliminate the project's significant impacts related to cultural resources. However, mitigation is available to reduce this impact to a less-than-significant level. Nonetheless, overall cultural resources impacts would be less than the project. *(Less)*

HAZARDOUS MATERIALS, WILDFIRE, AND OTHER HAZARDS

Under the No Project Alternative, the proposed industrial park would not be constructed, and the site would continue to be used as undeveloped grazing land. No hazardous materials would be used, stored, or transported on-site. Existing wildfire risks would remain unchanged. Overall, the No Project Alternative would result in less impacts related to hazardous materials hazards, wildfire, or other hazards compared to the project. *(Less)*

PUBLIC SERVICES

The No Project would not include any development. Therefore, this alternative would not generate increased demand for fire or police services. Overall, the No Project Alternative would result in less impacts related to public services compared to the project. *(Less)*

UTILITIES AND SERVICE SYSTEMS

Under the No Project Alternative, no development would be constructed or operated at the project site. Therefore, there would be no additional demand for water, wastewater treatment, or solid waste disposal; and no need for new facilities and infrastructure to support additional demand. Overall, the No Project Alternative would result in less impacts related to utilities and service systems compared to the project. *(Less)*

HYDROLOGY AND WATER QUALITY

Under the No Project Alternative, the proposed industrial park would not be constructed, and the site would continue to be used as undeveloped grazing land. Therefore, the No Project Alternative would not degrade water quality or alter the project site's existing drainage pattern. Overall, the No Project Alternative would result in less hydrology and water quality impacts compared to the project. *(Less)*

AESTHETICS

Under the No Project Alternative, the project site would remain in its existing condition, with the continued use of the site as undeveloped grazing land. This alternative would not result in any adverse effects related to the visual character or quality of the site or lighting or glare. While no impacts would occur under this alternative, no significant impacts were identified for the project. Nonetheless, overall aesthetic impacts of this alternative would be less than the project. *(Less)*

ENERGY

Under the No Project Alternative, the proposed industrial park would not be constructed, and the project site would not be developed. The No Project Alternative would not increase energy consumption; would not result in the inefficient, wasteful, or unnecessary consumption of energy; and would not require the construction or extension of utility infrastructure. Thus, the No Project Alternative would result in less energy consumption compared to the project. However, this alternative would not substantially reduce or avoid a significant impact associated with the project. *(Less)*

TRIBAL CULTURAL RESOURCES

Under the No Project Alternative, no construction would occur; therefore, no new facilities would be built, and no earthwork or ground-disturbing activities would occur. Because no earth-disturbing activities would occur, there would be no potential to cause a substantial change in the significance of Tribal cultural resources. Therefore, implementation of the No Project Alternative would eliminate the project's significant impacts related to Tribal cultural resources. However, mitigation is available to reduce this impact to a less-than-significant level. Nonetheless, overall Tribal cultural resources impacts would be less than the project. *(Less)*

6.4.2 Alternative 2: Innovation Mixed-Use Alternative

The proposed project would result in significant and unavoidable impacts associated with VMT and GHG emissions. These impacts are due largely to the high number of truck trips generated by the project. Alternative 2, the Innovation Mixed-Use Alternative, would be designed to reduce those impacts by decreasing the level of truck trips generated and increasing the diversity of land uses on the site while potentially increasing the level of employment. This alternative would decrease the amount of light industrial floor area proposed and would replace that floor area with uses that are less truck-intensive, including innovation/R&D and office uses. Specifically, this alternative would include a reduction in light industrial floor area from a total of 2.4 million sf to 1 million sf R&D. Office uses are less space-intensive than light industrial in terms of floor area, but require more area for parking due to the increased number of employees per sf; therefore, these uses would only require 800,000 sf of floor area. The total floor area of this alternative would be 1.8 million sf (600,000 sf less than the proposed project); however, due to the need for increased parking, the total development footprint (i.e., area of disturbance) would be similar to the project. In addition, to reduce project-related impacts associated with air quality and traffic noise, this alternative would place the office and R&D uses on the eastern side of the project site, which would provide additional distance and shielding between the existing residential uses to the east of the site and the proposed light industrial uses (including associated loading docks and truck staging areas).

Implementation of Alternative 2 would meet most of the project objectives, but would not meet the objective related to constructing a high-quality industrial park to the same extent as the proposed project, due to the fact that this alternative includes less than half of the amount of light industrial uses compared to the project. This alternative may also not meet the objective related to phasing construction to be responsive to market demands for light industrial space. While current and projected market demand for light industrial in this area is high, the market for R&D and office space in this area is unknown; therefore, it is uncertain if there would be market demand to construct these uses in the near term. Depending on market demand, these portions of the project may not be developed in the foreseeable future.

LAND USE AND AGRICULTURAL RESOURCES

Alternative 2 would result in similar ground disturbance and development footprint as the proposed project. Similar to the project, Alternative 2 is an employment-focused use that would require a general plan amendment. Impacts related to land use and agricultural resources would be similar. *(Similar)*

POPULATION, EMPLOYMENT, AND HOUSING

Alternative 2 does not include any residential uses and, similar to the project, would not result in direct population growth. However, also similar to the project, this alternative would result in similar levels of employment; therefore, the secondary effects related to population growth would be similar to the proposed project. In addition, similar to the proposed project, Alternative 2 would not extend infrastructure in a manner that would accommodate future unplanned growth. Overall, the impact would be similar. *(Similar)*

TRANSPORTATION AND CIRCULATION

Alternative 2 is designed to reduce the project's significant impacts related to VMT and GHG. Because this alternative would result in a reduced level of truck trips (which tend to have longer trip lengths than employee commute trips), and because it would provide a broader range of employment types, which would allow for increased opportunity for local residents to be employed at the site, Alternative 2 would therefore be more efficient from a VMT standpoint than the proposed project. Given the number of employees, Alternative 2 may not avoid the VMT impact, altogether, but it would reduce the impact. Similar to the project, Alternative 2 would be designed to minimize potential hazards related to design features and to provide adequate emergency access. Despite the reduced level of truck trips, this alternative would still result in the same potential conflicts with General Plan policies related to pedestrian and transit facilities because new employees (potentially more than the proposed project) would be added to a site that does not have continuous sidewalks and is not currently service by public transit. Thus, this alternative would not avoid the project's significant and unavoidable impacts related to pedestrian and transit facilities. However, due to the increased VMT efficiency, impacts related to transportation and circulation would, overall, be less. *(Less)*

AIR QUALITY

Because the overall development footprint of Alternative 2 is similar to the project, construction-related emissions of criteria air pollutants, ozone precursors, and TACs would be similar to those of the project. However, during operation, Alternative 2 provides opportunities for site design to place the office and R&D structures between the light industrial uses and the existing residences to the east, such that additional shielding would be provided. This may reduce or eliminate the need for some of the mitigation measures identified for the project. Furthermore, because trucks generate higher levels pollutant emissions than typical passenger vehicles, this alternative's decrease in truck trips would also decrease the level of pollutant emissions generated by the project. Alternative 2 would further reduce emissions of criteria air pollutants, ozone precursors, and TACs, and overall air quality impacts would be slightly less. This alternative would avoid the project's significant air quality impacts, although project impacts can be mitigated to a less-than-significant level. *(Less)*

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Alternative 2 is designed to reduce the project's significant impacts related to VMT and GHG. This is primarily accomplished by increasing VMT efficiency (discussed above under "Transportation and Circulation"); however, this alternative may be able to achieve additional GHG reduction due to the lower energy demand associated with this alternative's smaller total floor area (1.8 million sf versus 2.4 million sf). Because Alternative 2 is still a major development, and the location of the project site poses limitations to transportation demand management strategies, it may not be able to avoid the project's significant GHG impact; however, overall impacts related to GHG would be less. *(Less)*

NOISE AND VIBRATION

Because the overall development footprint of Alternative 2 is similar to the project, construction-related noise would be similar. However, during operation, Alternative 2 provides opportunities for site design to place the office and R&D structures between the noise-generating components of the light industrial uses (e.g., loading docks, backup generators, etc.) and the existing residences to the east, such that additional noise shielding would be provided. This may reduce or eliminate the need for some of the mitigation measures identified for the project. Furthermore, because trucks generate higher levels of roadway noise than typical passenger vehicles, this alternative's decrease in truck trips would also decrease the level of roadway noise generated by project traffic, which is a significant and unavoidable impact of the project. Alternative 2 would further reduce noise levels, and overall noise impacts would be slightly less. *(Less)*

BIOLOGICAL RESOURCES

Because the area of soil disturbance associated with Alternative 2 would be substantially similar to the proposed project, and because project-related impacts to biological resources are associated primarily with project construction, Alternative 2 would generally result in similar impacts and would require similar mitigation measures compared to those of the project. Overall, impacts related to biological resources would be similar. *(Similar)*

CULTURAL RESOURCES

Similar to biological resources, project-related impacts to cultural resources are associated with ground-disturbing construction activities. Because the area of soil disturbance associated with Alternative 2 would be similar to the project, impacts related to cultural resources would be similar and would require similar mitigation measures compared to those of the project. Overall, impacts to cultural resources would be similar. *(Similar)*

HAZARDOUS MATERIALS, WILDFIRE, AND OTHER HAZARDS

Project-related impacts related to hazardous materials, wildfire, and other hazards are all less than significant after implementation of mitigation measures. There is nothing peculiar about the land uses or overall development identified in Alternative 2 that differs from the project in a way that would change the level of impact. Similar mitigation measures would be required for Alternative 2. Overall, impacts related to hazardous materials, wildfire, and other hazards would be similar. *(Similar)*

PUBLIC SERVICES

The project would result in less-than-significant impacts related to public services. There is nothing peculiar about the land uses or overall development identified in Alternative 2 that differs from the project in a way that would change the potential impact to police, fire, or school services. Overall, impacts related to public services would be similar. *(Similar)*

UTILITIES AND SERVICE SYSTEMS

The project would result in less-than-significant impacts related to utilities. There is nothing peculiar about the land uses or overall development identified in Alternative 2 that differs from the project in a way that would change the level of impact to water supply, wastewater treatment and service, or solid waste capacity. Overall, impacts related to utilities would be similar. *(Similar)*

HYDROLOGY AND WATER QUALITY

Alternative 2 would have a similar overall development footprint as the proposed project, and construction associated with this alternative would require compliance with the same water quality regulations as the proposed project. In addition, although there are differences between the land use types identified for Alternative 2 compared to the project, the overall level of development would be similar, and Alternative 2 would also be required to comply with the same operational regulations as the proposed project. The EIR indicates the project-related impacts associated with hydrology and water quality are less than significant; impacts associated with Alternative 2 would be similar. *(Similar)*

AESTHETICS

The overall development footprint of Alternative 2 would be similar to the project. And, although there would be smaller floor area associated with Alternative 2, which could result in smaller and/or fewer buildings, overall, the development of the site would be mostly consistent with the size and scale of the proposed project. Lighting would be substantially similar. Differences in impacts related to aesthetics would be minimal and the overall impact would be similar. *(Similar)*

ENERGY

Alternative 2 is designed to reduce the project's significant impacts related to VMT and GHG. These reductions (described above under "Transportation and Circulation" and "Greenhouse Gas Emissions and Climate Change") would also translate into a reduction in energy use and increased energy efficiency. However, the proposed project would result in a less-than-significant impact associated with energy; therefore, although Alternative 2 would be more efficient and consume less total energy than the project, because neither the project nor Alternative 2 would result in a significant impact, the impact would be similar. *(Similar)*

TRIBAL CULTURAL RESOURCES

Project-related impacts to Tribal Cultural Resources would be reduced to a less-than-significant level with implementation of mitigation measures. Impacts to Tribal Cultural Resources are generally tied to a project's ground-disturbing construction activities. Alternative 2 would have a similar development footprint as the proposed project and would, therefore, result in the same level of impact and would require the same mitigation measures compared to those of the proposed project. Impacts to Tribal Cultural Resources would be similar. *(Similar)*

6.4.3 Alternative 3: Reduced Footprint and Floor Area Alternative

Alternative 3, the Reduced Footprint Alternative, is designed to reduce the project's operational impacts associated with GHG, as well as minimize the project's residual impacts (i.e., the degree of impact between baseline conditions and the mitigated project conditions, even if the impact remains below the threshold of significance) to biological resources. This alternative achieves these reductions by eliminating proposed development on the north parcel, which eliminates the need for the bridge across Pleasant Grove Creek and the Pleasant Grove Creek Bypass Channel. Eliminating proposed development on the north parcel also results in a reduction of 422,280 sf of light industrial floor area. Alternative 3 would result in the development of approximately 2 million sf of light industrial, manufacturing, and warehousing uses on 130 acres. It would generate approximately 1,597 employees (341 fewer employees than the project—a reduction by approximately 18 percent). It would likely be very similar to the project's south parcel site plan, although some adjustment would likely be necessary as through access to the north parcel would no longer be needed.

Implementation of Alternative 3 would meet most of the project objectives but would not meet the objective related to constructing a high-quality industrial park to the same extent as the proposed project, due to the fact that this alternative includes less light industrial uses compared to the project. Likewise, because this alternative would result in

fewer jobs, it would also not meet objectives related to creation of substantial, permanent employment opportunities and creating jobs-housing balance to the same extent as the project. This alternative may also not meet the objective related to the highest and best use of the property because it would cut off the 50-acre north parcel from near-term development. The future Placer Parkway alignment is adjacent to the west of the north parcel (Placer Parkway is planned as a major thoroughfare and would not feasibly provide direct site access). The Placer Parkway alignment also precludes any access from the north. The only possible way to provide future access to the site would be by extending the alignment of a future small residential road associated with the Creekview Specific Plan to the site. However, this would limit the level of development achievable at the north parcel as it would be restricted by the size of infrastructure, including roads and utilities, planned for (and currently being installed) in the Creekview Specific Plan area.

LAND USE AND AGRICULTURAL RESOURCES

Alternative 3 would result in less ground disturbance and a smaller development footprint as the proposed project. Section 3.1, "Land Use and Agricultural Resources," indicates that the proposed project would result in less-than-significant impacts related to conflicts with plans, policies, and regulations focused on environmental impact minimization, as well as impacts related to conversion of farmland. Although this alternative would affect less Farmland of Local Importance than the project, because the project's impact is less than significant, this alternative would result in a similar impact. Overall, the impact would be similar. *(Similar)*

POPULATION, EMPLOYMENT, AND HOUSING

Like the project, Alternative 3 does not include any residential uses and would likewise result in no direct population growth. However, this alternative would result in approximately 18 percent less employment than the proposed project. Section 3.2, "Population, Employment, and Housing," indicates that the project would result in less-than-significant impacts related to inducement of unplanned population growth. Although this alternative's smaller employment numbers would result in less secondary effects (employment-related) associated with population growth, because the project would result in a less-than-significant impact, the overall impact of this alternative is considered to be similar. *(Similar)*

TRANSPORTATION AND CIRCULATION

Because Alternative 3 would result in less overall development, it would result in fewer trips associated with both trucks and employees. This would result in a reduction in the total VMT; however, regarding VMT efficiency (VMT per service population), which is the basis of the threshold of significance for VMT impacts used in Section 3.3, "Transportation and Circulation," the reduction in floor area would not likely result a meaningful change in the impact. This is because the land use types and associated vehicle trip types would not change (i.e., although the total amount of development would be less, the VMT efficiency, which relates to the land use type, would be similar). Alternative 3 would, therefore, not be more efficient from a VMT standpoint than the proposed project. Similar to the project, Alternative 3 would be designed to minimize potential hazards related to design features and to provide adequate emergency access. Despite the reduced level of truck trips and number of employees, this alternative would still result in the same potential conflicts with General Plan policies related to pedestrian and transit facilities because new employees would be added to a site that does not have continuous sidewalks and is not currently service by public transit. Thus, this alternative would not avoid the project's significant and unavoidable impacts related to pedestrian and transit facilities. Overall, the impact would be similar. *(Similar)*

AIR QUALITY

Alternative 3 would involve a smaller area of disturbance and would, therefore, result in fewer construction-related emissions of criteria air pollutants, ozone precursors, and TACs, especially at future planned residential areas adjacent to the north parcel (although these homes are not currently constructed, it is possible that they could be completed

and occupied at the time the north parcel is under construction). Long-term emissions would also be reduced compared to the project because of the smaller scale of development and fewer truck trips. Further, only the south parcel would be developed, and development would be shifted to the west of the project site, more distant from the Creekside Specific Plan Area residences. Thus, Alternative 3 would further reduce emissions of criteria air pollutants, ozone precursors, and TACs, and overall air quality impacts would be less. This alternative would avoid the project's significant air quality impacts, although project impacts can be mitigated to a less-than-significant level. *(Less)*

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Alternative 3 is designed, in part, to reduce the project's significant impacts related to GHG (among other impacts). This is primarily accomplished by decreasing the total amount of development on the site, which decreases overall VMT because there would be fewer truck and employee trips. (Note that total VMT differs from the VMT efficiency metrics used in the VMT analysis). In addition to the reduction in total VMT, the reduction in overall development associated with this alternative would also reduce building energy and energy associated with onsite equipment. This would result in a reduction in GHG emissions; however, this reduction would not likely avoid the significant impact associated with the proposed project. Overall, impacts related to GHG would be less. *(Less)*

NOISE AND VIBRATION

Alternative 3 would involve a smaller area of disturbance and would, therefore, result in lower construction noise levels, especially at future planned residential areas adjacent to the north parcel (although these homes are not currently constructed, it is possible that they could be completed and occupied at the time the north parcel is under construction). The proposed project would result in a less-than-significant impact associated with construction noise, and, although this alternative would reduce construction noise, the construction noise impact would be similar. Unlike the project's less-than-significant construction noise impacts, mitigation measures are required to reduce the project's operational non-transportation noise to a less-than-significant level. Alternative 3 would require the same mitigation required by the project. Although there may be a slight reduction in noise due to the elimination of development on the north parcel, the project's impacts would generally be similar. However, the proposed project would result in a significant and unavoidable impact associated with increases in transportation-related noise, due largely to the number of truck trips generated. Alternative 3 includes less overall development and would generate fewer vehicle trips, including trucks, and consequently less transportation-related noise. However, the reduction in transportation-related noise associated with this alternative would not likely avoid the significant impact. Overall, the impact would be less. *(Less)*

BIOLOGICAL RESOURCES

Impacts of the proposed project on biological resources would, overall, be less-than-significant with implementation of mitigation measures. Some of the impacts requiring mitigation are associated primarily with the proposed bridge crossing Pleasant Grove Creek and the Pleasant Grove Creek Bypass. Alternative 3 would eliminate the bridge. Therefore, impacts associated with special-status plants, some special-status wildlife species, riparian habitat, protected wetlands, and wildlife movement corridors would likely be completely avoided by Alternative 3. Complete avoidance of impacts is preferable to mitigation of impacts. Therefore, although Alternative 3 would not avoid a significant impact associated with the project (the project does not result in an unavoidable significant impact to biological resources), the overall impact would be less due to the elimination of the need to mitigate several impacts. *(Less)*

CULTURAL RESOURCES

Alternative 3 would eliminate development of the north parcel and associated bridge. Therefore, the overall disturbance area would be reduced. The proposed project would result in a potentially significant impact related to currently unknown archaeological resources, and mitigation measures are identified to reduce the impact to a less-than-significant level. Alternative 3 would require similar mitigation to reduce impacts; however, because this

alternative results in less ground disturbance, the chance of uncovering an unknown archaeological resource is somewhat reduced. Overall, the impact is slightly less. *(Less)*

HAZARDOUS MATERIALS, WILDFIRE, AND OTHER HAZARDS

Project-related impacts related to hazardous materials, wildfire, and other hazards are all less than significant after implementation of mitigation measures. There is nothing peculiar about the land uses or overall development identified in Alternative 3 that differs from the project in a way that would change the level of impact. Similar mitigation measures would be required for Alternative 3. Overall, impacts related to hazardous materials, wildfire, and other hazards would be similar. *(Similar)*

PUBLIC SERVICES

The project would result in less-than-significant impacts related to public services. There is nothing peculiar about the land uses or overall development identified in Alternative 3 that differs from the project in a way that would change the potential impact to police, fire, or school services. Overall, impacts related to public services would be similar. *(Similar)*

UTILITIES AND SERVICE SYSTEMS

The project would result in less-than-significant impacts related to utilities. Although Alternative 3 would result in somewhat less demand on utilities than the proposed project, due to the decreased level of development, because the project's impacts associated with utilities are less than significant, the overall impact would generally be similar. *(Similar)*

HYDROLOGY AND WATER QUALITY

Although Alternative 3 would have a smaller overall development footprint as the proposed project and overall less development, the development types would be similar, and construction and operation of this alternative would require compliance with the same water quality regulations as the proposed project. The project includes a proposed bridge across Pleasant Grove Creek and the Pleasant Grove Creek Bypass to access the north parcel; however, compliance with regulations and standards would minimize potential impacts related to alteration of stormwater and flood flows; therefore, although Alternative 3 would eliminate the bridge, the impact related to potential changes in stormwater and flood flows would generally be similar. The EIR indicates the project-related impacts associated with hydrology and water quality are less than significant; impacts associated with Alternative 3 would be similar. *(Similar)*

AESTHETICS

The proposed project's impacts associated with aesthetics, on an individual project basis, are less than significant. However, the project is at the edge of existing development in the area and is adjacent to a protected open space area and would result in a substantial contribution to a cumulative change in character and cumulative increase in light and glare. Although the scale of development and lighting would be similar to the project on the south parcel, Alternative 3 would eliminate proposed development on the north parcel, which is adjacent to the protected open space area. This would reduce overall lighting and would provide a substantial setback from the existing open space area. Although this would not avoid the project's contribution to a significant cumulative impact, it would reduce it. Overall, the impact would be less. *(Less)*

ENERGY

The proposed project would result in less-than-significant impacts associated with energy use. Although Alternative 3 would result in less overall development and would create less demand for energy, the land use types would be similar and would be equivalent to the project in terms of energy efficiency. Because the project would result in a less-than-significant impact relate to energy, the overall impact of this alternative would generally be similar. *(Similar)*

TRIBAL CULTURAL RESOURCES

Alternative 3 would eliminate development of the north parcel and associated bridge. Therefore, the overall disturbance area would be reduced. The proposed project would result in a potentially significant impact related to currently unknown Tribal Cultural Resources, and mitigation measures are identified to reduce the impact to a less-than-significant level. Alternative 3 would require similar mitigation to reduce impacts; however, because this alternative results in less ground disturbance, the chance of uncovering an unknown archaeological resource is somewhat reduced. Overall, the impact is slightly less. *(Less)*

6.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 6-1 provides a summary comparison of the alternatives and the proposed project at buildout.

Table 6-1 Summary Comparison of the Alternatives and the Proposed Project at Buildout

Land Use/Project Component	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Innovation Mixed-Use Alternative	Alternative 3: Reduced Footprint and Floor Area Alternative
Development Type	Light Industrial	No development	Mixed Use	Light Industrial
Light industrial, manufacturing, and warehousing uses	2.4 million sf	0	0	2 million sf
Research & development uses	0	0	1 million sf	0
Office uses	0	0	800,000 sf	0
Employees	1,938 employees	0	Potentially more than the project's 1,938 employees	1,597 employees
Total acreage to be developed	180 acres	0	180 acres	130 acres
Site layout	North and south parcels	None	North and south parcels	South parcel only; shift development to the west

Notes: sf = square feet.

Source: Data compiled by Ascent Environmental in 2022.

Because the No Project Alternative (described above in Section 6.4.1) would avoid all adverse impacts resulting from construction and operation of the Roseville Industrial Park Project analyzed in Chapter 3, it is the environmentally superior alternative. However, the No Project Alternative would not meet the objectives of the project as presented above in Section 6.2.

When the environmentally superior alternative is the No Project Alternative, the State CEQA Guidelines (Section 15126[d][2]) require selection of an environmentally superior alternative from among the other action alternatives evaluated. As described above, neither Alternative 2 nor Alternative 3 would avoid the significant impacts associated with the proposed project. This is due primarily to the distance of the project site from major transportation corridors (i.e., State Route 65 and Interstate 80); any development in this location that could meet most of the project's objectives would involve long trip lengths, which generates elevated VMT and GHG emissions.

As shown in Table 6-2, although Alternative 3 would reduce project-related impacts for more environmental issue areas than Alternative 2, Alternative 2 would outperform Alternative 3 in terms of reducing the significant and unavoidable impacts associated with the project, especially impacts related to VMT, GHG, and noise. This is because Alternative 2 has approximately half the amount of light industrial, warehousing, and manufacturing development compared to Alternative 3 and would therefore generate substantially fewer truck trips—a major contributor to VMT, GHG, and noise impacts. Because it would best reduce the significant impacts associated with the project, Alternative 2 is considered the environmentally superior alternative.

Table 6-2 Summary of Environmental Effects of the Alternatives Relative to the Proposed Roseville Industrial Park Project

Environmental Topic	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Innovation Mixed-Use Alternative	Alternative 3: Reduced Footprint and Floor Area Alternative
Land Use and Agricultural Resources	LTS	Less	Similar	Similar
Population, Housing, and Employment	LTS	Less	Similar	Similar
Transportation and Circulation	SU	Less	Less	Similar
Air Quality	LTS/M	Less	Less	Less
Greenhouse Gas Emissions and Climate Change	SU	Less	Less	Less
Noise and Vibration	SU	Less	Less	Less
Biological Resources	LTS/M	Less	Similar	Less
Cultural Resources	LTS/M	Less	Similar	Less
Hazardous Materials, Wildfire, and other Hazards	LTS/M	Less	Similar	Similar
Public Services	LTS	Less	Similar	Similar
Utilities and Service Systems	LTS	Less	Similar	Similar
Hydrology and Water Quality	LTS	Less	Similar	Similar
Aesthetics	LTS	Less	Similar	Less
Energy	LTS	Less	Similar	Similar
Tribal Cultural Resources	LTS/M	Less	Similar	Less

Notes: LTS = less than significant; LTS/M = less than significant with mitigation; SU = significant and unavoidable.

Source: Data compiled by Ascent Environmental in 2022.

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8 REFERENCES

Executive Summary

No references used in this chapter.

Chapter 1 Introduction

City of Roseville. 2020 (August). *City of Roseville 2035 General Plan Update, Final Environmental Impact Report*. State Clearinghouse No. 2019080418. Roseville, CA. Prepared by AECOM, Sacramento, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

Gularte & Associates. 2021 (May 5). *Preliminary Geotechnical Report, Roseville 183, 6382 Phillip Road, APN 017-101-008-000, Roseville, CA*. Prepared for Panattoni Development Company. Rocklin, CA.

Chapter 2 Project Description

City of Roseville. 2004 (January). *Final Environmental Impact Report for the West Roseville Specific Plan and Sphere of Influence Amendment*. State Clearinghouse No. 2002082057. Roseville, CA. Prepared by EIP. Available: https://www.roseville.ca.us/government/departments/development_services/planning/specific_plans_planning_areas/west_roseville_specific_plan. Accessed August 2022.

———. 2008. Community Design Guidelines for the City of Roseville. Adopted December 6, 1995; reflects amendments through March 19, 2008. Roseville, CA. Available: https://roseville.ca.us/common/pages/DisplayFile.aspx?itemId=8836813. Accessed August 2021.

———. 2020 (August). *City of Roseville 2035 General Plan Update, Final Environmental Impact Report*. State Clearinghouse No. 2019080418. Roseville, CA. Prepared by AECOM, Sacramento, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

Kemen, Stefanie. Division manager. City of Roseville, Public Works – Engineering, Roseville, CA. January 19, 2023—email to Shelby Maples of the City of Roseville, Development Service – Planning, regarding the Pleasant Grove Retention Basin Project.

Chapter 3 Environmental Impacts and Mitigation Measures

No references used in this section.

Section 3.1 Land Use and Agricultural Resources

ATC Group Services LLC. 2021 (March 30). *Phase I Environmental Site Assessment of 6382 Phillip Road Roseville, California 95747*. Prepared for Panattoni Development Company, Inc. Modesto, CA.

ATC. *See* ATC Group Services LLC.

City of Roseville. 2002a (October 16). *Draft Environmental Impact Report for the City of Roseville Detention Basin*. SCH# 2002072084. Roseville, CA.

———. 2002b. *City of Roseville Retention Basin Project Findings of Fact & Statement of Overriding Considerations*. Prepared by URS Corporation. San Francisco, CA.

———. 2005 (May). *Implementation Strategy to Achieve Blueprint Project Objectives*. Roseville, CA. Available: https://www.roseville.ca.us/common/pages/DisplayFile.aspx?itemId=8836807. Accessed August 2021.

———. 2020a (August 5). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

———. 2020b (August 5). *City of Roseville General Plan 2035 Final Environmental Impact Report*. Roseville, CA. Certified August 5, 2020. Available: https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Planning/General%20Plan/Final%20General%20Plan%20EIR/City%20of%20Roseville%20EIR.pdf. Accessed August 2021.

Placer LAFCO. *See* Placer Local Agency Formation Commission.

Placer Local Agency Formation Commission. 2017. Part III Placer LAFCO Policies. Roseville, CA. Available: https://www.placer.ca.gov/2724/Policies-Guidelines. Accessed August 2021.

Sacramento Area Council of Governments. 2019 (November 18). *2020 Metropolitan Transportation Plan/Sustainable Communities Strategy.* Available: https://www.sacog.org/2020-metropolitan-transportation-plansustainable-communities-strategy. Accessed August 2021.

Section 3.2 Population, Employment, and Housing

BLS. *See* Bureau of Labor Statistics.

Bureau of Labor Statistics. 2021a. *BLS Data Viewer: Local Area Unemployment Statistics, Roseville, CA*. Available: https://beta.bls.gov/dataViewer/view. Accessed August 19, 2021.

———. 2021b. *Unemployment Rates for States*. Available: https://www.bls.gov/web/laus/laumstrk.htm. Accessed August 19, 2021.

California Department of Finance. 2021 (May). *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2020 and 2021*. Sacramento, CA.

City of Roseville. 2017 (May 2). *2017-2022 Economic Development Strategy*. Office of Economic Development. Approved by City Council on September 20, 2017.

———. 2020 (August 5). *City of Roseville General Plan 2035.* Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

———. 2021 (August). *2021 Housing Element*. Adopted August 18, 2021. Available: https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=16922252. Accessed May 2022.

Congressional Research Service. 2021 (June 15). *Unemployment Rates During the COVID-19 Pandemic*.

CRS. *See* Congressional Research Service.

DOF. *See* California Department of Finance.

Sacramento Area Council of Governments. 2020 (March). SACOG Regional Housing Needs Plan Cycle 6 (2021-2029). Available: https://www.sacog.org/regional-housing-needs-allocation-rhna. Accessed March 2022.

US Census. 2000. *Profile of General Demographic Characteristics: 2000, Roseville CA*. Available: https://data.census.gov/cedsci/table?q=Roseville&y=2000%3A2019&tid=DECENNIALDPSF42000.DP1. Accessed August 17, 2021.

———. 2007 (September). *Measuring Overcrowding in Housing*. Prepared for the Department of Housing and Urban Development, Office of Policy Development and Research.

———. 2010. *American Community Survey 1-Year Estimates: 2010, Roseville, CA*. Available: https://data.census.gov/cedsci/table?g=1600000US0662938&tid=ACSDP1Y2019.DP05. Accessed August 17, 2021.

———. 2019. *American Community Survey 1-Year Estimates: 2019, Roseville, CA*. Available: https://data.census.gov/cedsci/table?g=1600000US0662938&tid=ACSDP1Y2019.DP05. Accessed August 17, 2021.

Section 3.3 Transportation and Circulation

California Air Pollution Control Officer Association. 2021 (December). *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*. Available: https://www.caleemod.com/documents/handbook/full_handbook.pdf. Accessed May 2022.

California Department of Transportation. 2019 (August). Truck Networks on California State Highways, District 3. Map 3 of 12. Available: https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/trucks/truckmap-d03-a11y. Accessed October 25, 2021.

———. 2020a (May). Vehicle Miles Traveled-Focused Transportation Impact Study Guide. Adopted May 20, 2020. Available: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-05-20-approved-vmt-focused-tisg-a11y.pdf. Accessed October 2021.

———. 2020b (July). *Interim Land Development and Intergovernmental Review Safety Review Practitioners Guidance.* Available: https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-07-01-interim-ldigr-safety-guidance-a11y.pdf. Accessed October 2021.

———. 2021. *Caltrans 2020-2024 Strategic Plan*. Available: *https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/sp-2020-16p-web-a11y.pdf.* Accessed October 28, 2021.

Caltrans. *See* California Department of Transportation.

CAPCOA. *See* California Air Pollution Control Officer Association.

City of Roseville. 2004 (January). *Final Environmental Impact Report for the West Roseville Specific Plan and Sphere of Influence Amendment*. State Clearinghouse No. 2002082057. Roseville, CA. Prepared by EIP. Available: https://www.roseville.ca.us/government/departments/development_services/planning/specific_plans_planning_areas/west_roseville_specific_plan. Accessed August 2022.

———. 2008. *City of Roseville Bicycle Master Plan.* Prepared by Fehr & Peers in association with Alta Planning & Design. Available: https://www.roseville.ca.us/government/departments/public_works/biking_walking/planning. Accessed October 2021.

———. 2011a. *City of Roseville Pedestrian Master Plan.* Available: https://www.roseville.ca.us/government/departments/public_works/biking_walking/planning. Accessed October 2021.

———. 2011b (April). *Final Environmental Impact Report for the Creekview Specific Plan and Sphere of Influence Amendment*. State Clearinghouse No. 2008032017. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/specific_plans_planning_areas/creekview_specific_plan#:~:text=Creekview%20Specific%20Plan%20%20%20View%20%20,02.0%20Project%20Description%20%2057%20more%20rows%20. Accessed September 2022.

———. 2020 (August). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed October 28, 2021.

———. 2021a. *Amendments to City of Roseville Design and Construction Standards*. Available: https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Engineering/Design%20and%20Construction%20Standards/Standards%20Amendment/2021%20Amendment%20-%20Combined%20Document.pdf. Accessed October 15, 2021.

———. 2021b (October). *City of Roseville Truck Routes*. Available: https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Roadways%20&%20Traffic/Traffic/Transportation%20Permits%20&%20Truck%20Routes/Truck%20Route%20Map%202021.pdf. Accessed October 25, 2021.

———. 2021c. 2021 Housing Element. Adopted August 18, 2021. Available: https://www.roseville.ca.us/government/departments/development_services/planning/housing_element. Accessed October 15, 2021.

Fehr & Peers. 2021. *Final Transportation Impact Study for the Roseville Housing Element Update*.

Governor's Office of Planning and Research. 2018 (April). *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Available: https://opr.ca.gov/docs/20180416-743_Technical_Advisory_4.16.18.pdf. Accessed October 2021.

Institute of Transportation Engineers. 2021 (October). *Trip Generation Manual, 11th Edition*.

ITE. *See* Institute of Transportation Engineers.

LSC Transportation Engineers. 2018. *Roseville Short-Range Transit Plan 2018-2025 Final*. Prepared for the Placer County Transportation Planning Agency. Available: https://pctpa.net/transit/2018-roseville-transit-short-range-transit-plan/. Accessed October 2021.

OPR. *See* Governor's Office of Planning and Research.

Roseville Transit. 2019 (November 18). Roseville Transit Local Bus Service Guide. Local service route map. Available: https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8756381. Accessed October 15, 2021.

SACOG. *See* Sacramento Area Council of Governments.

Sacramento Area Council of Governments. 2019 (November). *2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)*. Adopted November 18, 2019. Available: https://www.sacog.org/post/adopted-2020-mtpscs. Accessed May 2022.

US Census Bureau. 2018. OntheMap. Available: https://onthemap.ces.census.gov/. Accessed November 2021.

———. 2019 (July 1). QuickFacts: Roseville city, California. Population estimates, July 1, 2019 (V2019). Available: https://www.census.gov/quickfacts/rosevillecitycalifornia. Accessed November 2021.

Section 3.4 Air Quality

California Air Resources Board. 2000 (October). *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. Available: https://ww2.arb.ca.gov/our-work/programs/diesel-risk-reduction-plan#:~:text=In%20September%202000%2C%20the%20California,and%2085%20percent%20by%202020. Accessed March 9, 2022.

———. 2003. *HARP User Guide.* Sacramento, CA.

———. 2013. *California Almanac of Emissions and Air Quality—2013 Edition*. Available: http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm. Accessed March 9, 2022.

———. 2016, May 4. Ambient Air Quality Standards. Available: https://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed March 9, 2022.

———. 2019. Roseville-N Sunrise Ave AQMIS data. Available: https://ww3.arb.ca.gov/qaweb/iframe_site.php?s_arb_code=31822. Accessed June 15, 2022.

CARB. *See* California Air Resources Board.

City of Roseville. 2020. *City of Roseville General Plan 2035, IV. Air Quality and Climate Change Element*. Roseville, CA.

EPA. *See* US Environmental Protection Agency.

Gard, John. Principal. Fehr & Peers. October 8, 2021 – email to Mike Parker and Sarah Henningsen of Ascent Environmental about Roseville Industrial Park Project-Generated VMT Estimates and Cumulative ADT.

PCAPCD. *See* Placer County Air Pollution Control District.

Placer County Air Pollution Control District. 2017. *CEQA Air Quality Handbook*. Auburn, CA. Available: https://www.placer.ca.gov/1801/CEQA-Handbook. Accessed March 9, 2022.

Sacramento Regional Air Quality Plan. 2017. *Sacramento Regional 2008 NAAQS 8-Hour Ozone Attainment and Further Reasonable Progress Plan*. Available: http://www.airquality.org/ProgramCoordination/Documents/Sac%20Regional%202008%20NAAQS%20Attainment%20and%20RFP%20Plan.pdf. Accessed June 15, 2022.

South Coast Air Quality Management District. 2014. SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Business Survey Results. Available: http://www.aqmd.gov/docs/default-source/ceqa/handbook/high-cube-warehouse-trip-rate-study-for-air-quality-analysis/business-survey-summary.pdf. Accessed January 18, 2022.

SRAQP. *See* Sacramento Regional Air Quality Plan

US Environmental Protection Agency. 2012 (April). *2008 Ground-Level Ozone Standards: Region 9 Final Designations*. Available: https://archive.epa.gov/ozonedesignations/web/html/region9f.html. Accessed March 9, 2022.

———. 2016. *Criteria Air Pollutants*. Available: https://www.epa.gov/criteria-air-pollutants#self. Last updated October 19, 2016. Accessed March 9, 2022.

Wertheim, Abbie. Development Manager. Panattoni Development Company, Inc. June 6, 2022—email to Mike Parker and Sarah Henningsen of Ascent Environmental responding to questions about electrification of forklifts and yard trucks.

Western Regional Climate Center. 2022. *Rocklin, California Period of Monthly Climate Summary*. Available: https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7516. Accessed April 20, 2022.

WRCC. *See* Western Regional Climate Center.

Section 3.5 Greenhouse Gas Emissions and Climate Change

California Air Pollution Control Officers Association. 2021. California Emissions Estimator Model (CalEEMod), Version 2020.4.0. Available: http://www.caleemod.com/. Accessed April 29, 2022.

California Air Resources Board. 2016a (October). *2016 ZEV Action Plan.* Available: https://dot.ca.gov/-/media/dot-media/programs/sustainability/documents/2016-zev-action-plan-a11y.pdf. Accessed April 29, 2022.

———. 2016b. *Facts about the Advanced Clean Cars Program.* Available: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed April 29, 2022.

———. 2017 (November). *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target*. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed April 29, 2022.

———. 2018. *SB 375 Regional Greenhouse Gas Emissions Reduction Targets*. Approved by the California Air Resources Board March 22, 2018. Available: https://www.arb.ca.gov/cc/sb375/finaltargets2018.pdf. Accessed April 29, 2022.

———. 2021 (July). *Current California GHG Emission Inventory Data.* Available: https://ww2.arb.ca.gov/ghg-inventory-data. Accessed April 29, 2022.

California Energy Commission. 2012. *Our Changing Climate 2012: Vulnerability & Adaptation to the Increasing Risks from Climate Change in California*. Available: https://ucanr.edu/sites/Jackson_Lab/files/155618.pdf. Accessed April 29, 2022.

———. 2018a (March). *2019 Building Energy Efficiency Standards: Frequently Asked Questions*. Available: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed April 29, 2022.

———. 2018b. Cal-Adapt Annual Averages Tool. Available: http://cal-adapt.org/tools/annual-averages/. Accessed April 29, 2022.

California Natural Resources Agency. 2017 (May). *Draft Report: Safeguarding California Plan: 2017 Update.* Available: http://resources.ca.gov/wp-content/uploads/2017/05/DRAFT-Safeguarding-California-Plan-2017-Update.pdf. Accessed April 29, 2022.

———. 2018 (January). *Safeguarding California Plan: 2018 Update.* Available: https://resources.ca.gov/CNRALegacyFiles/docs/climate/safeguarding/update2018/safeguarding-california-plan-2018-update.pdf. Accessed April 29, 2022.

CAPCOA. *See* California Air Pollution Control Officers Association.

CARB. *See* California Air Resources Board.

CEC. *See* California Energy Commission.

City of Roseville. 2009 (August). *City of Roseville Greenhouse Gas Emissions Reduction Plan Analysis*. Final Report. Roseville, CA.

———. 2010 (October). *City of Roseville Communitywide Sustainability Action Plan*. Roseville, CA.

———. 2020. *City of Roseville General Plan 2035, IV. Air Quality and Climate Change Element*. Roseville, CA.

CNRA. *See* California Natural Resources Agency.

EPA. *See* US Environmental Protection Agency.

Institute of Transportation Engineers. 2021 (October). *Trip Generation Manual, 11th Edition*.

Intergovernmental Panel on Climate Change. 2013. Chapter 6, Carbon and Other Biogeochemical Cycles. Pages 465–570 in *Climate Change 2013: The Physical Science Basis*. Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Available: http://www.climatechange2013.org/images/report/WG1AR5_ALL_FINAL.pdf. Accessed April 29, 2022.

———. 2014. *Climate Change 2014 Synthesis Report: Summary for Policymakers*. Available: https://www.ipcc.ch/pdf/assessment-report/ar5/syr/AR5_SYR_FINAL_SPM.pdf. Accessed April 29, 2022.

IPCC. *See* Intergovernmental Panel on Climate Change.

ITE. *See* Institute of Transportation Engineers.

National Highway Traffic Safety Administration. 2020. *Safer Affordable Fuel-Efficient Vehicles Rule.* Available: https://www.nhtsa.gov/corporate-average-fuel-economy/safe#:~:text=The%20Safer%20Affordable%20Fuel%2DEfficient%20(SAFE)%20Vehicles%20Rule%2C,model%20years%202021%20through%202026. Accessed: April 22, 2022.

NHTSA. *See* National Highway Traffic Safety Administration.

Placer County Air Pollution Control District. 2017. *CEQA Handbook.* Available: https://www.placerair.org/1801/CEQA-Handbook. Accessed April 29, 2022.

SACOG. *See* Sacramento Area Council of Governments.

Sacramento Area Council of Governments. 2016. *2016 Metropolitan Transportation Plan/Sustainable Communities Strategy*. Adopted February 18, 2016. Available: https://www.sacog.org/2016-mtpscs. Accessed April 29, 2022.

State of California. 2018. California Climate Change Legislation. Available: https://www.law.berkeley.edu/research/clee/research/climate/climate-policy-dashboard/#:~:text=California%20Climate%20Policies&text=Landmark%20legislation%20requiring%20California%20to,program)%20to%20achieve%20this%20goal. Accessed May 2022.

United Nations. 2015. Paris Agreement. Available: https://unfccc.int/sites/default/files/english_paris_agreement.pdf. Accessed May 2022.

Wade, Samuel. Branch chief. Transportation Fuels Branch, Industrial Strategies Division, California Air Resources Board, Sacramento, CA. June 30, 2017—e-mail to Austin Kerr of Ascent Environmental regarding whether the Low Carbon Fuel Standard applies to fuels used by off-road construction equipment.

Section 3.6 Noise and Vibration

California Department of Transportation. 2002 (January). *California Airport Land Use Planning Handbook*. Sacramento, CA. Prepared by the Shutt Moen Associates, Santa Rosa, CA.

———. 2013a (September). *Transportation and Construction Vibration Guidance Manual*. Sacramento, CA: Noise, Division of Environmental Analysis. Sacramento, CA.

———. 2013b (September). *Technical Noise Supplement.* California Department of Transportation Division of Environmental Analysis. Sacramento, CA. Prepared by ICF Jones & Stokes.

———. 2020 (April). *Transportation and Construction Vibration Guidance Manual*. Sacramento, CA: Noise, Division of Environmental Analysis. Sacramento, CA.

Caltrans. *See* California Department of Transportation.

City of Merced. 2009. *Wal-Mart Environmental Impact Report*. Available: https://www.cityofmerced.org/home/showpublisheddocument/5640/637032493349970000. Accessed April 29, 2022.

City of Roseville. 2014. Municipal Code. Section 9.24.030 (Health and Safety; Noise Regulations; Exemptions); Available: http://qcode.us/codes/roseville/. Accessed April 29, 2022.

———. 2020. City of Roseville General Plan 2035; Noise Element. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed April 29, 2022.

EPA. *See* US Environmental Protection Agency.

Federal Highway Administration. 2004. Traffic Noise Model, Version 2.5. Available: https://www.fhwa.dot.gov/environment/noise/traffic_noise_model/tnm_v25/index.cfm. Accessed April 29, 2022.

———. 2006 (January). *Roadway Construction Noise Model User's Guide*. Washington, D.C. Prepared by the Research and Innovative Technology Administration, Cambridge, MA.

Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment*. Washington, D.C. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf. Accessed April 29, 2022.

FHWA. *See* Federal Highway Administration.

FTA. *See* Federal Transit Administration.

Lennox. 2019. *16ACX Merit Series Product Specifications*.

US Environmental Protection Agency. 1971 (December 31). Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances. Washington, DC.

———. 1978 (November). *Protective Noise Levels*.

Section 3.7 Biological Resources

American Bird Conservancy. 2015. *Bird-Friendly Building Design.* Available: https://abcbirds.org/wp-content/uploads/2015/05/Bird-friendly-Building-Guide_20151.pdf. Accessed May 17, 2022.

Bailey Environmental. 2003 (December). *Streams of Western Placer County: Aquatic Habitat and Biological Resources Literature Review*. Lincoln, CA. Prepared for Sierra Business Council.

Barnett Environmental. 2021 (March). *6382 Phillip Rd., Roseville CA Bio/Wetland Resources Constraints Analysis*. Prepared for Panattoni Development Company, Inc. Sacramento, CA.

California Department of Fish and Wildlife. 2012. *Staff Report on Burrowing Owl Mitigation.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843. Accessed September 12, 2021.

———. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities.* Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline. Accessed September 12, 2021.

California Tree and Landscape Consulting, Inc. 2021 (June). *Preliminary Arborist Report and Tree Inventory*. Prepared for Panattoni Development Company Sacramento LPIV, LLC. Sacramento, CA.

California Native Plant Society. 2021. Inventory of Rare and Endangered Plants of California (online edition, v3-03 0.39). Available: http://www.rareplants.cnps.org. Accessed August 12, 2021.

California Natural Diversity Database. 2021. Results of electronic records search. Sacramento: California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed August 12, 2021.

California Water Boards. 2019. *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*. Adopted April 2, 2019 and revised April 6, 2021. Available: https://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/2021/procedures.pdf. Accessed May 2022.

CDFW. *See* California Department of Fish and Wildlife.

City of Roseville. 2020 (August 5). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

CNDDB. *See* California Natural Diversity Database.

CNPS. *See* California Native Plant Society.

Environmental Laboratory. 1987. US Army Corps of Engineers Wetlands Delineation Manual. (Technical Report Y-87-1.) US Army Corps of Engineers Waterways Experiment Station. Vicksburg, MS.

Placer County. 2006 (February). *Pleasant Grove and Curry Creek Ecosystem Restoration Plan*. Auburn, CA. Prepared for Placer County Planning Department, with funding from California Bay-Delta Program. Prepared by Foothill Associates, Sacramento, CA.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. *A Manual of California Vegetation*. Second edition. California Native Plant Society Press, Sacramento, California, USA.

Spencer, W.D., P. Beier, K. Penrod, K. Winters, C. Paulman, H. Rustigian-Romsos, J. Strittholt, M. Parisi, and A. Pettler. 2010. *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California*. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18366. Accessed September 11, 2021.

State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Available: https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html. Accessed January 4, 2022.

SWRCB. *See* State Water Resources Control Board.

USACE. *See* US Army Corps of Engineers.

US Army Corps of Engineers. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0).* Available: https://usace.contentdm.oclc.org/utils/getfile/collection/p266001coll1/id/7627. Accessed January 4, 2022.

Wildlands. 2005 (September). *Orchard Creek Conservation Bank Long-Term Maintenance Plan*. Sacramento, CA.

Section 3.8 Cultural Resources

Ascent Environmental, Inc. 2022. *Cultural Resources Assessment Report for the Roseville Industrial Park Project*. Prepared for Panattoni Development Company.

City of Roseville. 2020 (August). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

Gularte & Associates. 2021 (May 5). *Preliminary Geotechnical Report, Roseville 183, 6382 Phillip Road, APN 017-101-008-000, Roseville, CA*. Prepared for Panattoni Development Company. Rocklin, CA.

Meyer, Jack, and Jeffrey S. Rosenthal. 2008 (April). *A Geoarchaeological Overview and Assessment of Caltrans District 3*. Prepared for the California Department of Transportation.

Section 3.9 Hazardous Materials, Wildfire, and Hazards

Abatzoglou, J.T. and A.P. Williams. 2016 (October 18). Impact of anthropogenic climate change on wildfire across western US forests. *Proceedings of the National Academy of Sciences* 113(42):11770-11775.

ATC Group Services LLC. 2021a (March 30). *Phase I Environmental Site Assessment of 6382 Phillip Road Roseville, California 95747*. Prepared for Panattoni Development Company, Inc. Modesto, CA.

———. 2021b (April 29). *Limited Phase II Site Investigation 6382 Phillip Road Roseville, California 95747*. Prepared for Panattoni Development Company, Inc. Modesto, CA.

ATC. *See* ATC Group Services LLC.

Balch, J. K., B. A. Bradley, J. T. Abatzoglou, R. C. Nagy, E. J. Fusco, and A. L. Mahood. 2017 (March 14). Human-started wildfires expand the fire nice across the United States. *Proceedings of the National Academy of Sciences* 114(11):2946-2951.

CAL FIRE. *See* California Department of Forestry and Fire Protection.

California Board of Forestry and Fire Protection and California Department of Forestry and Fire Protection. 2019 (January 22). *2019 Strategic Fire Plan for California*.

California Department of Forestry and Fire Protection. 2021. *California Fire Hazard Severity Zone Viewer*. Available: https://gis.data.ca.gov/datasets/789d5286736248f69c4515c04f58f414. Accessed August 9, 2021.

California Governor's Office of Emergency Services. 2017 (October). *State of California Emergency Plan*. Available: https://www.caloes.ca.gov/PlanningPreparednessSite/Documents/California_State_Emergency_Plan_2017.pdf. Accessed August 2021.

City of Roseville. 2011 (June). *City of Roseville Emergency Operations Plan*. Roseville, CA. https://www.roseville.ca.us/government/departments/fire_department/emergency_preparedness/city_readiness. Accessed August 2021.

———. 2016 (September). *City of Roseville 2016 Multi-Hazard Mitigation Plan*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/fire_department/emergency_preparedness/city_readiness. Accessed August 2021.

_____. 2018 (June). Location of Roseville Fire Stations. Available: https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Fire%20Dept/Fire%20Station%20Locations/Fire_Station_Districts_2018.pdf. Accessed August 2021.

———. 2020 (August). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

Schoennagel, T., J.K. Balch, H. Brenkert-Smith, P. E. Dennison, B.J. Harvey, M.A. Krawchuck, N. Mietkiewicz, P. Morgan, M. A. Moritz, R. Rasker, M.G. Turner, and C. Whitlock. 2017 (May 2). Adapt to more wildfire in western North American forests as climate changes. *Proceedings of the National Academy of Sciences* 114(18):4582-4590.

Westerling, A.L., H.G. Hidalgo, D.R. Cayan, and T.W. Swetnam. 2006 (August 18). Warming and earlier spring increase western US forest wildfire activity. *Science* 313(5789):940-943.

Section 3.10 Public Services

Baquera, Rob. Public Information Officer. Roseville Police Department, Roseville, CA. October 20, 2021—email to Shelby Maples of the City of Roseville Development Services – Planning regarding the need for police services and facilities for the Roseville Industrial Park Project.

California Department of Education. 2021. Enrollment by Grade. Roseville City School District, Roseville Joint Union High School District, Eureka Union School District, Dry Creek Joint Elementary School District, and Center Joint Unified School District. Available: https://dq.cde.ca.gov/dataquest/. Accessed September 2021.

California Department of Finance. 2021 (May). *E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2020 and 2021*. Sacramento, CA.

City of Roseville. 2020a (August). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

———. 2020b (August). *City of Roseville 2035 General Plan Update Final Environmental Impact Report*. Certified August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed September 2021.

———. 2021a (June 16). Annual Budget Fiscal Year 2021-22, Section III: Department Operating Budgets. Available: https://www.roseville.ca.us/government/departments/finance/budget. Accessed October 2021.

———. 2021b (July). Roseville Parks, Trails & Bikeways Map. Available: https://www.roseville.ca.us/government/departments/public_works/biking_walking/parks_trails_bikeways_map. Accessed September 2021.

City of Roseville Police Department. 2020. *City of Roseville Police Department 2020 Annual Summary*. Available: https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Police%20Department/Police_AnnualSummary_2020.pdf. Accessed September 2021.

Rizzi, Jason. Fire Division Chief. Roseville Fire Department, Roseville, CA. October 19, 2021—email from Shelby Maples of the City of Roseville Development Services – Planning regarding her conversation with Chief Rizzi about the need for fire facilities for the Roseville Industrial Park Project.

Roseville Fire Department. 2021. Fire Operations. Available: https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8918422. Accessed September 2021.

———. 2020 (February). *Final Standards of Cover*. Roseville, CA. Prepared by Fitch & Associates, LLC, Platte City, MO.

Section 3.11 Utilities and Service Systems

California Department of Water Resources. 2022. Sustainable Groundwater Management Act (SGMA). Available: https://water.ca.gov/Programs/Groundwater-Management/SGMA-Groundwater-Management. Accessed on May 5, 2022.

City of Roseville. 2004 (January). *Final Environmental Impact Report for the West Roseville Specific Plan and Sphere of Influence Amendment*. State Clearinghouse No. 2002082057. Roseville, CA. Prepared by EIP. Available: https://www.roseville.ca.us/government/departments/development_services/planning/specific_plans_planning_areas/west_roseville_specific_plan. Accessed August 2022.

———. 2017 (February). *CEQA-Plus Initial Study/Mitigated Negative Declaration for the City of Roseville Pleasant Grove Wastewater Treatment Plant Expansion and Energy Recovery Project (SCH # 2016122040)*. Available: https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8774505. Accessed May 4, 2022.

———. 2020a (August). *City of Roseville General Plan 2035. Public Facilities Element.* Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed May 4, 2022.

———. 2020b (August 5). *2035 General Plan Update Final Environmental Impact Report.* Available: https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Planning/General%20Plan/Final%20General%20Plan%20EIR/City%20of%20Roseville%20EIR.pdf. Accessed April 21, 2022.

———. 2021 (June). *City of Roseville 2020 Urban Water Management Plan.* Available: https://www.roseville.ca.us/government/departments/environmental_utilities/at_your_service/water_supply/urban_water_management_plan. Accessed May 4, 2022. Prepared by Water Works Engineers, LLC. Roseville, CA.

———. 2022 (May). *Roseville Industrial Park Project Water Supply Assessment.* Prepared by West Yost. Roseville, CA.

DWR. *See* California Department of Water Resources.

Panattoni Development Company, Inc. 2022a (March 1). *Potable Water Master Plan.* Prepared by Laugenour and Meikle. Woodland, CA.

———. 2022b (January 5). *Roseville Industrial Park Recycled Water Master Plan.* Prepared by Laugenour and Meikle. Woodland, CA.

———. 2022c (March 7). *Roseville Industrial Park Wastewater Master Plan.* Prepared by Laugenour and Meikle. Woodland, CA.

———. 2022d (March 7). *Roseville Industrial Park Specific Plan Area Water Conservation Plan.* Prepared by Laugenour and Meikle. Woodland, CA.

RD1001 GSA, Sacramento Groundwater Authority GSA, South Sutter Water District GSA, Sutter County GSA, and West Placer County GSA. 2021 (December). *North American Subbasin Groundwater Sustainability Plan.* Available: https://nasbgroundwater.org/gsp/. Accessed May 5, 2022.

Western Placer Management Authority. 2021 (October). *Draft Renewable Placer: Waste Action Plan Environmental Impact Report*. Available: https://renewableplacer.com/wp-content/uploads/2021/10/Waste-Action-Plan_Public-Draft-EIR_10_2021-1.pdf. Accessed May 2022.

WPMA. *See* Western Placer Management Authority.

Section 3.12 Hydrology and Water Quality

California Department of Water Resources. 2006. Sacramento Valley Groundwater Basin, North American Subbasin. California's Groundwater Bulletin 118. Available: https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Groundwater-Management/Bulletin-118/Files/2003-Basin-Descriptions/5_021_64_NorthAmericanSubbasin.pdf. Accessed October 30, 2019.

———. 2021. Central Valley Flood Protection Plan. Available: https://water.ca.gov/Programs/Flood-Management/Flood-Planning-and-Studies/Central-Valley-Flood-Protection-Plan. Accessed September 2021.

———. 2022. Sustainable Groundwater Management Act (SGMA). Available: https://water.ca.gov/programs/groundwater-management/sgma-groundwater-management. Accessed May 5, 2022.

Central Valley Regional Water Quality Control Board. 2018. The Water Quality Control Plan (Basin Plan) for the Sacramento and San Joaquin River Basins. Available: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/#basinplans. Accessed October 29, 2019.

Central Valley RWQCB. *See* Central Valley Regional Water Quality Control Board.

City of Roseville. 2004 (February). Stormwater Management Program. Prepared by: Kennedy/Jenks Consultants. Available: https://www.waterboards.ca.gov/water_issues/programs/stormwater/swmp/roseville_swmp.pdf. Accessed October 21, 2019.

———. 2011. *Stormwater Quality BMP Guidance Manual for Construction*. Available: https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Engineering/Design%20and%20Construction%20Standards/Stormwater%20Quality%20BMP%20Guidance%20Manual%20for%20Construction.pdf Accessed May 2022.

———. 2020a (August). *City of Roseville General Plan 2035.* Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

———. 2020b (August 5). *City of Roseville General Plan 2035 Final Environmental Impact Report*. Roseville, CA. Certified August 5, 2020. Available: https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_7964838/File/Government/Departments/Development%20Services/Planning/General%20Plan/Final%20General%20Plan%20EIR/City%20of%20Roseville%20EIR.pdf. Accessed September 2021.

———. 2022 (May). *Roseville Industrial Park Project Water Supply Assessment.* Prepared by West Yost. Roseville, CA.

DWR. *See* California Department of Water Resources.

Kemen, Stefanie. Division manager. City of Roseville, Public Works – Engineering, Roseville, CA. January 19, 2023—email to Shelby Maples of the City of Roseville, Development Service – Planning, regarding the Pleasant Grove Retention Basin Project.

Laugenour and Meikle. 2023 (January 23). *Preliminary Drainage Study for Roseville Industrial Park Project, Phillip Road, Roseville, California (Planning Application 21-0193)*. Prepared for the City of Roseville.

NRCS. *See* Natural Resources Conservation Service.

PCFCWCD. *See* Placer County Flood Control and Water Conservation District.

Placer County. 2016 (April). *West Placer Storm Water Quality Design Manual*. Revised May 2018. Available: https://www.placer.ca.gov/DocumentCenter/View/1610/West-Placer-Storm-Water-Quality-Design-Manual-PDF. Accessed May 2022.

Placer County Flood Control and Water Conservation District. 1993. Auburn Ravine, Coon, and Pleasant Grove Creeks Flood Mitigation. Prepared by: CH2MHill. Available https://www.placer.ca.gov/DocumentCenter/View/1253/Cross-Canal-Watershed-Flood-Control-Plan-Volume1-PDF. Accessed September 2021.

RD 1001, Sacramento Groundwater Authority GSA, South Sutter Water District GSA, Sutter County GSA, and West Placer County GSA. 2021 (September). *North American Subbasin Groundwater Sustainability Plan Public Draft*. Available: https://portal.nasbgroundwater.org/documents. Accessed September 2021.

State Water Resources Control Board. 2021 (June 9). *2018 California Integrated Report (Clean Water Act Section 303(d) List and 305(b) Report)*. Available: https://www.waterboards.ca.gov/water_issues/programs/water_quality_assessment/2018_integrated_report.html. Accessed September 14, 2021.

SWRCB. *See* State Water Resources Control Board.

Section 3.13 Aesthetics

Caltrans. *See* California Department of Transportation.

City of Roseville. 1996 (July 26). Zoning Ordinance #3041, reflects amendments through April 6, 2016. City of Roseville, Planning Division. Roseville, CA.

———. 2004 (February 4). *West Roseville Specific Plan*. Prepared by EIP. Roseville, CA.

———. 2008 (March 19). *Community Design Guidelines for the City of Roseville*. Adopted December 6, 1995.

———. 2016. *Amoruso Ranch Specific Plan*. Adopted June 15, 2016; amended March 18, 2020. Available: https://www.roseville.ca.us/government/departments/development_services/planning/specific_plans_planning_areas/amoruso_ranch_specific_plan. Accessed January 20, 2022.

———. 2020 (August 5). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

———. 2021 (August). *Creekview Specific Plan*. Roseville, CA.

California Department of Transportation. 2019. *List of eligible and officially designated State Scenic Highways*. Available: https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways. Accessed January 20, 2022.

Section 3.14 Energy

AFDC. *See* Alternative Fuels Data Center.

Alternative Fuels Data Center. 2022. Alternative Fueling Station Counts by State. Available: https://afdc.energy.gov/stations/#/analyze?region=US-CA. Accessed January 25, 2022.

California Air Resources Board. 2014 (May). *First Update to the Climate Change Scoping Plan.* Available: https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_plan.pdf. Accessed January 25, 2022.

———. 2016. *California's Advanced Clean Cars Program.* Available: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program. Accessed January 25, 2022.

———. 2017 (November). *California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target*. Available: https://www.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf. Accessed January 24, 2022.

California Energy Commission. 2003 (August). *Reducing California's Petroleum Dependence. Joint Agency Report by California Energy Commission and California Air Resources Board*. Available: https://www.arb.ca.gov/fuels/carefinery/ab2076final.pdf. Accessed January 25, 2022.

———. 2017. Renewable Energy – Overview. Available: https://www.energy.ca.gov/programs-and-topics/topics/renewable-energy. Accessed January 25, 2022.

———. 2018 (March). 2019 Building Energy Efficiency Standards Frequently Asked Questions. Available: https://www.energy.ca.gov/sites/default/files/2020-03/Title_24_2019_Building_Standards_FAQ_ada.pdf. Accessed January 25, 2022.

———. 2019. *2019 California Energy Efficiency Action Plan*. Available: https://www.energy.ca.gov/filebrowser/download/1900. Accessed January 25, 2022.

———. 2020a (March). *Final 2020 Integrated Energy Policy Report Update*. Available: https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2020-integrated-energy-policy-report-update. Accessed January 25, 2022.

———. 2020b California Energy Commission – Tracking Progress Available: https://www.energy.ca.gov/sites/default/files/2019-12/renewable_ada.pdf. Accessed January 25, 2022.

CARB. *See* California Air Resources Board.

CEC. *See* California Energy Commission.

City of Roseville. 2010 (October). *City of Roseville Communitywide Sustainability Action Plan*. Roseville, CA.

———. 2020. *City of Roseville General Plan 2035, IV. Air Quality and Climate Change Element*. Roseville, CA.

EIA. *See* US Energy Information Administration.

Roseville Electric. 2020. *2020 Power Content Label*. Available: https://p1cdn4static.civiclive.com/UserFiles/Servers/Server_7964838/Image/Electric/PCL/FINAL%202020%20Roseville%20Power%20Content%20Label.png. Accessed January 25, 2022.

US Energy Information Administration. 2017. Annual Energy Outlook 2012 with Projections to 2050. Available: http://large.stanford.edu/courses/2017/ph241/grace1/docs/0383-2017.pdf. Accessed January 25, 2022.

US Department of Energy. 2016 (June). *Monthly Energy Review.* Available: http://www.eia.gov/totalenergy/data/monthly. Accessed January 25, 2022.

Section 3.15 Tribal Cultural Resources

Ascent Environmental, Inc. 2022. *Cultural Resources Assessment Report for the Roseville Industrial Park Project*. Prepared for Panattoni Development Company.

City of Roseville. 2020 (August). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

Gularte & Associates. 2021 (May 5). *Preliminary Geotechnical Report, Roseville 183, 6382 Phillip Road, APN 017-101-008-000, Roseville, CA*. Prepared for Panattoni Development Company. Rocklin, CA.

Meyer, Jack, and Jeffrey S. Rosenthal. 2008 (April). A Geoarchaeological Overview and Assessment of Caltrans District 3. Prepared for the California Department of Transportation.

Chapter 4 Cumulative Impacts

City of Roseville. 2008 (March 19). *Community Design Guidelines for the City of Roseville*. Adopted December 6, 1995.

———. 2020a (August). *City of Roseville General Plan 2035*. Adopted August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed August 2021.

———. 2020b (August). *City of Roseville 2035 General Plan Update Final Environmental Impact Report*. Certified August 5, 2020. Roseville, CA. Available: https://www.roseville.ca.us/government/departments/development_services/planning/general_plan_development_guidelines. Accessed September 2021.

———. 2021a (June 16). Annual Budget Fiscal Year 2021-22, Section III: Department Operating Budgets. Available: https://www.roseville.ca.us/government/departments/finance/budget. Accessed October 2021.

———. 2021b (June). *City of Roseville 2020 Urban Water Management Plan.* Available: https://www.roseville.ca.us/government/departments/environmental_utilities/at_your_service/water_supply/urban_water_management_plan. Accessed May 4, 2022. Prepared by Water Works Engineers, LLC. Roseville, CA.

———. 2022 (May). *Roseville Industrial Park Project Water Supply Assessment.* Prepared by West Yost. Roseville, CA.

Institute of Transportation Engineers. 2021 (October). *Trip Generation Manual, 11th Edition*.

ITE. *See* Institute of Transportation Engineers.

PCAPCD. *See* Placer County Air Pollution Control District.

Placer County Air Pollution Control District. 2017. *CEQA Air Quality Handbook*. Auburn, CA. Available: https://www.placer.ca.gov/1801/CEQA-Handbook. Accessed March 9, 2022.

Rizzi, Jason. Fire Division Chief. Roseville Fire Department, Roseville, CA. October 19, 2021—email from Shelby Maples of the City of Roseville Development Services – Planning regarding her conversation with Chief Rizzi about the need for fire facilities for the Roseville Industrial Park Project.

Western Placer Management Authority. 2021 (October). *Draft Renewable Placer: Waste Action Plan Environmental Impact Report*. Available: https://renewableplacer.com/wp-content/uploads/2021/10/Waste-Action-Plan_Public-Draft-EIR_10_2021-1.pdf. Accessed May 2022.

WPMA. *See* Western Placer Management Authority.

Chapter 5 Other CEQA Sections

City of Roseville. 2008 (March 19). *Community Design Guidelines for the City of Roseville*. Adopted December 6, 1995.

Employment Development Department. 2021 (June). Placer County Profile. Employment by Industry (Not Seasonally Adjusted). Available: https://www.labormarketinfo.edd.ca.gov/cgi/databrowsing/localAreaProfileQSResults.asp?selectedarea=Placer+County&selectedindex=31&menuChoice=localAreaPro&state=true&geogArea=0604000061&countyName=. Accessed July 2021.

PCAPCD. *See* Placer County Air Pollution Control District.

Placer County Air Pollution Control District. 2017. *CEQA Air Quality Handbook*. Auburn, CA. Available: https://www.placer.ca.gov/1801/CEQA-Handbook. Accessed March 9, 2022.

US Census. 2019. *American Community Survey 1-Year Estimates: 2019, Roseville, CA*. Available: https://data.census.gov/cedsci/table?g=1600000US0662938&tid=ACSDP1Y2019.DP05. Accessed August 17, 2021.

Chapter 6 Alternatives

Placer County. 2019 (December 10). *Placer Ranch Specific Plan*. Adopted December 10, 2019 by the Placer County Board of Supervisors. Auburn, CA. Available: https://www.placer.ca.gov/DocumentCenter/View/40770/Placer-Ranch-Specific-Plan-PDF?bidId=. Accessed June 2022.

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