

DRAFT
Environmental Impact Report
SDG Commerce 220 Distribution Center Project
City of American Canyon, Napa County, California
State Clearinghouse Number 2023100842

Prepared for:
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503
707.647.4337

Contact: William He, Senior Planner

Prepared by:
FirstCarbon Solutions
2999 Oak Road, Suite 250
Walnut Creek, CA 94597
925.357.2562

Contact: Mary Bean, Project Director
Janna Waligorski, Senior Project Manager

Date: June 5, 2024

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Contents

Acronyms and Abbreviations	ix
Executive Summary	ES-1
Purpose.....	ES-1
Project Summary	ES-1
Significant Unavoidable Adverse Impacts	ES-1
Summary of Project Alternatives.....	ES-2
Areas of Controversy	ES-2
Public Review of the Draft EIR	ES-3
Executive Summary Matrix.....	ES-4
Chapter 1: Introduction.....	1-1
1.1 - Overview of the CEQA Process	1-1
1.2 - Scope of the Draft EIR	1-2
1.3 - Organization of the EIR.....	1-4
1.4 - Documents Incorporated by Reference.....	1-6
1.5 - Documents Prepared for the Proposed Project	1-6
1.6 - Review of the Draft EIR.....	1-6
Chapter 2: Project Description	2-1
2.1 - Project Location and Setting.....	2-1
2.2 - Project History	2-9
2.3 - Project Characteristics	2-10
2.4 - Project Objectives.....	2-22
2.5 - Intended Uses of this Draft EIR.....	2-22
Chapter 3: Environmental Impact Analysis	3-1
Organization of Issue Areas	3-1
Issues Addressed in this EIR	3-1
Level of Significance	3-1
Impact Analysis and Mitigation Measure Format	3-1
3.1 - Aesthetics, Light, and Glare	3.1-1
3.2 - Air Quality.....	3.2-1
3.3 - Biological Resources	3.3-1
3.4 - Cultural Resources and Tribal Cultural Resources	3.4-1
3.5 - Energy	3.5-1
3.6 - Geology, Soils, and Seismicity.....	3.6-1
3.7 - Greenhouse Gas Emissions	3.7-1
3.8 - Hazards and Hazardous Materials	3.8-1
3.9 - Hydrology and Water Quality	3.9-1
3.10 - Land Use	3.10-1
3.11 - Noise.....	3.11-1
3.12 - Public Services	3.12-1
3.13 - Transportation	3.13-1
3.14 - Utilities and Service Systems	3.14-1
Chapter 4: Effects Found not to be Significant	4-1
4.1 - Introduction.....	4-1
4.2 - Environmental Effects Found not to be Significant	4-1

Chapter 5: Other CEQA Considerations..... 5-1
5.1 - Significant Unavoidable Impacts..... 5-1
5.2 - Growth-inducing Impacts 5-1
5.3 - Mandatory Findings of Significance 5-3

Chapter 6: Alternatives to the Proposed Project..... 6-1
6.1 - Introduction 6-1
6.2 - Project Objectives 6-2
6.3 - Alternative 1—No Project Alternative 6-3
6.4 - Alternative 2—Reduced Density Alternative 6-3
6.5 - Environmentally Superior Alternative..... 6-7
6.6 - Alternatives Rejected From Further Consideration 6-9

Chapter 7: Persons and Organizations Consulted/List of Preparers 7-1
7.1 - Persons and Organizations Consulted..... 7-1
7.2 - List of Preparers 7-2

List of Appendices

Appendix A: Notice of Preparation/Comments

Appendix B: Air Quality and Greenhouse Gas Emissions Supporting Information

Appendix C: Biological Resources Supporting Information

- C.1 - Biological Resources Assessment
- C.2 - Commerce 217 Documents
- C.3 - Commerce 220 Documents

Appendix D: Cultural Resources Supporting Information

- D.1 - Native American Heritage Commission and Tribal Correspondence
- D.2 - Northwest Information Center

Appendix E: Geotechnical Report

Appendix F: Phase I Environmental Site Assessment

Appendix G: Hydrology Report

Appendix H: Noise Supporting Information

Appendix I: Transportation Supporting Information

- I.1 - Transportation Memorandum
- I.2 - Vehicle Miles Traveled Analysis

List of Tables

Table ES-1: Executive Summary Matrix..... ES-5
Table 1-1: NOP Comment Letter Summary..... 1-2
Table 2-1: SDG Commerce 220 Project Summary 2-10
Table 3-1: Cumulative Projects..... 3-4
Table 3.2-1: Description of Criteria Pollutants of National and California Concern..... 3.2-2

Table 3.2-2: Federal and State Air Quality Standards in the SFBAAB 3.2-6

Table 3.2-3: Attainment Status 3.2-8

Table 3.2-4: Air Quality Monitoring Summary..... 3.2-8

Table 3.2-5: Construction Schedule 3.2-28

Table 3.2-6: Project Construction Equipment Assumptions 3.2-28

Table 3.2-7: Construction Off-site Trips 3.2-29

Table 3.2-8: Vehicle Trip Generation During Operations (Daily)..... 3.2-30

Table 3.2-9: Vehicle Type Classification 3.2-30

Table 3.2-10: Summary of Construction Diesel Emission Source Configurations..... 3.2-33

Table 3.2-11: BAAQMD Regional (Mass Emissions) Air Pollutant Significance Thresholds 3.2-38

Table 3.2-12: BAAQMD Odor Screening-level Distances Thresholds..... 3.2-42

Table 3.2-13: Consistency With 2017 Clean Air Plan Control Measures 3.2-44

Table 3.2-14: Unmitigated Construction Emissions 3.2-52

Table 3.2-15: Unmitigated Operational Emissions 3.2-53

Table 3.2-16: Summary of Construction Health Risks at the Maximum Impacted Receptor 3.2-56

Table 3.2-17: Summary of Construction Health Risks at the Maximum Impacted Receptor 3.2-57

Table 3.4-1: Cultural Resources within 0.5-mile Radius of the Project Site..... 3.1-15

Table 3.4-2: Previous Investigations within 0.5-mile Radius of the Project Site..... 3.1-15

Table 3.4-3: Tribal Consultation 3.1-17

Table 3.5-1: Estimated Annual Project Energy Consumption in 2025 3.5-13

Table 3.6-1: Fault Summary 3.6-3

Table 3.7-1: BAAQMD Thresholds of Significance for Greenhouse Gases..... 3.7-18

Table 3.7-2: Proposed Project Construction GHG Emissions..... 3.7-25

Table 3.7-3: Operational Greenhouse Gas Emissions..... 3.7-26

Table 3.7-4: Operational Greenhouse Gas Emission Beyond Buildout Year (Compliance
with Applicable Regulations) 3.7-27

Table 3.8-1: Off-site Points of Interest 3.8-4

Table 3.9-1: American Canyon Meteorological Summary 3.9-1

Table 3.10-1: Surrounding Land Use Designations 3.10-2

Table 3.10-2: General Plan Consistency Analysis..... 3.10-8

Table 3.10-3: Development Standards Consistency 3.10-45

Table 3.11-1: Sound Terminology 3.11-3

Table 3.11-2: Typical Construction Equipment Maximum Noise Levels..... 3.11-5

Table 3.11-3: Vibration Levels of Construction Equipment 3.11-6

Table 3.11-4: Federal Transit Administration Construction Vibration Impact Criteria..... 3.11-9

Table 3.13-1: Bicycle Facility Summary 3.13-3

Table 3.13-2: Trip Generation Summary 3.13-12

Table 3.14-1: 2020 Sources of Water Supply 3.14-1

Table 3.14-2: Potrero Hills Landfill Summary 3.14-6

Table 3.14-3: SDG Commerce 220 Estimated Water Consumption 3.14-17

Table 3.14-4: Normal Year Supply and Demand Comparison (AFY)..... 3.14-17

Table 3.14-5: Single Dry Year Supply and Demand Comparison (AFY)..... 3.14-18

Table 3.14-6: Multiple Dry Year Supply and Demand Comparison (AFY)..... 3.14-18

Table 3.14-7: Wastewater Generation Estimate 3.14-21

Table 3.14-8: Construction Solid Waste Generation 3.14-22

Table 3.14-9: Annual Operational Solid Waste Generation 3.14-22

Table 6-1: Reduced Density Alternative Summary..... 6-4

Table 6-2: Reduced Density Alternative Trip Generation Comparison 6-6

Table 6-3: Summary of Alternatives..... 6-7

Table 6-4: Alternative Location Analysis 6-13

List of Exhibits

Exhibit 2-1: Regional Location Map 2-3

Exhibit 2-2: Local Vicinity Map Aerial Base 2-5

Exhibit 2-3: Site Photographs..... 2-7

Exhibit 2-4a: Site Plan 2-11

Exhibit 2-5: Conceptual Illustration..... 2-15

Exhibit 2-6: Landscaping Plan..... 2-19

Exhibit 3.1-1: Conceptual Building Elevations..... 3.1-7

Exhibit 3.3-1: Soils Map..... 3.3-5

Exhibit 3.3-2: Vegetation Communities and Land Cover Types 3.3-7

Exhibit 3.3-3: CNDDDB Special-Status Species Occurrences 3.3-13

Exhibit 3.3-4: Biological Impacts 3.3-43

Exhibit 3.6-1: Earthquake Fault Zone Map..... 3.6-5

Exhibit 3.11-1: Noise Land Use Compatibility..... 3.11-11

Exhibit 3.13-1: Local Street Network 3.13-19

Exhibit 3.13-2: Existing and Proposed Bikeways 3.13-21

Exhibit 6-1: Alternative Locations..... 6-11

List of Figures

Figure 3.7-1: 2010 California Greenhouse Gas Emissions by Sector 3.7-3

THIS PAGE INTENTIONALLY LEFT BLANK

ACRONYMS AND ABBREVIATIONS

°C	degrees Celsius (Centigrade)
°F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ABAG	Association of Bay Area Governments
ACF	Advanced Clean Fleet
ACHP	Advisory Council on Historic Preservation
ACM	asbestos-containing material
ACP	Alternative Compliance Plan
ACT	American Canyon Transit
ACTM	Airborne Toxics Control Measure
ADA	Americans with Disabilities Act
ADMRT	Air Dispersion Modeling and Risk Tool
ADT	Average Daily Traffic
AFY	acre-feet per year
AIA	Airport Influence Area
AICUZ	Air Installation Compatibility Use Zone
AJD	Approved Jurisdictional Determination
ALUC	Airport Land Use Commission
APCD	Air Pollution Control District
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measures
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BART	Bay Area Rapid Transit
BASMAA	Bay Area Stormwater Management Agencies Association
BAU	business-as-usual
BCDC	Bay Conservation and Development Commission
BCF	billion cubic feet

Acronyms and Abbreviations

BCF/year	billion cubic feet per year
BERD	Built Environment Resource Directory
BMP	Best Management Practice
BRA	Biological Resources Assessment
BSMAA	Bay Area Stormwater Management Agencies Association
BTU	British thermal units
BVOC	biogenic volatile organic compound
C&D	Construction and Demolition
C ² ES	Center for Climate and Energy Solution
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL FIRE	California Department of Forestry and Fire Protection
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Occupational Health and Safety Administration
CalDAG	California Disabled Accessibility Guidebook
CalEEMod	California Emissions Estimator Model
CALGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CASQA	California Stormwater Quality Association
CBC	California Building Standards Code
CBSC	California Building Standards Commission
CCA	community choice aggregations
CCAA	California Clean Air Act
CCCC	California Climate Change Center
CCR	California Code of Regulations
CCTS	Central California Taxonomic System
CDF	California Department of Finance
CDFW	California Department of Fish and Wildlife
CEA	California Earthquake Authority
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations

CH ₄	methane
CHL	California Historical Landmarks
CHMIRS	California Hazardous Material Incident Report System
CHRIS	California Historical Resources Information System
CMP	Congestion Management Plan
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CNRA	California Natural Resources Agency
CO	carbon monoxide
CO ₂ e	carbon dioxide equivalent
COC	constituents of concern
CPF	cancer potency factor
CPHI	California Points of Historical Interest
CPUC	California Public Utilities Commission
CRA	Cultural Resources Assessment
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dba	A-weighted decibel
DBH	diameter at breast height
DMM	Demand Management Measure
DOE	United States Department of Energy
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
du	dwelling unit
du/acre	dwelling unit per acre
DWR	California Department of Water Resources
EIA	Energy Information Administration
EIR	Environmental Impact Report
EISA	Energy Independence and Security Act of 2007
EMFAC	Emission Factors mobile source emissions model
EPA	United States Environmental Protection Agency
ERF	Emergency Response Framework
ESPS	Engineering Standards Plans and Specifications
EV	electric vehicle

Acronyms and Abbreviations

EVSE	electric vehicle supply equipment
FAA	Federal Aviation Administration
FAR	floor area ratio
FCS	FirstCarbon Solutions
FCWCD	Flood Control and Water Conservation District
FEMA	Federal Emergency Management Agency
FGC	Fish and Game Code
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
GHG	greenhouse gas
gpm	gallons per minute
GPS	Global Positioning System
GWh	gigawatt-hours
GWh/y	gigawatt-hours per year
GWP	global warming potential
HAP	Hazardous Air Pollutants
HARP	Hotspots Analysis and Reporting Program
HCM	Highway Capacity Manual
HCP	Habitat Conservation Plan
HFC	hydrofluorocarbon
HHD	heavy heavy-duty
HHDT	heavy heavy-duty truck
HI	hazard index
HOV/HOT	High Occupancy Vehicle/High Occupancy Toll
hp	horsepower
HRA	Health Risk Assessment
HRI	California Historic Resources Inventory
HSWA	Hazardous and Solid Waste Act
HVAC	heating, ventilation, and air conditioning
IAQ	Indoor Air Quality
IPaC	Information for Planning and Consultation
IPCC	United Nations Intergovernmental Panel on Climate Change
ISO	Insurance Services Office
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
ITP	Incidental Take Permit
kW	kilowatts
LCFS	Low Carbon Fuel Standard

LDA	light-duty automobile
L _{dn}	day/night average sound level
LED	light-emitting diode
L _{eq}	equivalent sound level
LEV	Low Emission Vehicle
LID	Low Impact Development
LOS	Level of Service
LPG	liquified petroleum gas
LSE	load-serving entities
LSI	Large Spark Ignition
LTS	Level of Traffic Stress
M&A	Monk & Associates
MBTA	Migratory Bird Treaty Act
MCE	Marin Clean Energy
MCV	Manual of California Vegetation
MDV	medium-duty vehicle
MEIR	Maximally Exposed Individual Resident
MEIW	Maximally Exposed Individual Worker
mgd	million gallons per day
MHDT	medium heavy-duty truck
MM	Mitigation Measure
MMBTU	Million Metric British Thermal Unit
MMRP	Mitigation Monitoring and Reporting Program
mph	miles per hour
MPO	Metropolitan Planning Organization
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
MW	megawatt
MXD	mixed-use development
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCTPA	Napa County Transportation and Planning Agency
NEHRP	National Earthquake Hazards Reduction Program
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFIP	National Flood Insurance Program
NFPA	National Fire Protection Association

Acronyms and Abbreviations

NHM	Natural History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO ₂	nitrogen dioxide
NOAA Fisheries	National Marine Fisheries Service
NOC	Notice of Completion
NOI	Notice of Intent
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NVTA	Napa Valley Transportation Authority
NVWMA	Napa-Vallejo Waste Management Authority
NWIC	Northwest Information Center
O ₃	ozone
OAL	Office of Administrative Law
OEHHA	California Office of Environmental Health Hazard Assessment
OHWM	ordinary high water mark
ONAC	Federal Office of Noise Abatement and Control
OPR	California Governor’s Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PCB	polychlorinated biphenyl
pCi/L	picocuries per liter
PERP	Portable Equipment Registration Program
PFC	perfluorocarbon
PG&E	Pacific Gas and Electric Company
Phase I ESA	Phase I Environmental Site Assessment
PJD	Preliminary Jurisdictional Determination
PM ₁₀	particulate matter, including dust, 10 micrometers or less in diameter
PM _{2.5}	particulate matter, including dust, 2.5 micrometers or less in diameter
PM	particulate matter
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resources Code
PVC	polyvinyl chloride
Recology	Integrated Resource Recovery Company

RecycleSmart	Central Contra Costa County Solid Waste Authority
REL	Reference Exposure Level
RMP	Risk Management Plan
rms	root mean square
ROG	reactive organic gases
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
SAFE	Safer Affordable Fuel-Efficient
SF ₆	sulfur hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFPUC	San Francisco Public Utilities Commission
SIP	State Implementation Plan
SNAP	Significant New Alternatives Policy
SO ₂	sulfur dioxide
SOI	Sphere of Influence
SORE	Small Off-Road Engine
South Coast AQMD	South Coast Air Quality Management District
SR	State Route
State Water Board	California State Water Resources Control Board
SWIS	Solid Waste Information System
SWMP	Storm Water Management Plan
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
TAC	toxic air contaminant
TCM	transportation control measures
TDM	Transportation Demand Management
TDS	total dissolved solids
TDV	Time Dependent Valuation
TEA-21	Transportation Equity Act for the 21 st Century
Tg	teragram
therms/y	therms per year
TIA	Traffic Impact Analysis
TIS	Traffic Impact Study
TISG	Transportation Impact Study Guide
TMA	Transportation Management Association
TMDL	Total Maximum Daily Load
TNC	Transportation Network Company
TOD	Transit Oriented Development

Acronyms and Abbreviations

TRU	Transport Refrigeration Unit
UBC	Uniform Building Code
UCERF3	Third Uniform California Earthquake Rupture Forecast
USACE	United States Army Corps of Engineers
USC	United States Code
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
UWMP	Urban Water Management Plan
V/C	volume to capacity ratio
Valley Air District	San Joaquin Valley Air Pollution Control District
VDECS	Verified Diesel Emission Control Strategies
VMT	Vehicle Miles Traveled
VOC	volatile organic compounds
WAF	worker adjustment factor
WATERS	Watershed Assessment, Tracking, and Environmental Results System
WDR	Waste Discharge Requirements
WQMP	Water Quality Management Plan
WRF	Water Reclamation Facility
WSA	Water Supply Assessment
WSS	Web Soil Survey
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant
ZEV	Zero-Emission Vehicle

EXECUTIVE SUMMARY

Purpose

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the SDG Commerce 220 Project (State Clearinghouse No. 2023100842). This document is prepared in conformance with CEQA (Public Resources Code [PRC] § 21000, *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et seq.*).

The purpose of this Draft EIR is to inform decision-makers, representatives of affected and responsible agencies, the public, and other interested parties of the potential environmental effects that may result from implementation of the proposed project. This Draft EIR describes potential impacts relating to a wide variety of environmental issues and methods by which these impacts can be mitigated or avoided.

Project Summary

Project Location

The project site is located at 1055 Commerce Court in the City of American Canyon, in Napa County, California. The project site consists of Assessor's Parcel Number (APN) 058-030-069 (10.17 acres) plus small additional improvement areas (consisting primarily of parking lot improvements and connections to adjoining land uses) for a total of 10.45 acres. The rectangular project site is bounded by a eucalyptus grove and North Slough (west), a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 currently under construction (north), Commerce Court beyond which is a paintball recreation area (east), and a wine distribution warehouse known as SDG Commerce 330 (south). The project site is located on the *Cuttings Wharf, California*, United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 4 North, Range 4 West, Section 14 (Latitude 38° 11' 22" North; Longitude 122° 16' 19" West).

Project Description

The applicant, SDG Commerce 220, LLC proposes to develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. The warehouse would provide 23 truck doors and approximately 4,400 square feet of office space. It would have perimeter concrete tilt wall panels with varying parapet heights and accent spandrel glass/metal canopy features around offices and corners of the building. The average roof height would be approximately 35 feet; portions of the building exterior walls would have various heights to provide architectural relief. The building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized.

Project Objectives

The objectives of the proposed project are to:

1. Positively contribute to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base.
2. Develop land to its highest and best use.
3. Continue the buildout of the City of American Canyon in accordance with the General Plan.
4. Meet regional demand for wine warehousing by adding to the inventory of this space.
5. Develop nonresidential uses on the project site that are compatible with the City of American Canyon's Water Reclamation Facility and the Napa County Airport.
6. Maximize the efficient use of land by developing an industrial project at the upper end of the allowable Floor Area Ratio range.
7. Complete the buildout of the SDG Commerce development.
8. Protect North Slough by employing stormwater pollution prevention measures during construction and operation.
9. Provide development fees to the American Canyon Fire Protection District to fund the development of a new fire station.

Significant Unavoidable Adverse Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Inconsistency with CEQA Guidelines Section 15064.3, subdivision (b):** The proposed project's Vehicle Miles Traveled (VMT) was evaluated in accordance with the City's adopted VMT policy. For the project's VMT impact to be less than significant, the VMT per employee would need to be reduced by at least 19 percent below current levels. However, according to the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA Handbook), a reduction in the VMT of 15 percent is generally considered the maximum feasible mitigation for suburban environments such as that of the proposed project. If this level of trip reduction could be achieved, that would mitigate most of the project's VMT impact, although not to a level that would be less than significant (19 percent); however, given the lack of transit services within an acceptable walking distance of the proposed project, achieving this level of mitigation is considered infeasible. Even with implementation of a TDM Plan as required by MM TRANS-2, the impact would remain significant and unavoidable.
- **Cumulative Transportation:** Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project's location and lack of access to high-quality transit. MM TRANS-2 would reduce project-related VMT but not to a level below significance. As such, the proposed project would also have a cumulatively considerable contribution on VMT.

Summary of Project Alternatives

Below is a summary of the alternatives to the proposed project considered in Section 5, Alternatives to the proposed project.

No Project Alternative

The project site would remain undeveloped for the foreseeable future and no development would occur.

Reduced Density Alternative

A 164,875-square-foot wine warehouse would be developed on the project site, which represents a 25 percent reduction in square footage.

Areas of Controversy

Pursuant to CEQA Guidelines Section 15123(b), a summary section must address areas of controversy known to the lead agency, including issues raised by agencies and the public, and it must also address issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

A Notice of Preparation (NOP) for the proposed project was issued on October 27, 2023. The NOP describing the original concept for the proposed project and issues to be addressed in the EIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties for a 30-day public review period extending from October 27, 2023 through November 27, 2023. The NOP identified the potential for significant impacts on the environment related to the following topical areas:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

Disagreement Among Experts

This Draft EIR contains substantial evidence to support all the conclusions presented herein. It is possible that there will be disagreement among various parties regarding these conclusions, although the City of American Canyon is not aware of any disputed conclusions at the time of this writing. Both the CEQA Guidelines and case law clearly provide standards for treating disagreement among experts. Where evidence and opinions conflict on an issue concerning the environment, and the lead agency knows of these controversies in advance, the EIR must acknowledge the controversies, summarize the conflicting opinions of the experts, and include sufficient information

to allow the public and decision-makers to make an informed judgment about the environmental consequences of the proposed project.

Potentially Controversial Issues

Below is a list of potentially controversial issues that may be raised during the public review and hearing process of this Draft EIR:

- Health effects on communities from diesel emissions
- Land Use Compatibility
- Traffic and Circulation
- Impacts on wetlands
- Climate change

It is also possible that evidence will be presented during the 45-day, statutory Draft EIR public review period that may create disagreement. Decision-makers would consider this evidence during the public hearing process.

In rendering a decision on a project where there is disagreement among experts, the decision-makers are not obligated to select the most environmentally preferable viewpoint. Decision-makers are vested with the ability to choose whatever viewpoint is preferable and need not resolve a dispute among experts. In their proceedings, decision-makers must consider comments received concerning the adequacy of the Draft EIR and address any objections raised in these comments. However, decision-makers are not obligated to follow any directives, recommendations, or suggestions presented in comments on the Draft EIR, and can certify the Final EIR without needing to resolve disagreements among experts.

Public Review of the Draft EIR

Upon completion of the Draft EIR, the City of American Canyon filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (PRC § 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the following locations:

American Canyon City Hall
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Hours: Monday-Friday: 8:00 a.m. to 5:00 p.m.
Saturday–Sunday: Closed

Active Adults Center
2185 Elliot Drive
American Canyon, CA 94503
Hours: Monday - Friday 9:00 a.m. to 2:00 p.m.
Saturday–Sunday: Closed

American Canyon Library
300 Crawford Way
Hours: Monday, Tuesday, and
Thursday–Saturday: 10:00 a.m.
to 6:00 p.m.
Wednesday: 12:00 p.m. to 8:00 p.m.
Sunday: Closed

The Draft EIR is also available for review at the following website:

<https://www.cityofamericancanyon.org/government/community-development/development-projects>

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR may be submitted electronically at this website link: <https://cityofamcan.org/SDG220>.

Hardcopy written comments on this Draft EIR should be addressed to:

SDG Commerce 220 Project
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised during the comment period will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the City of American Canyon on the proposed project, at which the certification of the Final EIR will be considered. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the proposed project.

Executive Summary Matrix

Table ES-1 below summarizes the impacts, mitigation measures, and resulting level of significance after mitigation for the relevant environmental issue areas evaluated for the proposed project. The table is intended to provide an overview; narrative discussions for the issue areas are included in the corresponding section of this EIR. Table ES-1 is included in the EIR as required by CEQA Guidelines Section 15123(b)(1).

Table ES-1: Executive Summary Matrix

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.1—Aesthetics, Light, and Glare		
Impact AES-1: The proposed project, located in a non-urbanized area, would not substantially degrade the existing visual character or the quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly-accessible vantage point.)	No mitigation is necessary.	Less than significant impact.
Impact AES-2: The proposed project may create a new source of substantial light or glare which could adversely affect day or nighttime views in the area.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.2—Air Quality		
Impact AIR-1: The proposed project could conflict with or obstruct implementation of the applicable air quality plan.	<p>MM AIR-1: Implement BAAQMD Best Management Practices to Control Dust During Construction</p> <p>The following dust control measures, as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the proposed project and implemented during construction:</p> <ul style="list-style-type: none"> • All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least two times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard. • All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. the use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 miles per hour. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. idling times shall be minimized either by shutting equipment off when not in use or reducing 	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>the maximum idling time to 5 minutes, as required by the California airborne toxics control measure (ACTM) Title 13, Section 2485 of California Code of Regulations. clear signage regarding idling restrictions shall be provided for construction workers at all access points.</p> <ul style="list-style-type: none"> All construction equipment shall be maintained and properly tuned in accordance with the manufacturer’s specifications. all equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. the construction contractor shall take corrective action within 48 hours. the BAAQMD’s and the City’s phone numbers shall also be visible to ensure compliance with applicable regulations. 	
<p>Impact AIR-2: The proposed project would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.</p>	<p>Implement MM AIR-1.</p>	<p>Less than significant impact with mitigation incorporated.</p>
<p>Impact AIR-3: The proposed project would not expose sensitive receptors to substantial pollutant concentrations.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Impact AIR-4: The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Cumulative Impact</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>
<p>Section 3.3—Biological Resources</p>		
<p>Impact BIO-1: The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.</p>	<p>MM BIO-1a: Pre-construction Surveys for Swainson’s Hawk Prior to ground disturbance that occurs during the nesting season for Swainson’s hawk (generally March 20 to July 20), a qualified Biologist shall conduct Swainson’s hawk nesting surveys within a 0.5-mile radius of the project site to determine whether nests are occupied. Occupancy shall be determined through observation of all accessible areas, including from</p>	<p>Less than significant impact with mitigation incorporated.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>public roads or other publicly accessible observation areas of Swainson’s hawk activity (e.g., foraging) on and near the project site.</p> <p>The qualified Biologist shall follow the survey protocol outlined in the California Department of Fish and Wildlife (CDFW) <i>Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley</i>, which recommends surveys according to the following survey periods:</p> <ul style="list-style-type: none"> I. January–March 20: Conduct one survey total. II. March 20–April 5: Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset. III. April 5–April 20: Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset. IV. April 21–June 10: Initiating surveys are not recommended. Monitoring of known nest sites only. V. June 10–July 30: (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset. <p>Pre-construction surveys shall be completed for at least the two survey periods immediately prior to a project’s initiation.</p> <p>MM BIO-1b: Swainson’s Hawk Avoidance and Minimization and Construction Monitoring</p> <p>Following the implementation of MM BIO-1a, if nests are located and determined to be occupied, minimization measures must be implemented, and construction monitoring conducted as follows:</p> <ol style="list-style-type: none"> 1. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson’s hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment. 2. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern. 	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>3. No tree containing an active Swainson’s hawk nest shall be removed.</p> <p>MM BIO-1c: Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found) A qualified Biologist shall conduct a habitat assessment for wintering burrowing owl, and surveys if habitat is present. The qualified Biologist shall follow the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation habitat assessment and survey methodology prior to project activities occurring during the burrowing owl wintering season from September 1 to January 31. The habitat assessment and surveys shall encompass a sufficient buffer zone to detect owls nearby that may be impacted, which shall be a minimum of 1,640 feet unless otherwise approved in writing by the CDFW. Surveys shall include four nonbreeding season surveys spread evenly throughout the nonbreeding season pursuant to the CDFW 2012 Staff Report. Time lapses between surveys or project activities shall trigger subsequent surveys, as determined by a qualified Biologist, including but not limited to a final survey within 24 hours prior to ground disturbance and before construction equipment mobilizes to the project area. The qualified Biologist shall have a minimum of 2 years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections.</p> <p>Detected burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan shall be subject to CDFW review. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a “take” avoidance, minimization, or mitigation measure; therefore, off-site habitat compensation shall be included in the eviction plan. Habitat compensation acreages shall be approved by CDFW, as the amount depends on-site-specific conditions and must be completed before project construction unless otherwise approved in writing by CDFW. Habitat compensation shall also include placement of a conservation easement and preparation and implementation of a long-term management plan prior to project construction.</p>	

MM BIO-1d: Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

1. If the proposed project requires vegetation to be removed during the nesting season (February 1 to August 31), pre-construction surveys shall be conducted no more than 7 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present within the project site and buffer area as appropriate.
2. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).
3. The qualified Biologist shall monitor the active nest during construction activities and modify the protection zone accordingly to prevent project-related nest disturbance, until the young have fledged.

MM BIO-1e: Roosting Bat Pre-construction Survey and Avoidance

A qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) within 250 feet of project construction activities (where accessible).

If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>space to prevent recolonization. Grading shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).</p> <p>MM BIO-1f: Protection of Western Pond Turtles A qualified Biologist (i.e., a Biologist with at least 2 years of experience conducting surveys for western pond turtle detections) shall submit a wildlife exclusion fencing plan to the California Department of Fish and Wildlife (CDFW) for review and approval prior to starting construction. Exclusion fencing shall be installed along the western perimeter of the project site to prevent the species from traveling from North Slough onto the project site during construction. A qualified Biologist shall survey the project site and adjacent habitat within 72 hours of the start of project activities to determine whether western pond turtle or their nests are present and guide the installation of the exclusion fence. If western pond turtles are discovered, a qualified Biologist with experience handling and relocating the species shall move the species to the nearest suitable habitat outside of the project area and exclusion fencing. If western pond turtle nests are found, CDFW shall be notified prior to starting project activities, and the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fence until eggs hatch and young turtles disperse to the adjacent North Slough. In addition, if nest(s) are located during surveys, moth balls (naphthalene) shall be sprinkled around the vicinity of the nest (no closer than 5 feet) to mask human scent and discourage predators. Grading within the nest site’s 50-foot buffer area shall be delayed until the young leave the nest as determined by a qualified Biologist. If the CDFW allows translocation of any nestling pond turtles this shall be completed by a qualified Biologist under the direction of the CDFW.</p> <p>MM BIO-1g: Protection of Overwintering Monarch Butterfly Activities such as vegetation removal, grading, or initial ground-disturbing activities shall be conducted between November 1 and July 31 (outside of the overwintering season) to the extent feasible. If such activities must be</p>	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>initiated during the overwintering season (August 1 through October 31), a pre-construction overwintering survey shall be conducted by a qualified Biologist no more than 7 days prior to vegetation removal, grading, or initial ground disturbance. The survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any colonies that could potentially be affected either directly or indirectly by project activities. If no colonies are present, then project activities can commence as scheduled. If a colony is present, project construction shall cease immediately to avoid all direct and indirect impacts and report the presence of the colony to the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and follow all recommendations provided by USFWS and CDFW.</p>	
<p>Impact BIO-2: The proposed project could have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.</p>	<p>No mitigation required.</p>	<p>Less than significant impact.</p>
<p>Impact BIO-3: The proposed project could 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.</p>	<p>Implementation of MM BIO-1a through MM BIO-1e.</p>	<p>Less than significant impact with mitigation incorporated.</p>
<p>Impact BIO-4: The proposed project could 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 wildlife nursery sites.</p>	<p>No mitigation required.</p>	<p>Less than significant.</p>
<p>Cumulative Impact</p>	<p>Implementation of MM BIO-1a through MM BIO-1g.</p>	<p>Less than significant impact with mitigation incorporated.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.4—Cultural Resources and Tribal Cultural Resources		
<p>Impact CUL-1: The proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.</p>	<p>MM CUL-1a: All construction personnel directly involved with project-related ground disturbance shall attend a “tailgate” Worker Environmental Awareness Program (WEAP) training for archaeological resources. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards for archaeology.</p> <p>MM CUL-1b: An Archaeological Monitor reporting to the qualified Archaeologist, shall be present during the clearing, grading, and trenching phases of the proposed project to check for the inadvertent discovery of archaeological resources or human remains. Over the course of the proposed project, should the Archaeologist determine that the probability of inadvertent discovery is low, they may make a recommendation to the lead agency that monitoring be reduced to regular periodic or “spot-check” monitoring, or that monitoring may cease altogether.</p> <p>MM CUL-1c: If buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the lead agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the Master Plan area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA Guidelines.</p> <p>If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be</p>	<p>Less than significant Impact with mitigation incorporated</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>identified by the monitor and recommended to the lead agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.</p> <p>No further grading shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the lead agency where they would be afforded long-term preservation to allow future scientific study.</p>	
<p>Impact CUL-2: The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</p>	<p>Implementation of MM CUL-1a, MM CUL-1b, and MM CUL-1c.</p>	<p>Less than significant impact with mitigation incorporated.</p>
<p>Impact CUL-3: The proposed project could disturb human remains, including those interred outside of formal cemeteries.</p>	<p>MM CUL-3: In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:</p> <ol style="list-style-type: none"> 1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98. 2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance 	<p>Less than significant impact with mitigation incorporated.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:</p> <ul style="list-style-type: none"> • The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission. • The descendant identified fails to make a recommendation. • The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner. <p>Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:</p> <ul style="list-style-type: none"> • When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC. 	
<p>Impact CUL-4: The proposed project may cause a substantial adverse change in the significance of a Tribal Cultural Resource.</p>	<p>MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.</p>	<p>Less than significant impact with mitigation incorporated.</p>
<p>Impact CUL-5: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource.</p>	<p>MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.</p>	<p>Less than significant impact with mitigation incorporated.</p>
<p>Cumulative Impact</p>	<p>MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.</p>	<p>Less than significant impact with mitigation incorporated.</p>
<p>Section 3.5—Energy</p>		
<p>Impact ENER-1: The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
energy resources, during project construction or operation.		
Impact ENER-2: The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.6—Geology and Soils		
Impact GEO-1: The proposed project may expose people or structures to potential substantial adverse effects associated with seismic hazards.	MM GEO-1: Prior to the issuance of the building permit, recommendations from the Geotechnical Engineering Investigation prepared by Krazan & Associates (Environmental Impact Report [EIR] Appendix E) shall be incorporated into all project plans and applicable construction-related permits and submitted to the City of American Canyon for review and approval.	Less than significant impact with mitigation incorporated.
Impact GEO-2: The proposed project may result in substantial soil erosion or the loss of topsoil.	MM HYD-1: Prior to the issuance of grading permits or building permits (whichever occurs first), the project applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) by preparing a Storm Water Pollution Prevention Plan (SWPPP) and submitting it, along with a Notice of Intent (NOI), to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The City of American Canyon shall confirm that the applicant has prepared a SWPPP and obtained coverage under the General Permit prior to issuance of grading or building permits. The SWPPP shall identify a practical sequence for Best Management Practice (BMP) implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall address both the project site and adjacent parcel where soil stockpiles would be removed and the borrow pit would be created to provide fill for the project site. The SWPPP shall include but not be limited to the following elements: <ul style="list-style-type: none"> • Temporary erosion control measures shall be employed for disturbed areas. 	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<ul style="list-style-type: none"> ● No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months. disturbed areas shall be covered with soil stabilizers, mulch, fiber rolls, or temporary vegetation. ● Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures. drop inlets shall be lined with filter fabric/geotextile. ● Discharge from the stormwater system shall be diffused in such a way as to mimic existing overland flow conditions. ● The construction contractor shall prepare standard operating procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. this may include locating construction-related equipment and processes that contain or generate pollutants in a secure way, away from storm drains, gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities. ● BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure. ● In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance as an interim erosion control measure throughout the wet season. <p>Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a SWPPP in accordance with the requirements of the Statewide General Permit. The SWPPP shall be implemented during construction.</p>	
<p>Impact GEO-3: The proposed project would not be located on a geologic unit or soil that would become unstable as a result of the project, and potentially result</p>	<p>No mitigation is necessary.</p>	<p>Less than significant impact.</p>

Impacts	Mitigation Measures	Level of Significance After Mitigation
in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.		
Impact GEO-4: The proposed project may create substantial risks to life or property as a result of expansive soil conditions on the project site.	Implement Mitigation Measure GEO-1.	Less than significant impact with mitigation incorporated.
Impact GEO-5: The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	MM GEO-5: Although extremely unlikely, should any significant paleontological resources (e.g., bones, teeth, well-preserved plant elements) be unearthed by the construction crew, their activities shall be diverted at least 15 feet from the find until a professional Paleontologist has assessed it and, if deemed significant, salvaged in a timely manner. Collected fossils shall be deposited in an appropriate repository, such as the University of California Museum of Paleontology (UCMP), where they shall be properly curated and made available for future research.	Less than significant impact with mitigation incorporated.
Cumulative Impact	Implement Mitigation Measure GEO-1, MM HYD-1, and MM GEO-5.	Less than significant impact with mitigation incorporated.
Section 3.7—Greenhouse Gas Emissions		
Impact GHG-1: The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	No mitigation is necessary.	Less than significant impact.
Impact GHG-2: The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.8—Hazards and Hazardous Materials		
Impact HAZ-1: Buildout of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and would not create a significant hazard to the public or the environment	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.		
Impact HAZ-2: The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-3: The proposed project would not 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 not create a significant hazard to the public or the environment.	No mitigation is necessary.	Less than significant impact.
Impact HAZ-4: The proposed project would not create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport.	Less than significant impact.	No mitigation is necessary.
Impact HAZ-5: The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Less than significant impact.	No mitigation is necessary.
Cumulative Impact	Less than significant impact.	No mitigation is necessary.
Section 3.09—Hydrology and Water Quality		
Impact HYD-1: The proposed project could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	MM HYD-1: Prior to the issuance of grading permits or building permits (whichever occurs first), the project applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) by preparing a Storm Water Pollution Prevention Plan (SWPPP) and submitting it, along with a Notice of Intent (NOI), to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The City of American Canyon shall confirm that the applicant has prepared a SWPPP and obtained coverage under the General Permit prior to issuance of grading or building permits. The SWPPP shall identify a	Less than significant impact with mitigation incorporated.

Impacts	Mitigation Measures	Level of Significance After Mitigation
	<p>practical sequence for Best Management Practice (BMP) implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall address both the project site and adjacent parcel where soil stockpiles would be removed and the borrow pit would be created to provide fill for the project site. The SWPPP shall include but not be limited to the following elements:</p> <ul style="list-style-type: none"> ● Temporary erosion control measures shall be employed for disturbed areas. ● No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months. ● Disturbed areas shall be covered with soil stabilizers, mulch, fiber rolls, or temporary vegetation. ● Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures. drop inlets shall be lined with filter fabric/geotextile. ● Discharge from the stormwater system shall be diffused in such a way as to mimic existing overland flow conditions. ● The construction contractor shall prepare standard operating procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. this may include locating construction-related equipment and processes that contain or generate pollutants in a secure way, away from storm drains, gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities. ● BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure. ● In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance as an interim erosion control measure throughout the wet season. 	

Impacts	Mitigation Measures	Level of Significance After Mitigation
	Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a SWPPP in accordance with the requirements of the Statewide General Permit. The SWPPP shall be implemented during construction.	
Impact HYD-2: The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	No mitigation is necessary.	Less than significant impact.
Impact HYD-3: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	Implementation of MM HYD-1	Less than significant impact with mitigation incorporated.
Section 3.10—Land Use and Planning		
Impact LU-1: The proposed project would not conflict with the applicable provisions of the City of American Canyon General Plan.	No mitigation is necessary.	Less than significant impact.
Impact LU-2: The proposed project would not conflict with the applicable provisions of the American Canyon Municipal Code.	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Impact LU-3: The proposed project would not conflict with the applicable provisions of the Napa County Airport Land Use Compatibility Plan.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.11—Noise		
Impact NOI-1: The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	No mitigation is necessary.	Less than significant impact.
Impact NOI-2: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.	No mitigation is necessary.	Less than significant impact.
Impact NOI-3: The proposed project would not expose people residing or working in the project area to excessive noise levels 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.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.
Section 3.12—Public Services		
Impact PUB-1: The proposed project would not result in a need for new or expanded fire protection facilities that may have physical impacts on the environment.	No mitigation is necessary.	Less than significant impact.
Impact PUB-2: The proposed project would not result in a need for new or expanded police protection facilities that may have physical impacts on the environment.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
Section 3.13—Transportation and Traffic		
Impact TRANS-1: The proposed project would not conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.	No mitigation is required.	Less than significant impact.
Impact TRANS-2: The proposed project would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).	MM TRANS-2: Transportation Demand Management Program The proposed project shall develop a Transportation Demand Management (TDM) program to encourage employees to choose non-personal vehicle modes of transportation for commuting. This includes a commute trip reduction marketing initiative, through which the employer would disseminate information about available transportation options. Strategies would include encouraging ride sharing among project employees and linking them to resources to find rideshare partners working nearby, such as through the Napa Valley Transportation Authority (NVTA) V-Commute program or the regional 511.org program. Marketing materials can also inform employees of resources such as the Guaranteed Ride Home Program, which provides free rides home in emergency situations for employees using non-personal vehicle transportation modes.	Significant and unavoidable impact.
Impact TRANS-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	No mitigation is required.	Less than significant impact.
Impact TRANS-4: The proposed project would not result in inadequate emergency access.	No mitigation is required.	Less than significant impact.
Cumulative Impact	Implementation of MM TRANS-2	Significant and unavoidable impact.
Section 3.14—Utilities		
Impact UTIL-1: The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or	No mitigation is necessary.	Less than significant impact.

Impacts	Mitigation Measures	Level of Significance After Mitigation
relocation of which could cause significant environmental effects.		
Impact UTIL-2: The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.	No mitigation is necessary.	Less than significant impact.
Impact UTIL-3: The proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments.	No mitigation is necessary.	Less than significant impact.
Impact UTIL-4: The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.	No mitigation is necessary.	Less than significant impact.
Cumulative Impact	No mitigation is necessary.	Less than significant impact.

CHAPTER 1: INTRODUCTION

1.1 - Overview of the CEQA Process

This Draft Environmental Impact Report (Draft EIR) is prepared in accordance with the California Environmental Quality Act (CEQA) to evaluate the potential environmental impacts associated with the implementation of the SDG Commerce 220 Project (State Clearinghouse No. 2023100842). This document is prepared in conformance with CEQA (California Public Resources Code [PRC], § 21000, *et seq.*) and the CEQA Guidelines (California Code of Regulations [CCR], Title 14, § 15000, *et seq.*). This Draft EIR is intended to serve as an informational document for the public agency decision-makers and the public regarding the proposed project.

1.1.1 - Overview

The proposed project consists of the development of a 219,834-square-foot wine warehouse on the 10.45-acre project site. Chapter 2, Project Description provides a complete description of the proposed project.

1.1.2 - Purpose and Authority

This Draft EIR provides a project-level analysis of the environmental effects of the SDG Commerce 220 Project. The environmental impacts of the proposed project are analyzed in the EIR to the degree of specificity appropriate, in accordance with CEQA Guidelines Section 15146. This document addresses the potentially significant adverse environmental impacts that may be associated with the planning, construction, or operation of the project. It also identifies appropriate and feasible mitigation measures and alternatives that may be adopted to significantly reduce or avoid these impacts.

CEQA requires that an EIR contain, at a minimum, certain specific elements. These elements are contained in this Draft EIR and include:

- Table of Contents
- Introduction
- Executive Summary
- Project Description
- Environmental Setting, Significant Environmental Impacts, and Mitigation Measures
- Cumulative Impacts
- Significant Unavoidable Adverse Impacts
- Alternatives to the Proposed Project
- Growth-Inducing Impacts
- Effects Found not to be Significant
- Areas of Known Controversy

1.1.3 - Lead Agency Determination

The City of American Canyon is designated as the lead agency for the proposed project. CEQA Guidelines Section 15367 defines the lead agency as “. . . the public agency, which has the principal responsibility for carrying out or approving a project.” Other public agencies may use this Draft EIR in the decision-making or permit process and consider the information in this Draft EIR along with other information that may be presented during the CEQA process.

This Draft EIR was prepared by FirstCarbon Solutions (FCS), an environmental consultant. Prior to public review, it was extensively reviewed and evaluated by the City of American Canyon. This Draft EIR reflects the independent judgment and analysis of the City of American Canyon as required by CEQA. Lists of organizations and persons consulted and the report preparation personnel are provided in Chapter 7 of this Draft EIR.

1.2 - Scope of the Draft EIR

This Draft EIR addresses the potential environmental effects of the proposed project. The City of American Canyon issued a Notice of Preparation (NOP) for the proposed project on October 27, 2023, which circulated between October 27, 2023, and November 27, 2023, for the statutory 30-day public review period. The scope of this Draft EIR includes the potential environmental impacts identified in the NOP and issues raised by agencies and the public in response to the NOP. The NOP is contained in Appendix A of this Draft EIR.

Seven comment letters were received in response to the NOP. They are listed in Table 1-1 and provided in Appendix A of this Draft EIR.

Table 1-1: NOP Comment Letter Summary

Affiliation	Signatory(ies)	Date
Public Agencies		
Caltrans	Yunsheng Luo	November 27, 2023
CDFW	Erin Chappell	November 17, 2023
Department of Justice	Christie Vosburg	November 7, 2023
NAHC	Cameron Vela	October 31, 2023
Private Parties		
—	Yvonne Baginski	November 21, 2023
—	Jeannette Goyetche	November 21, 2023
—	Jerry Hoffman	November 25, 2023
Notes: Caltrans = California Department of Transportation CDFW = California Department of Fish and Wildlife NAHC = Native American Heritage Commission Source: Compiled by FirstCarbon Solutions (FCS). 2023.		

1.2.1 - Environmental Issues Determined not to be Significant

The NOP identified topical areas that were determined not to be significant. An explanation of why each area is determined not to be significant is provided in Chapter 4, Effects Found not to be Significant. These topical areas are as follows:

- Agricultural and Forest Resources
- Mineral Resources
- Recreation
- Wildfire

In addition, certain subjects within various topical areas were determined not to be significant. Other potentially significant issues are analyzed in these topical areas; however, the following issues are not analyzed:

- Scenic Vistas
- State Scenic Highways
- Loss of Important Farmland
- Williamson Act Contracts or Agricultural Zoning
- Forest Zoning
- Loss of Forest Land
- Pressures to Convert Surrounding Agricultural Land or Forest Land
- Sensitive Natural Communities or Riparian Habitat
- Conservation Plans
- Septic or Alternative Wastewater Disposal Systems
- Wildfires
- 100-year Flood Hazards
- Levee or Dam Failure
- Seiches, Tsunamis, or Mudflows
- Division of an Established Community
- Loss of Mineral Resources of Statewide or Local Importance
- Growth Inducement
- Displacement of Persons or Housing
- Schools
- Parks
- Other Public Facilities
- Emergency Evacuation

An explanation of why each issue is determined not to be significant is provided in Chapter 4, Effects Found not to be Significant.

1.2.2 - Potentially Significant Environmental Issues

The NOP indicated that the following topical areas may contain potentially significant environmental issues that will require further analysis in the EIR. These sections are as follows:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources/Tribal Cultural Resources
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions/Energy
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

1.3 - Organization of the EIR

This Draft EIR is organized into the following main sections:

- **Chapter ES: Executive Summary.** This chapter includes a summary of the proposed project and alternatives addressed in the Draft EIR. A brief description of the areas of controversy and issues to be resolved and a table that summarizes the impacts, mitigation measures, and level of significance after mitigation are also included in this section.
- **Chapter 1: Introduction.** This chapter provides an introduction and overview describing the purpose of this Draft EIR, its scope and components, and its review and certification process.
- **Chapter 2: Project Description.** This chapter includes a detailed description of the proposed project, including its location, site, and project characteristics. It also includes a discussion of the project objectives, intended uses of the Draft EIR, responsible agencies, and approvals that are needed for the proposed project.
- **Chapter 3: Environmental Impact Analysis.** This chapter analyzes the environmental impacts of the proposed project. Impacts are organized into major topic areas. Each topic area includes a description of the environmental setting, methodology, significance criteria, impacts, mitigation measures, and significance after mitigation. The specific environmental topics that are addressed within Chapter 3 are as follows:
 - Section 3.1—Aesthetics, Light, and Glare: Addresses the potential visual impacts of the proposed project and the overall increase in illumination produced by the proposed project.
 - Section 3.2—Air Quality: Addresses potential air quality impacts associated with project implementation and emissions of criteria pollutants. In addition, the section also evaluates project emissions of toxic air contaminants.

- Section 3.3—Biological Resources: Addresses potential impacts on habitat, vegetation, and wildlife; the potential degradation or elimination of important habitat; and impacts on listed, proposed, and candidate threatened and endangered species.
 - Section 3.4—Cultural Resources and Tribal Cultural Resources: Addresses potential impacts on historical resources, archaeological resources, paleontological resources, and burial sites. Additionally addresses potential project impacts related to tribal cultural resources.
 - Section 3.5—Energy: Address the potential impacts related to energy that could result from implementation of the proposed project.
 - Section 3.6—Geology, Soils, and Seismicity: Addresses the potential impacts the proposed project may have on soils and assesses the effects of project development in relation to geologic and seismic conditions.
 - Section 3.7—Greenhouse Gas Emissions: Addresses potential project emissions of greenhouse gases.
 - Section 3.8—Hazards and Hazardous Materials: Addresses potential for presence of hazardous materials or conditions on the project site and in the project area that may have the potential to impact human health.
 - Section 3.9—Hydrology and Water Quality: Addresses the potential impacts of the project on local hydrological conditions, including drainage areas, and changes in the flow rates.
 - Section 3.10—Land Use: Addresses consistency with the City of American Canyon General Plan, American Canyon Municipal Code, and Napa County Airport Land Use Compatibility Plan.
 - Section 3.11—Noise: Addresses potential noise impacts during construction and at project buildout from mobile and stationary sources. The section also addresses the impact of noise generation on neighboring uses.
 - Section 3.12—Public Services: Addresses potential impacts upon public services, including fire protection, law enforcement, schools, parks, and recreational facilities.
 - Section 3.13—Transportation: Addresses potential impacts related to the local and regional roadway system and public transportation, bicycle, and pedestrian access.
 - Section 3.14—Utilities and Services Systems: Addresses potential impacts related to service providers, including fire protection, law enforcement, water supply, wastewater, solid waste, and energy providers.
- **Chapter 4: Effects Found not to be Significant.** This chapter contains analysis of the topical sections and CEQA Appendix G checklist questions not addressed in Chapter 3.
 - **Chapter 5: Other CEQA Considerations.** This chapter provides a summary of significant unavoidable environmental impacts and growth-inducing impacts.
 - **Chapter 6: Alternatives to the Proposed Project.** This chapter compares the impacts of the proposed project with three land use project alternatives: No Project Alternative and Reduced Project Alternative. An environmentally superior alternative has been identified. In addition, alternatives initially considered but rejected from further consideration are discussed.
 - **Chapter 7: Persons and Organizations Consulted/List of Preparers.** This chapter contains a full list of persons and organizations that were consulted during the preparation of this Draft

EIR. This chapter also contains a full list of the authors who assisted in the preparation of the Draft EIR, by name and affiliation.

- **Appendices.** The Draft EIR appendices includes all notices and other procedural documents pertinent to the Draft EIR as well as all technical material prepared to support the analysis.

1.4 - Documents Incorporated by Reference

As permitted by CEQA Guidelines Section 15150, this Draft EIR has referenced several technical studies, analyses, and previously certified environmental documentation. Information from the documents, which have been incorporated by reference, has been briefly summarized in the appropriate section(s). The relationship between the incorporated part of the referenced document and the Draft EIR has also been described. The documents and other sources that have been used in the preparation of this Draft EIR include but are not limited to:

- City of American Canyon General Plan
- American Canyon Municipal Code
- Napa County Airport Land Use Compatibility Plan
- City of American Canyon Urban Water Management Plan

In accordance with CEQA Guidelines Section 15150(b), the General Plan, the referenced documents and other sources used in the preparation of the Draft EIR are available for review at the American Canyon City Hall at the address shown in Section 1.6 below.

1.5 - Documents Prepared for the Proposed Project

The following technical studies and analyses were prepared for the proposed project:

- Biological Resources Assessment, prepared by FirstCarbon Solutions (Appendix C)
- Geotechnical Engineering Investigation, prepared by Krazan & Associates (Appendix E)
- Phase I Environmental Site Assessment, prepared by Cameron-Cole (Appendix F)
- Hydrology Report, prepared by RSA⁺ (Appendix G)
- Hydraulic Calculations, prepared by RSA⁺ (Appendix G)
- Stormwater Control Plan, prepared by RSA⁺ (Appendix G)

1.6 - Review of the Draft EIR

Upon completion of the Draft EIR, the City of American Canyon filed a Notice of Completion (NOC) with the State Office of Planning and Research to begin the public review period (PRC § 21161). Concurrent with the NOC, this Draft EIR has been distributed to responsible and trustee agencies, other affected agencies, surrounding cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the public review period, the Draft EIR, including the technical appendices, is available for review at the following locations:

City of American Canyon City Hall
4381 Broadway Street, Suite 201
American Canyon, CA 94503
Hours:
Monday–Friday: 8:00 a.m. to 5:00 p.m.
Saturday–Sunday: Closed

Active Adults Center
2185 Elliot Drive
American Canyon, CA 94503
Hours: Monday - Friday 9:00 a.m. to 2:00 p.m.
Saturday–Sunday: Closed

American Canyon Library
300 Crawford Way
American Canyon, CA 94503
Hours: Monday, Tuesday, and Thursday–
Saturday: 10:00 a.m. to 6:00 p.m.
Wednesday: 12:00 p.m. to 8:00 p.m.
Sunday: Closed

The Draft EIR is also available for review at the following website:

<https://www.cityofamericancanyon.org/government/community-development/development-projects>

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR may be submitted electronically at this website link: <https://cityofamcan.org/SDG220>.

Hardcopy written comments on this Draft EIR should be addressed to:

SDG Commerce 220 Project
City of American Canyon
4381 Broadway Street, Suite 201
American Canyon, CA 94503

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged. Upon completion of the public review period, written responses to all significant environmental issues raised will be prepared and made available for review by the commenting agencies at least 10 days prior to the public hearing before the American Canyon Planning Commission on the proposed project. Following a recommendation by the Planning Commission, the City Council will consider certifying the Final EIR at a regularly scheduled Council meeting. Comments received and the responses to comments will be included as part of the record for consideration by decision-makers for the proposed project.

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 2: PROJECT DESCRIPTION

This Draft Environmental Impact Report (Draft EIR) analyzes the potential environmental effects of the proposed SDG Commerce 220 Distribution Center Project (proposed project) in the City of American Canyon.

2.1 - Project Location and Setting

2.1.1 - Location

The project site is located at 1055 Commerce Court in the City of American Canyon, in Napa County, California; refer to Exhibit 2-1. The project site consists of Assessor's Parcel Number (APN) 058-030-069 (10.17 acres) plus small additional improvement areas (consisting primarily of parking lot improvements and connections to adjoining land uses) for a total of 10.45 acres. The rectangular project site is bounded by a eucalyptus grove and North Slough (west), a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 currently under construction (north), Commerce Court beyond which is a paintball recreation area (east), and a wine distribution warehouse known as SDG Commerce 330 (south); refer to Exhibit 2-2. The project site is located on the *Cuttings Wharf, California*, United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map, Township 4 North, Range 4 West, Section 14 (Latitude 38° 11' 22" North; Longitude 122° 16' 19" West).

2.1.2 - Existing Land Use Activities

The project site contains undeveloped land. The project site gently slopes from east to west and is approximately 13 to 25 feet above mean sea level. A linear wetland and three isolated wetlands are located within the northern portion of the property. The southern portion of the project site contains several soil stockpiles that are intended for use at the SDG Commerce 217 property. A young eucalyptus tree is located near Commerce Court. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk. Exhibit 2-3 provides photographs of the project site.

2.1.3 - Surrounding Land Uses

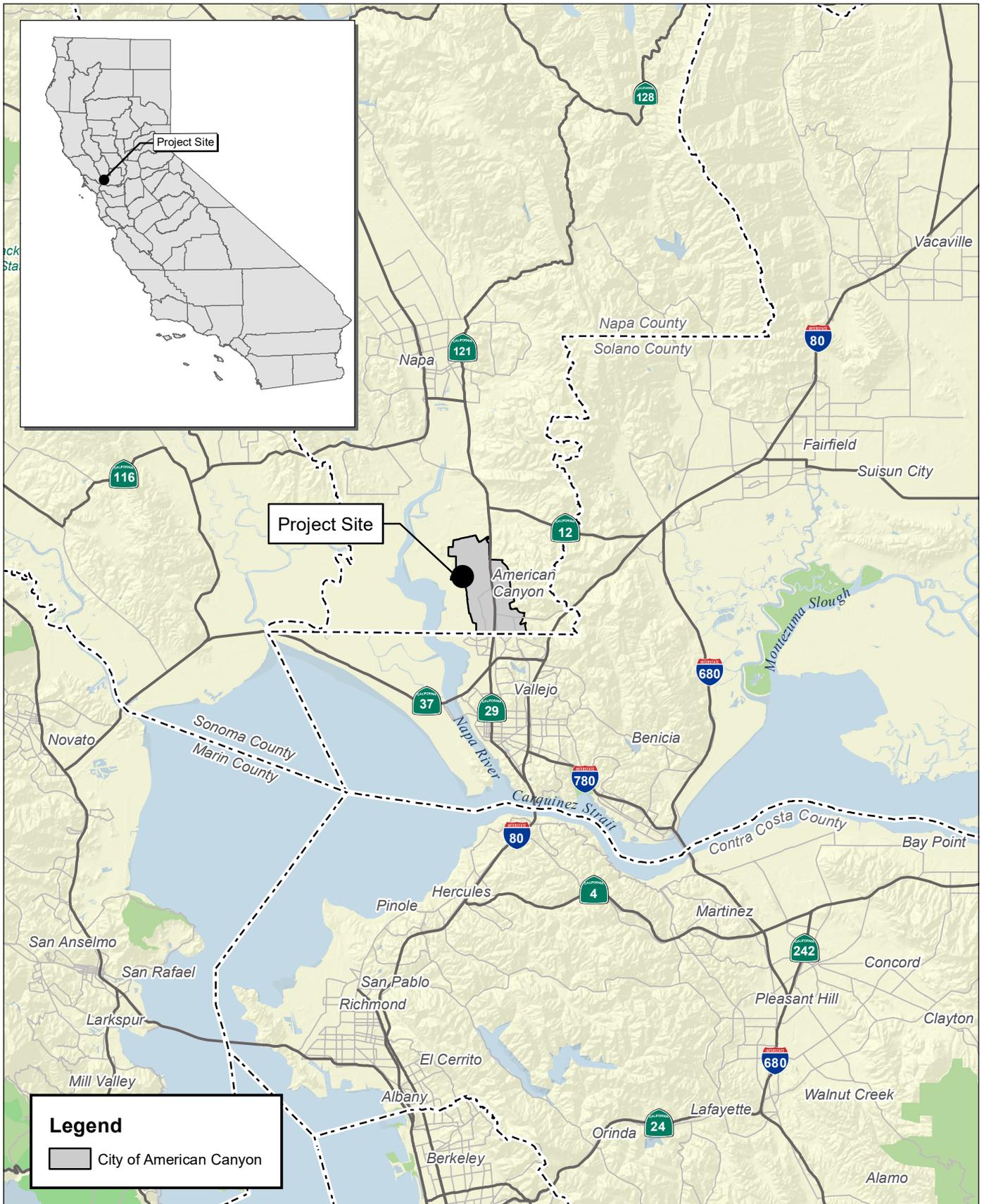
North

A wine distribution warehouse known as SDG Commerce 217 is being constructed to the north of the project site at the time of this writing. This parcel totals 10.39 acres. The area further to the north consists of multiple industrial warehouses and other industrial type land uses.

East

Commerce Court, a two-lane undivided roadway, forms the eastern boundary of the project site. A 68-foot-wide City Public Access and Utility easement is located within Commerce Court with underground sewer, water, reclaimed water, sewer force main and underground power. A eucalyptus grove is located east of Commerce Court. A residence, dirt/gravel roads, and various accessory structures are located throughout this eucalyptus grove as well as Paint Jungle, a paintball recreation area.

THIS PAGE INTENTIONALLY LEFT BLANK



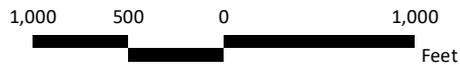
Source: Census 2000 Data, The California Spatial Information Library (CaSIL).



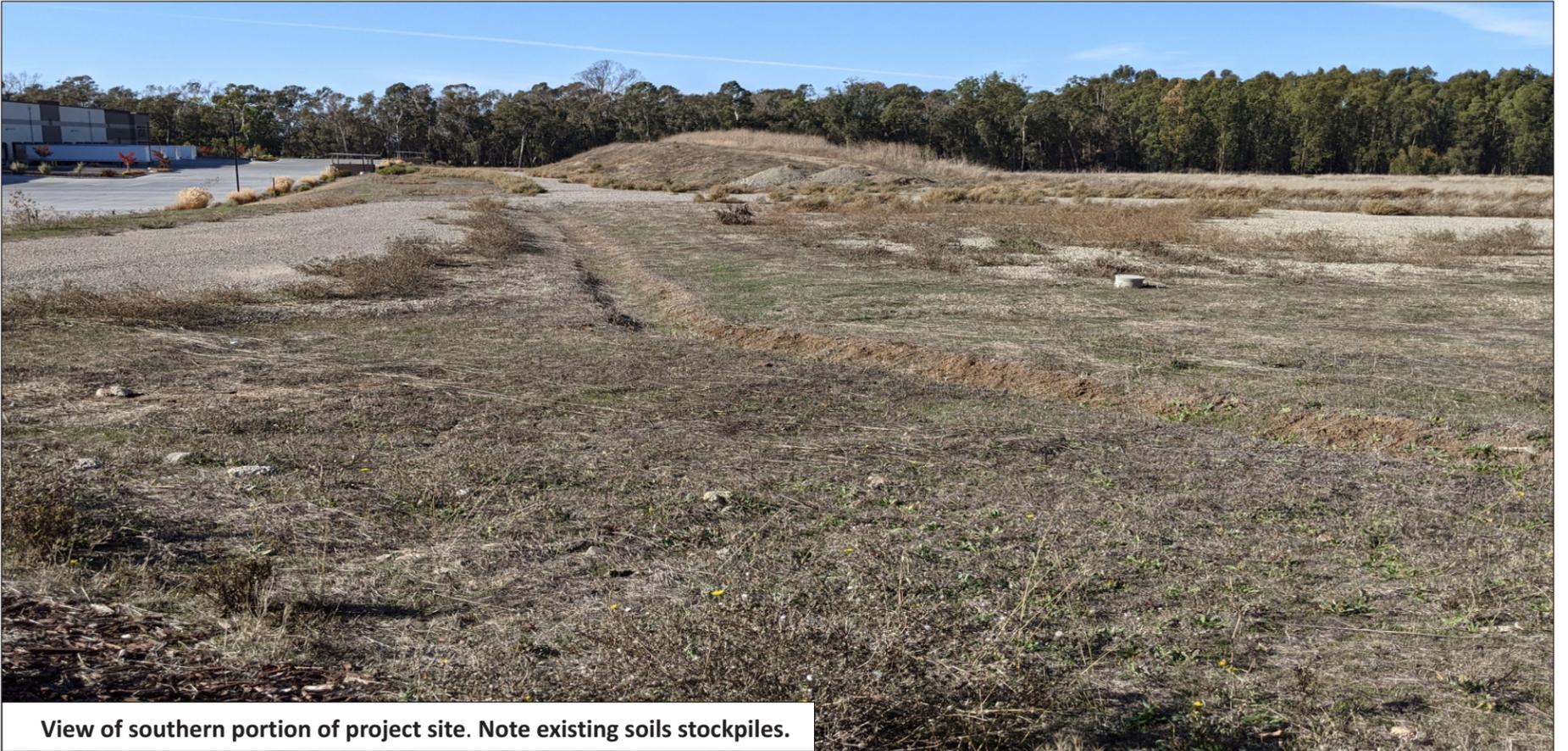
THIS PAGE INTENTIONALLY LEFT BLANK



Source: Bing Aerial Imagery.



THIS PAGE INTENTIONALLY LEFT BLANK



View of southern portion of project site. Note existing soils stockpiles.



View of northern portion of project site.



View of project frontage with Commerce Court.

THIS PAGE INTENTIONALLY LEFT BLANK

South

A wine distribution warehouse known as SDG Commerce 330 is located south of the project site. This parcel totals 15.24 acres. The area further to the south consists of an equestrian center (SpiritHorse Therapeutic Riding Center), the American Canyon 4-H Service Club, and the Napa Junction Magnet Elementary School.

West

An 11.23-acre parcel containing a eucalyptus grove and North Slough are located west of the project site. The American Canyon Water Reclamation Facility is located west of North Slough. Further west is the Napa River and associated wetlands.

2.1.4 - Land Use Designations

The project site is designated Commercial Recreation (CR) by the City of American Canyon General Plan and zoned Recreation (REC). A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zoning district.

The project site is within Compatibility Zone D (Common Traffic Pattern) of the Napa County Airport's Land Use Compatibility Plan.

2.2 - Project History

The project site is part of what was previously a larger 35.85-acre site (Exhibit 2-4a). The site was subdivided into three lots (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330) via a tentative parcel map in February 2019. The southern parcel (SDG Commerce 330) was developed in 2020. The northern parcel (SDG Commerce 217) was entitled in 2021 and at the time of this writing is currently being developed. The central parcel (SDG Commerce 220) is the project site evaluated in this Draft EIR. Exhibit 2-2 shows the relationship of the three parcels to each other. The following narrative provides background on the entire 35.85-acre site.

Aerial photography dating to 1937 indicates that the entire site was occupied by a planted crop of trees; between then and the late 1950s, a eucalyptus grove was planted. From the 1950s until 2001 the site remained relatively unchanged. From 2001 until circa 2012, the northwest corner of the site was used as a paintball field (Sherwood Forest Paintball Area) with the eucalyptus trees remaining in place.

In 2004, a warehouse was built to the north of the site (as shown in Exhibit 2-2), and its development also included construction of Commerce Court cul-de-sac road improvements which terminated at the northeast corner of the SDG Commerce 217 site. Also in 2004, the City of American Canyon installed underground utilities and an access road through the middle of the eucalyptus grove adjacent to the east side of this site. This work also included installation of a sanitary sewer force main that crosses the northern portion of the site (i.e., the 217 SDG Commerce parcel). In 2012 the entire 35.85-acre site was cleared and grubbed of eucalyptus trees and shrubs.

2.3 - Project Characteristics

2.3.1 - Project Summary

The applicant, SDG Commerce 220, LLC proposes to develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. The warehouse would provide 23 truck doors and approximately 4,400 square feet of office space. It would have perimeter concrete tilt wall panels with varying parapet heights and accent spandrel glass/metal canopy features around offices and corners of the building. The average roof height would be approximately 35 feet high and portions of the building exterior walls would have various heights to provide architectural relief. The building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized. Table 2-1 summarizes the project characteristics. Exhibit 2-4a depicts the site plan within the greater 35.85-acre site. Exhibit 2-4b provides the project-specific site plan. Exhibit 2-5 provides a conceptual illustration of the proposed project.

Table 2-1: SDG Commerce 220 Project Summary

Acres	Building Square Feet	Floor Area Ratio	Building Height	End Use/Characteristics
10.45 ¹	219,834	0.5	35 feet	Wine Distribution Warehouse/23 truck doors
¹ Project site consists of APN 058-030-069 (10.17 acres) plus small additional improvement areas for a total of 10.45 acres. Source: SDG Commerce 220, LLC. 2022.				

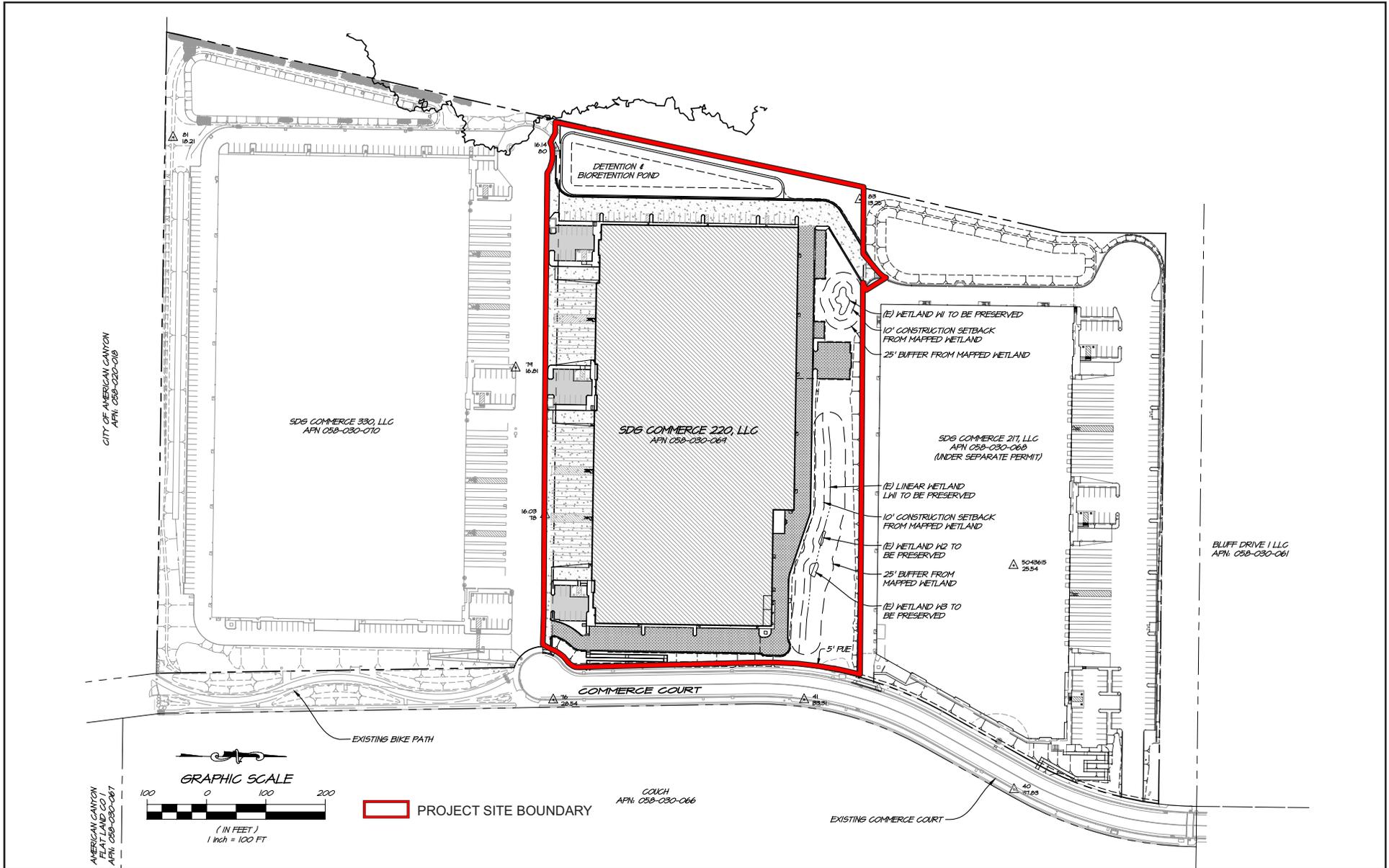
Operation and Employment

The building would be designed to accommodate approximately three tenants. Typical hours of operation for wine distribution and storage are 6:00 a.m. to 6:00 p.m., Monday through Friday and 6:00 a.m. to 12:00 a.m., Monday through Friday during peak seasonal months, typically June through November. It is anticipated that the project would employ approximately 35 full-time employees and 20 part-time employees working in up to three overlapping shifts.

Warehousing and storage of wine and other wine-related industries are not labor intensive, and the proposed uses for the building do not demand frequent client or user trips to the site. It is estimated that the proposed project would generate approximately 2 to 4 client or visitor trips per day, likely during off-peak season and during normal working hours. Forklifts used within the building would be electrically powered.

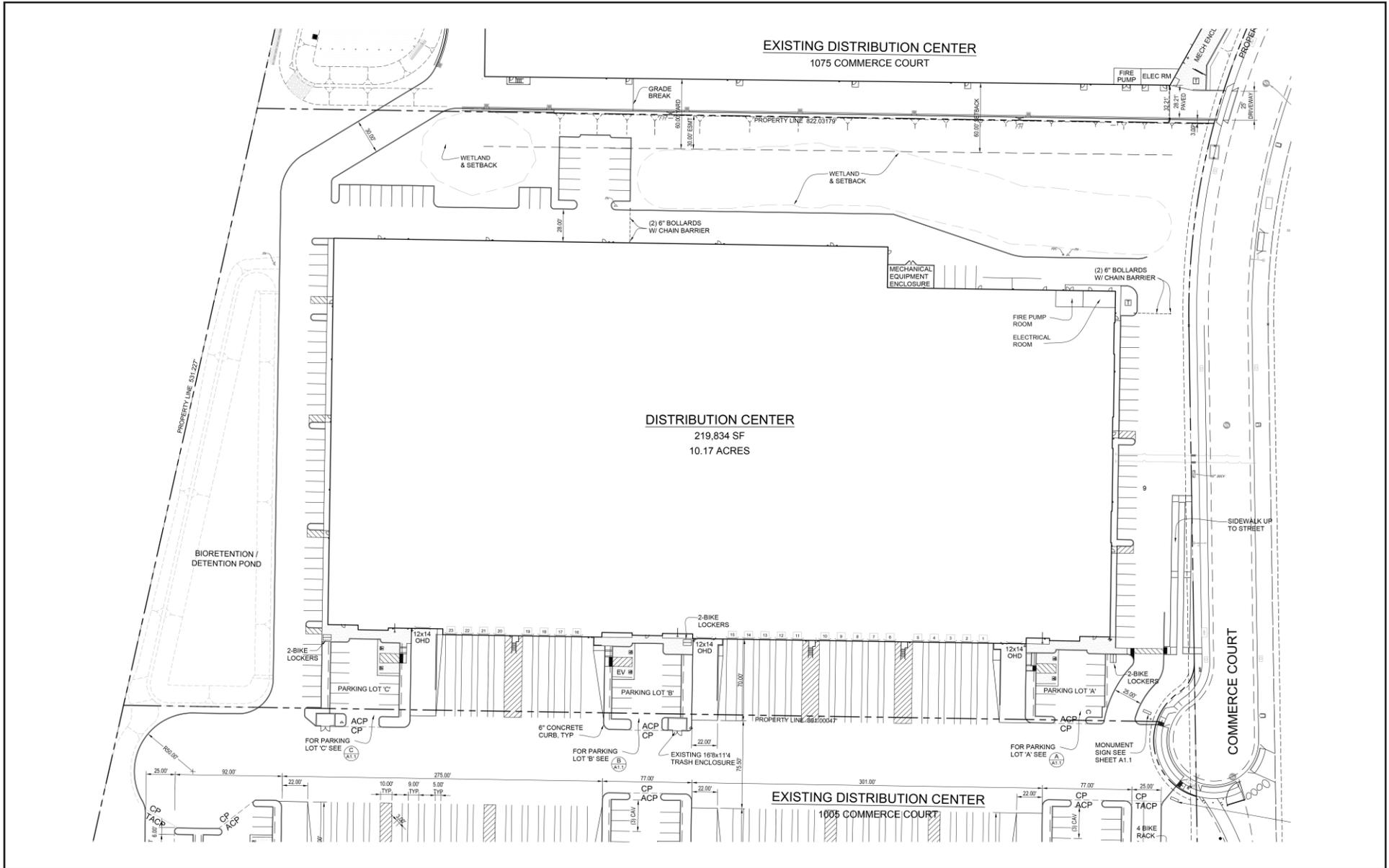
Site Access, Circulation, and Parking

Vehicular and truck access would be taken from one driveway on Commerce Court that would be shared with the SDG Commerce 330 project. Drive aisles would be provided around the full perimeter of the building to support emergency ingress and egress.



Source: RSA+ Consulting Civil Engineers + Surveyors. 07/21/2023.

THIS PAGE INTENTIONALLY LEFT BLANK



Source: Ward Architects, Inc. 08/01/2023.



56390001 • 08/2023 | 2-4b_Site_Plan.cdr

Exhibit 2-4b Site Plan

CITY OF AMERICAN CANYON
SDG COMMERCE 220 PROJECT
ENVIRONMENTAL IMPACT REPORT

THIS PAGE INTENTIONALLY LEFT BLANK



View of project rendering looking northwest from southeast corner.

Source: Stravinsky Development Group.

THIS PAGE INTENTIONALLY LEFT BLANK

A total of 134 car spaces and 23 truck parking stalls would be provided. Of these parking stalls, five would be designated for handicap access and one would be a compact space. There would be five electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE stall, and 19 electric vehicle (EV) capable stalls. Per the 2022 California Green Building Standards Code (CALGreen), nonresidential developments with 101–150 parking spaces must provide at least 17 EV capable spaces and at least four EV capable spaces provided with EVSE (Title 24, Part 11, Chapter 5, Table 5.106.5.3.1). The proposed project would meet these requirements.

Pedestrian circulation throughout the project site would be provided in accordance with the California Disabled Accessibility Guidebook (CalDAG) and Americans with Disabilities Act (ADA) recommendations and standards. Short and long-term bicycle parking would be provided in accordance with current CALGreen codes. The proposed project would provide three, long-term bicycle lockers, each of which would accommodate up to four bicycles, for a total of 12 bicycle parking spaces (located adjacent to each office area). Short-term bicycle parking would also be similarly located. The proposed 12 bicycle parking spaces would be five more than required per the City's Zoning Ordinance Chapter 19.14.090 (A), Bicycle Parking Requirements.

Lighting

The proposed project would include exterior lighting on the building and parking lot poles on the north side of the property. Parking lot lighting would be consistent with City of American Canyon municipal code requirements Section 19.21.030(M). The 30-foot-tall lights would be “shoebox” dimmable light-emitting diode (LED) fixtures designed to be dark-sky friendly by directing the light toward the ground to prevent glare to surrounding properties.

Signage

One monument sign is proposed, (approximately 8 feet wide by 5 feet tall) located at the entry to the site from Commerce Court.

Landscaping

Landscaping would be provided around the site perimeter on the east, north and partial west sides and within parking islands throughout (Exhibit 2-6). Mechanical equipment would be placed on the north side of the building behind a 6-foot-high color slatted chain-link fence. The irrigation system would be connected to the City's reclaimed water system, thus eliminating the use of the City's potable water for landscape purposes. In addition, the warehouse would be dual plumbed with recycled water for toilet flushing inside the warehouse building.

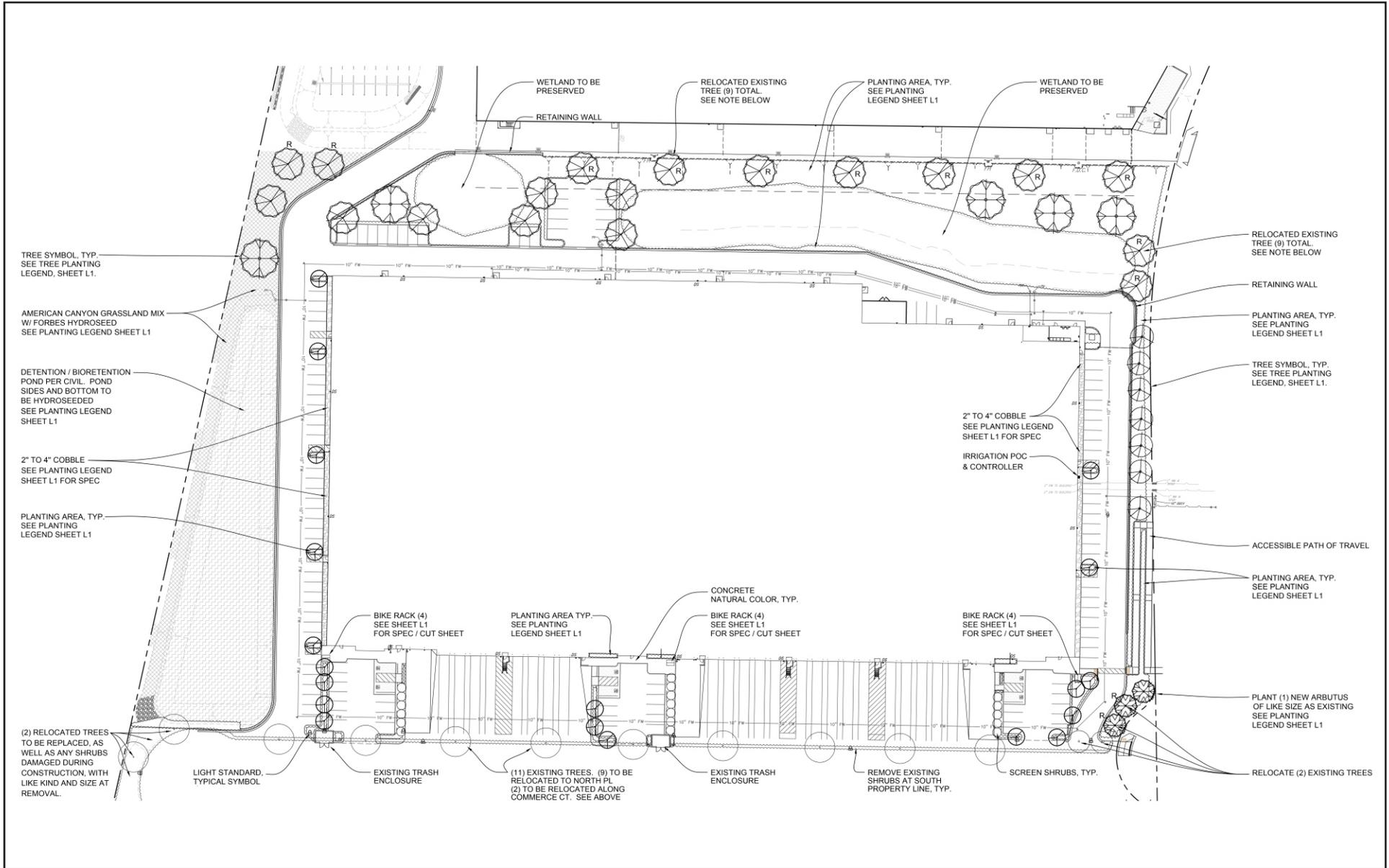
Storm Drainage

Stormwater runoff would be directed via an on-site storm drain system into a detention/bioretention pond located on the western side of the site. Roof drainage would be connected to the proposed detention/bioretention pond via the on-site storm drain system surrounding the building by way of down spouts on the exterior of the building, which would be painted to blend-in with the building façade.

Wetland Areas

The two existing, on-site wetland areas would be preserved in place (see Exhibit 2-4b).

THIS PAGE INTENTIONALLY LEFT BLANK



Source: Ward Architects, Inc. 08/01/2023.



Exhibit 2-6 Landscaping Plan

THIS PAGE INTENTIONALLY LEFT BLANK

Utilities

Water

The City of American Canyon would provide potable and recycled water service to the proposed project. Potable and recycled water infrastructure currently exists within Commerce Court. Service laterals would extend from the Commerce Court water lines to project building.

Wastewater

The City of American Canyon would provide wastewater collection and treatment service to the proposed project. Sewer infrastructure currently exists within Commerce Court. Connection back to the existing City sewer infrastructure in Commerce Court would be made through the existing sanitary sewer system and lift station that was previously designed and constructed on the Commerce 330 site for future shared use with the proposed project.

Electricity

Pacific Gas and Electric Company (PG&E) would deliver electricity to the proposed project. Electric infrastructure currently exists within Commerce Court. Service laterals would extend from the Commerce Court facilities to project buildings. No natural gas would be used. Solar would be installed on the building roof top and would produce an estimated 235,000 kilowatt-hour (kWh) per year. The intent of the solar system is to supplement the power consumed by items such as exterior lighting, parking lot lights, interior warehouse lighting and a portion of the building's refrigeration system.

Telecommunications Services

Telephone service provided by AT&T would be extended from the existing underground infrastructure in the Commerce Court right-of-way to the electrical room located in the northeast corner of the building.

Off-site Improvements

A small portion of the development extends beyond the parcel boundaries to the north and south of the project site in order to provide parking lot and circulation connectivity. The properties to the north and south of the project site are under related ownership as the proposed project and the potential impacts associated with development and site disturbance on those parcels was analyzed in previous California Environmental Quality Act (CEQA) documentation.^{1,2}

Construction

Construction would occur in a single phase, lasting approximately 11 months. For this analysis, construction is assumed to start in September 2024. During the construction phase, 12 to 24 workers would be at the site, with a maximum near to 80 and a minimum of one. Construction hours would be from 7:00 a.m. to 6:00 p.m. Monday through Friday. Construction of the concrete building slab,

¹ City of American Canyon. 2021. Commerce 217 Distribution Center Project Initial Study/Mitigated Negative Declaration. Website: <https://ceqanet.opr.ca.gov/2020120302/2>. Accessed August 16, 2023.

² City of American Canyon. 2018. SDG 330 Wine Warehouse Project Initial Study/Mitigated Negative Declaration. Website: <https://ceqanet.opr.ca.gov/2018112067>. Accessed August 16, 2023.

wall panels and large concrete paving pours would be required to be performed during nighttime hours starting no earlier than 12:00 a.m. Pre-notification of these night pour dates and times would be provided to the City and property owners in the vicinity. Typical construction equipment that would be used at the site would include self-loading dirt scraper, bulldozer, motor grader, compactor, roller, water truck, backhoe, excavator, trencher, drilling auger, front end loader, paving machine, laser screed, concrete finishing trowels, tractor, crane, forklift, generator, man lift, scissor lift, welding machine, and light tower. Less than 1,000 cubic yards of imported soil would be required for grading.

2.4 - Project Objectives

The objectives of the proposed project are to:

1. Positively contribute to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base.
2. Develop land to its highest and best use.
3. Continue the buildout of the City of American Canyon in accordance with the General Plan.
4. Meet regional demand for wine warehousing by adding to the inventory of this space.
5. Develop nonresidential uses on the project site that are compatible with the City of American Canyon's Water Reclamation Facility and the Napa County Airport.
6. Maximize the efficient use of land by developing an industrial project at the upper end of the allowable Floor Area Ratio range.
7. Complete the buildout of the SDG Commerce development.
8. Protect North Slough by employing stormwater pollution prevention measures during construction and operation.
9. Provide development fees to the American Canyon Fire Protection District to fund the development of a new fire station.

2.5 - Intended Uses of this Draft EIR

This Draft EIR is being prepared by the City of American Canyon to assess the potential environmental impacts that may arise in connection with actions related to implementation of the proposed project. Pursuant to CEQA Guidelines Section 15367, the City of American Canyon is the lead agency for the proposed project and has discretionary authority over the proposed project and project approvals. The Draft EIR is intended to address all public infrastructure improvements and all future development proposals that are within the parameters of the proposed project.

2.5.1 - Discretionary and Ministerial Actions

Discretionary approvals and permits are required by the City of American Canyon for implementation of the proposed project. The proposed project would require the following discretionary approvals and actions, including:

- Conditional Use Permit

Subsequent ministerial actions would be required for the implementation of the proposed project including issuance of grading and building permits.

2.5.2 - Responsible and Trustee Agencies

A number of other agencies in addition to the City of American Canyon will serve as Responsible and Trustee Agencies, pursuant to CEQA Guidelines Section 15381 and Section 15386, respectively. This Draft EIR will provide environmental information to these agencies and other public agencies, which may be required to grant approvals or coordinate with other agencies, as part of project implementation. These agencies may include, but are not limited to, the following:

- United States Army Corps of Engineers (USACE)
- California Department of Fish and Wildlife (CDFW)
- San Francisco Bay Regional Water Quality Board (San Francisco Bay RWQCB)
- County of Napa
- Napa County Airport Land Use Commission (ALUC)
- Napa Valley Unified School District (NVUSD)

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 3: ENVIRONMENTAL IMPACT ANALYSIS

Organization of Issue Areas

This Draft Environmental Impact Report (Draft EIR) provides analysis of impacts for those environmental topics where it was determined in the Notice of Preparation (NOP), or through subsequent analysis, that the proposed project would result in “potentially significant impacts.” Sections 3.1 through 3.14 discuss the environmental impacts that may result with approval and implementation of the proposed project.

Issues Addressed in this EIR

The following environmental issues are addressed in Chapter 3:

- Aesthetics, Light, and Glare
- Air Quality
- Biological Resources
- Cultural Resources and Tribal Cultural Resources
- Energy
- Geology, Soils, and Seismicity
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use
- Noise
- Public Services
- Transportation
- Utilities and Service Systems

Level of Significance

Determining the severity of project impacts is fundamental to achieving the objectives of the California Environmental Quality Act (CEQA). CEQA Guidelines Section 15091 requires that decision makers mitigate, as completely as is feasible, the significant impacts identified in the Draft EIR. If the EIR identifies any significant unmitigated impacts, CEQA Guidelines Section 15093 requires decision makers in approving a project to adopt a statement of overriding considerations that explains why the benefits of the project outweigh the adverse environmental consequences identified in the EIR.

The level of significance for each impact examined in this Draft EIR was determined by considering the predicted magnitude of the impact against the applicable threshold. Thresholds were developed using criteria from the CEQA Guidelines and checklist; State, federal, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

Impact Analysis and Mitigation Measure Format

The format adopted in this Draft EIR to present the evaluation of impacts is described and illustrated below.

Summary Heading of Impact

Impact AES-1: An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact number identifies the section of the report (AES for Aesthetics, Light, and Glare in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.

Impact Analysis

A narrative analysis follows the impact statement.

Level of Significance Before Mitigation

This section identifies the level of significance of the impact before any mitigation is proposed.

Mitigation Measures

In some cases, following the impact discussion, reference is made to State and federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are set off with a summary heading and described using the format presented below:

MM AES-1 Project-specific mitigation is identified that would reduce the impact to the lowest degree feasible. The mitigation number links the particular mitigation to the impact it is associated with (AES-1 in this example); mitigation measures are numbered sequentially.

Level of Significance After Mitigation

This section identifies the resulting level of significance of the impact following mitigation.

Abbreviations used in the mitigation measure numbering are:

Code	Environmental Issue
AES	Aesthetics, Light, and Glare
AIR	Air Quality
BIO	Biological Resources
CUL	Cultural Resources and Tribal Cultural Resources
ENER	Energy
GEO	Geology, Soils, and Seismicity
GHG	Greenhouse Gas Emissions

Code	Environmental Issue
HAZ	Hazards and Hazardous Materials
HYD	Hydrology and Water Quality
LU	Land Use
NOI	Noise
PUB	Public Services
TRANS	Transportation
UTIL	Utilities and Service Systems

Cumulative Impacts

The discussion of cumulative impacts in this subsection analyzes the cumulative impacts of the proposed project, taken together with other past, present, and reasonably foreseeable future projects producing related impacts. The goal of this analysis is to determine whether the overall long-term impacts of all such projects would be cumulatively significant and to determine whether the project itself would cause a “cumulatively considerable” incremental contribution to any such cumulatively significant impacts. To determine whether the overall long-term impacts of all such projects would be cumulatively significant, the analysis generally considers the following:

- The area in which impacts of the proposed project would be experienced.
- The impacts of the proposed project that are expected in the area.
- Other past, proposed, and reasonably foreseeable projects that have had or are expected to have impacts in the same area.
- The impacts or expected impacts of these other projects.
- The overall impact that can be expected if the individual impacts from each project are allowed to accumulate.

“Cumulative impacts” refers to two or more individual impacts that, when considered together, are considerable, or that compound or increase other environmental impacts (CEQA Guidelines § 15355). Cumulative impacts can result from individually minor but collectively significant impacts taking place over time (40 Code of Federal Regulations [CFR] 1508.7). If the analysis determines that the potential exists for the project, taken together with other past, present, and reasonably foreseeable future projects, to result in a significant or adverse cumulative impact, the analysis then determines whether the project’s incremental contribution to any significant cumulative impact is itself significant (i.e., “cumulatively considerable”). The cumulative impact analysis for each individual resource topic is presented in each resource section of this Chapter immediately after the description of the direct project impacts and identified mitigation measures.

The cumulative impact analysis is guided by the requirements of CEQA Guidelines Section 15130. Key principles established by this section include:

- A cumulative impact only occurs from impacts caused by the proposed project together with other projects. An EIR should not discuss impacts that do not result from the proposed project.
- When the combined cumulative impact from the increment associated with the proposed project and other projects is not significant, an EIR need only briefly explain why the impact is not significant; detailed explanation is not required.
- An EIR may determine that a project’s contribution to a cumulative effect impact would be rendered less than cumulatively considerable if a project is required to implement or fund its fair share of mitigation intended to alleviate the cumulative impact.

The cumulative impact analysis relies on these principles as the basis for determining the significance of the proposed project’s cumulative contribution to various impacts.

Table 3-1 lists the relevant cumulative projects considered for the environmental analysis.

Table 3-1: Cumulative Projects

Jurisdiction	Project	Location	Characteristics	Status
City of American Canyon	Giovannoni Logistics Center	Green Island Road/Devlin Road	2.4 million square-foot logistics center	Approved; not constructed
	SDG Commerce 217	1075 Commerce Court	217,294 square-foot wine warehouse	Approved; under construction
	Pacific Gas and Electric Company (PG&E) Napa Regional Center	500 Boone Road	99,503 square-foot maintenance and operations center on 24.5 acres	Approved; under construction
	Green Island Road Widening	Green Island Road between State Route (SR) 29 and a cul-de-sac	Reconstruction of roadway; addition of a two-way left-turn lane, curb, gutter, sidewalks; construction of the Napa Valley Vine Trail	Approved; not constructed
	Napa-Vallejo Waste Management Authority Construction and Demolition Debris Recycling Facility	South Kelly Road/Devlin Road (southwest quadrant)	Enclosed construction and demolition debris recycling facility on 9 acres	Awaiting application
	Napa Airport Corporate Center	South Kelly Road/Devlin Road (southeast quadrant)	300,000 square-foot business park on 35 acres	Approved; not constructed

Jurisdiction	Project	Location	Characteristics	Status
	Watson Ranch Specific Plan	East of Napa Junction	1,253 market rate dwelling units; 186 affordable housing units; 50 live/work units; 93,500-square-foot commercial; 100-room hotel	Approved; under construction
	Broadway District Specific Plan	SR-29 corridor from the southern city limit to Green Island Road	1,200 dwelling units; 840,000 square feet of nonresidential uses within 300 acres	Approved; under Construction
Napa County	Sentinels of Freedom Property	West Napa Logistics; South of Napa County Airport	Two warehouses (224,593 square feet and 217,294 square feet) on 20.56 acres	Awaiting application
	Hess Collection/Laird Family General Plan Amendment and Rezoning	East of SR-29 from S. Kelly Road to Paoli Loop Road	4.5 million square feet industrial project on 279 acres	Application in process
Source: City of American Canyon. 2024.				

THIS PAGE INTENTIONALLY LEFT BLANK

3.1 - Aesthetics, Light, and Glare

3.1.1 - Introduction

This section describes the existing aesthetics, light, and glare setting and potential effects from project implementation on visual resources and the site and its surroundings. Descriptions and analysis in this section are based on-site reconnaissance conducted by FirstCarbon Solutions (FCS), as well as review of the City of American Canyon General Plan.

No public comments pertaining to aesthetics, light, and glare were received in response to the Notice of Preparation (NOP).

3.1.2 - Environmental Setting

Regional Setting

American Canyon is located in southern Napa County between the east bank of the Napa River and the Sulfur Springs Mountains foothills. State Route (SR) 29—known locally as Broadway Street—bisects the City from north to south and serves as the primary commercial corridor. Residential uses are generally located in the southern portion of the City, with commercial and industrial uses located in the northern portion near the Napa County Airport. American Canyon is characterized by a contemporary, low-rise, suburban appearance, with most development having occurred within the last 50 years.

Project Site

The project site contains undeveloped land (Exhibit 2-3). The project site gently slopes downward from east to west and is approximately 13 to 25 feet above mean sea level. A linear wetland and another isolated wetland are located within the northern portion of the property. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk. The southern portion of the project site contains several soil stockpiles that are intended for use at the SDG Commerce 217 property during construction of that site's entitled wine distribution warehouse.

Surrounding Land Uses

West

A Eucalyptus grove and North Slough are located west of the project site. The American Canyon Water Reclamation Facility is located west of North Slough.

North

An undeveloped parcel entitled for a wine distribution warehouse known as SDG Commerce 217 is located north of the project site. This parcel totals 10.39 acres.

East

Commerce Court, a two-lane undivided roadway, forms the eastern boundary of the project site. A Eucalyptus grove is located east of Commerce Court.

South

A wine distribution warehouse known as SDG Commerce 330 is located south of the project site. This parcel totals 15.24 acres. The Napa Junction Magnet Elementary School, Wetlands Edge Park, and residential uses are located to the south and are accessed from Eucalyptus Drive.

Light and Glare

The project site does not currently contain any sources of light and glare. Parking lot lights that employ full cut-off fixtures are present at the adjoining Commerce SDG 330 warehouse. Street lighting is present along Commerce Court.

3.1.3 - Regulatory Framework

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to aesthetics, light, and glare:

- Goal 1B** Provide for the orderly development of American Canyon that maintains its distinctive character.
- Goal 1C** Create a pattern and character of land use development that establishes American Canyon as a distinct “place” differentiated from adjacent urban areas, maintains a semi-rural character, and respects the environmental setting.
- Objective 1.4** Provide for a pattern of development that (a) establishes distinct neighborhoods, districts, places of community activity and culture and open spaces that are interlinked and promote a cohesive image, (b) locates jobs, commerce, recreation, and other places of community activity within close proximity to all housing units, minimizing the need for vehicular use, (c) achieves a balance of uses to serve both sides of Highway 29, and (d) establishes an overall compact urban form surrounded by open space.
- Objective 1.5** Maintain the character and quality of the natural environmental resources of the City and protect the population and development from the adverse impacts of environmental hazards.
- Policy 1.22.4** Require that development be designed to achieve a high level of quality and compatibility with existing uses including the consideration of the following:
- a. Architectural treatment of all building elevations;
 - b. Use of extensive landscape along the primary street frontages and parking lots;
 - and

- c. Enclosure of storage areas visible from principal highways (including Highway 29) and peripheral residential and commercial districts with decorative screening or other elements.

Policy 1.22.5 Require that industrial areas developed as research and development and office-oriented business parks be designed to convey a unified character by consideration of Policy 1.22.4 and the following:

- a. Inclusion of pedestrian walkways, arcades, and/or other visual elements to interconnect individual buildings;
- b. Differentiation of building façades by materials, color, architectural details and modulation of building volumes;
- c. Incorporation of extensive landscape in parking areas, along building frontages, and other public areas;
- d. Use of consistent and well-designed public and informational signage; and
- e. Installation of elements that define the key entries to the industrial district.

Municipal Code 19.21.020(M), Lighting

Municipal Code Section 19.21.020(M), Lighting, requires that public parking with three or more vehicle parking spots shall have lighting facilities capable of providing sufficient illumination at every point of the parking area and that a lighting study may be required by the community development director. Further, all parking area illumination, including security lighting, shall be designed to reflect away from adjoining properties and right-of-way.

Municipal Code 19.41, Design Permits

A design permit application must be approved by the community development director or planning commission prior to building construction or alteration, including commercial structures and industrial structures. The purpose of the design permit is to provide for a review process that promotes excellence in site planning and architectural design, consistent with General Plan design policies, encourages the harmonious appearance of buildings and sites, ensures that new and modified uses and development are compatible with existing and potential uses in the surrounding area, and produce an environment of stable, desirable character.

Municipal Code 19.42, Conditional Use Permits

A conditional use permit application shall incorporate concurrent applications, such as a design permit application when applicable. The Planning Commission is the approval authority for a conditional use permit application unless the application is subject to Municipal Code 19.01(C,D), Relationship to other Regulations and Requirements.

Municipal Code 19.01(C,D), Relationship to other Regulations and Requirements

A discretionary application that is subject to a CEQA environmental review that requires a statement of overriding considerations shall be approved by the City Council.

3.1.4 - Methodology

FCS evaluated potential aesthetics, light, and glare impacts through site reconnaissance conducted in November 2022, as well as review of the City of American Canyon General Plan and project plans.

3.1.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether impacts to aesthetics are significant environmental effects. Except as provided in Public Resources Code Section 21099, would the project:

- a) Have a substantial adverse effect on a scenic vista? (Refer to Section 7, Effects Found not to be Significant).
- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a State Scenic Highway? (Refer to Section 7, Effects Found not to be Significant).
- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

3.1.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Visual Character

Impact AES-1: The proposed project, located in a non-urbanized area, would not substantially degrade the existing visual character or the quality of public views of the site and its surroundings. (Public views are those that are experienced from a publicly-accessible vantage point.)

Impact Analysis

Per Public Resources Code Section 21071, an urbanized area includes an incorporated city that has a population of at least 100,000 persons. The project site is located within the City of American Canyon, which has a population of 21,338 as of January 1, 2023¹ and is therefore not considered an urbanized area. Public views of the site are limited to those as seen from Commerce Court and partially obscured views as seen from portions of Napa Junction Magnet Elementary School.

The project site is undeveloped and slopes gently downward from east to west. Site elevation ranges from 13 to 25 feet above mean sea level. The southern portion of the project site contains a large

¹ California Department of Finance. 2023. Report E-1: Population Estimates for Cities, Counties, and the State, January 1, 2022 and 2023. Website: <https://dof.ca.gov/forecasting/demographics/estimates-e1/>. Accessed November 6, 2023.

soil mound that is intended for use on the SDG Commerce 217 property during construction of that site's entitled wine distribution warehouse. A linear wetland and another isolated wetland are located within the northern portion of the property. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk.

The project vicinity is characterized by industrial development and eucalyptus groves. The industrial development is primarily warehouses. The project is bounded on the north by the SDG Commerce 217 Wine Storage and Distribution Center currently under construction. To the west is an 11.23-acre parcel which remains unimproved with a eucalyptus tree grove and a wire fence; to the south is the SDG Commerce 330 Distribution Center; to the east is a 68-foot-wide City Public Access and Utility Easement within the Commerce Court Extension; to the east of this easement is a 40-acre parcel that is improved with a mobile home, dirt/gravel roads, and a Paintball Jungle recreational business consisting of various sheds and lean-to structures and wire fences.

The proposed project consists of the development of a 219,834-square foot wine warehouse. The proposed project would have a floor area ratio (FAR) of 0.496 (Exhibit 2-5 and Exhibit 3.1-1).

Construction of the project would temporarily employ construction-related equipment. Because construction is a temporary activity it is not expected to significantly impact visual character or quality of the site and its surroundings.

The proposed warehouse would be similar in appearance to other similar structures in the Green Island Business Park, particularly the adjacent SDG Commerce 330 building to the south and the future SDG Commerce 217 building to the north. The proposed warehouse would employ earth-tone colors and would have perimeter concrete tilt wall panels with varying parapet heights, as well as accent spandrel glass/metal canopy features around corners of the buildings to provide additional modulation. The average roof height of the building would be approximately 35 feet and portions of the building's exterior walls would have varying heights to provide architectural relief. The proposed use would be consistent with the City of American Canyon General Plan land use designation of "Commercial Recreation" and zoning designation of "Recreation" for the project site and would be similar to and compatible with surrounding wine distribution warehouse uses (See Section 3.9, Land Use and Planning for further discussion). Furthermore, approval by the community development director or planning commission of a design permit for the project is required by Municipal Code 19.41.030, which requires, among other things, review of site plans and architectural design, General Plan consistency, and compatibility with existing and potential uses in the surrounding area. Therefore, the proposed project would not substantially degrade the existing visual character or the quality of public views of the site and its surroundings. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

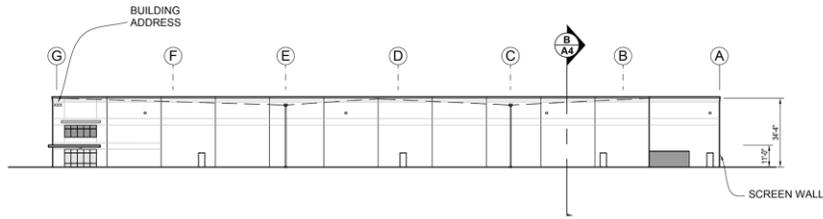
Light and Glare

Impact AES-2: **The proposed project would not create a new source of substantial light or glare which could adversely affect day or nighttime views in the area.**

Impact Analysis

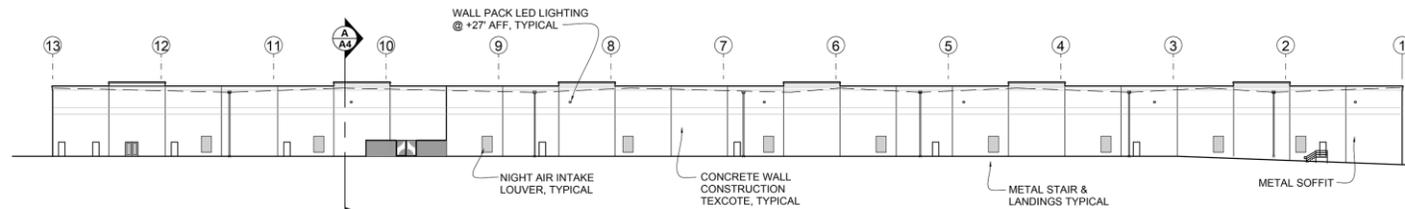
The project site does not currently contain any existing sources of light and glare. The adjacent SDG Commerce 330 property contains parking lot lights that employ full cut-off fixtures.

The development of the proposed project would result in the installation of new sources of light and glare on the project site during both construction and operation. Construction lighting would be minimal and temporary; operational exterior lighting would include building mounted light fixtures and pole-mounted light fixtures within parking areas surrounding the building.



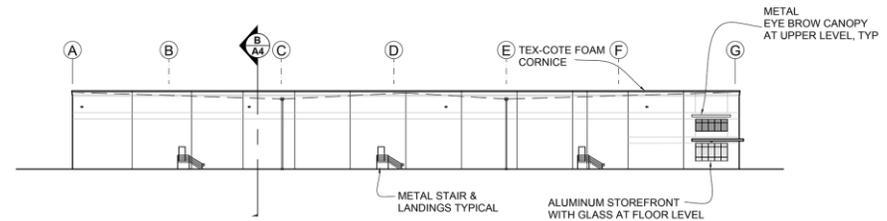
EAST ELEVATION

SCALE: 1" = 30'



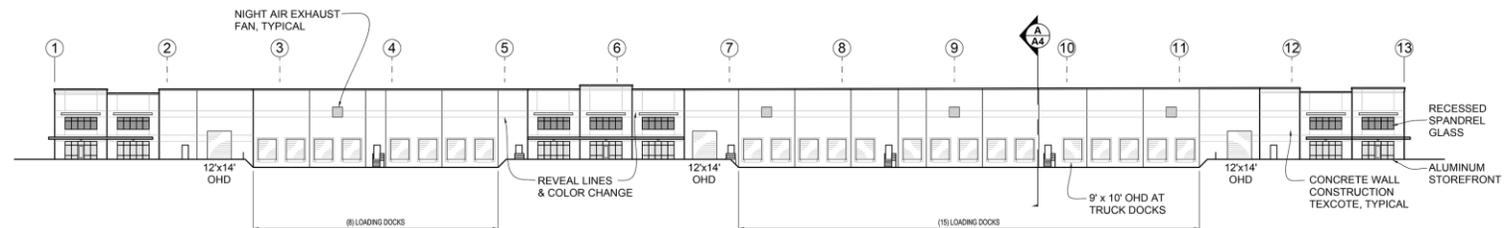
NORTH ELEVATION

SCALE: 1" = 30'



WEST ELEVATION

SCALE: 1" = 30'



SOUTH ELEVATION

SCALE: 1" = 30'

Source: Industrial and Commercial Contractors, LP. Ward Architects, Inc. 01/25/2023.

THIS PAGE INTENTIONALLY LEFT BLANK

Parking lot lighting would be consistent with requirements of the City of American Canyon Municipal Code 19.21.020(M), including direction of lighting away from adjoining properties and right-of-way. The lights would be “shoebox” fixtures, typically 30 feet in height, which are designed with dimmable light-emitting diode (LED) fixtures that direct light toward the ground to reduce glare to surrounding properties. A photometric study would be prepared to analyze the light pole spacing to maximize light coverage while minimizing excessive light spillage off-site. Illuminated signage may also be employed.

A conditional use permit application submittal and approval would be required per Municipal Code Section 19.05.020. The conditional use permit application would be reviewed per the procedures and general standards outlined in Municipal Code Chapter 19.42, which include consistency with the standards of the General Plan and applicable zoning district as well as compliance with applicable policies of the Napa County Airport Land Use Compatibility Plan. With the compulsory implementation of applicable municipal codes, including, but not limited to design permit approval, impacts related to light and glare would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.1.7 - Cumulative Impacts

The geographic scope of the cumulative aesthetics, light, and glare analysis is the 0.25-mile radius surrounding the project site. This is the area within view of the project site and, therefore, the area most likely to experience cumulative changes in visual character or experience cumulative light and glare impacts.

Several of the projects listed in Table 4-1 are immediately adjacent to or within 0.25 mile of the project site (e.g., SDG Commerce 217).

The project site and the surrounding area have long been planned to accommodate industrial uses and are isolated and separate from the residential areas of the City. The existing surrounding uses are large industrial uses. The City of American Canyon General Plan designates the project site as “Commercial Recreation,” and the American Canyon Zoning Ordinance zones the project site as “Recreation.” Both land use designations permit the types of end uses envisioned by the proposed project. Other existing, approved, and reasonably foreseeable future developments would similarly be required to comply with applicable land use and zoning.

The project as proposed would be compatible with surrounding industrial uses and would be consistent with the City of American Canyon General Plan land use designation and zoning for the project site. A Design Permit would be required from the City to approve the specific building and site design, including building height. Other past projects, present projects under construction, and reasonably foreseeable projects in the surrounding area would be subject to similar landscaping and design requirements. Therefore, the proposed project, in conjunction with other past, present, and

reasonably foreseeable projects, would not result in cumulatively significant visual character impacts.

The past, present, and reasonably foreseeable developments near the project site have contributed to—and will continue to contribute to—ambient light and glare in the project vicinity. The proposed project would install new sources of light and glare on the project site from exterior building lighting, security lighting, and lights and glare associated with vehicles accessing the project site. Compulsory compliance with Municipal Code lighting and design permit requirements would ensure that light and glare would be minimized to the extent feasible. Other past, present, and reasonably foreseeable future developments in the project vicinity that involve the installation of new exterior lighting fixtures have been and would be required to implement similar standard measures to prevent light spillage. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable projects in the applicable geographic area, would not have a cumulatively significant impact related to light and glare.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.2 - Air Quality

This section describes existing air quality conditions regionally and locally as well as the relevant regulatory framework. This section also evaluates the possible impacts related to air quality that could result from implementation of the project. Information included in this section is based on project-specific air quality modeling results utilizing California Emissions Estimator Model (CalEEMod) Version 2022.1 and the United States Environmental Protection Agency (EPA) American Meteorological Society Regulatory Model (AERMOD) air dispersion model (Version 22112). Complete modeling output is provided in Appendix B.

The following public comments were received during the Environmental Impact Report (EIR) scoping period related to air quality.

- Requests that the Department of Justice best practices and mitigation measures for warehouses¹ be incorporated into the proposed project.
- Concern regarding the project's diesel truck emissions and associated health impacts.

3.2.1 - Environmental Setting

Regional Geography and Climate

Air quality is affected by the rate and location of pollutant emissions and by climatic conditions that influence the movement and dispersion of pollutants. Atmospheric conditions, such as wind speed, wind direction, and air temperature gradients, along with local and regional topography, influence the relationship between air pollutant emissions and air quality.

The project site is in the San Francisco Bay Area Air Basin (SFBAAB), which consists of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, southwestern Solano, and southern Sonoma Counties. SFBAAB covers approximately 5,540 square miles of complex terrain, consisting of coastal mountain ranges, inland valleys, and the San Francisco Bay. The SFBAAB is generally bounded on the west by the Pacific Ocean, on the north by the Coast Ranges, and on the east and south by the Diablo Range.

The climate within the SFBAAB is dominated by a strong, semi-permanent, subtropical high-pressure cell over the northeastern Pacific Ocean. Climate is also affected by the adjacent oceanic heat reservoir's moderating effects. Mild summers and winters, moderate rainfall and humidity, and daytime onshore breezes characterize regional climatic conditions in the San Francisco Bay Area (Bay Area). In summer, when the high-pressure cell is strongest and farthest north, fog forms in the morning and temperatures are mild. In winter, when the high-pressure cell is weakest and farthest south, occasional rainstorms occur.

¹ California Department of Justice. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: <https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf>. Accessed November 28, 2023.

Winter daytime temperatures in the SFBAAB typically average in the mid-50°F (degrees Fahrenheit), with nighttime temperatures averaging in the low 40°F. Summer daytime temperatures typically average in the 70°F, with nighttime temperatures averaging in the 50°F. Precipitation varies in the region, but in general, annual rainfall is lowest in the coastal plain and inland valley, higher in the foothills, and highest in the mountains.

Air Pollutant Types, Sources, and Effects

Criteria Air Pollutants

Concentrations of criteria air pollutants are used as indicators of air quality conditions. Air pollutants are termed criteria air pollutants if they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. According to the EPA, criteria air pollutants are ozone, particulate matter (PM₁₀ and PM_{2.5}), nitrogen dioxide (NO₂), carbon monoxide (CO), lead, and sulfur dioxide (SO₂). Table 3.2-1 provides a summary of the types, sources, and effects of criteria air pollutants.

Table 3.2-1: Description of Criteria Pollutants of National and California Concern

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
Ozone	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), nitrous oxides (NO _x), and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NO _x) are mobile sources (on-road and off-road vehicle exhaust).	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.
Particulate matter (PM ₁₀) Particulate matter (PM _{2.5})	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM ₁₀ refers to particulate matter that is between 2.5 and 10 microns in diameter, (one micron is one-millionth of a meter). PM _{2.5} refers to particulate matter that is 2.5 microns or less in diameter, about one-thirtieth the size of the average human hair.	Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation-related sources are from	<ul style="list-style-type: none"> • Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias. • Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
		vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.	
Nitrogen dioxide (NO ₂)	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO _x (NO, NO ₂ , NO ₃ , N ₂ O, N ₂ O ₃ , N ₂ O ₄ , and N ₂ O ₅). NO _x is a precursor to ozone, PM ₁₀ , and PM _{2.5} formation. NO _x can react with compounds to form nitric acid and related small particles and result in particulate matter (PM) related health effects.	NO _x is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO _x emissions. NO ₂ concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration; increased visits to hospital for respiratory illnesses.
Carbon monoxide (CO)	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood-burning, and natural sources.	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.
Sulfur dioxide (SO ₂)	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 parts per million (ppm), the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO _x) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below State and federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM ₁₀ .	Human caused sources include fossil fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethyl sulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

Criteria Pollutant	Physical Description and Properties	Sources	Most Relevant Effects from Pollutant Exposure
		below the maximum standards.	
Lead (Pb)	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or federal standards at any monitoring station since 1982.	Lead ore crushing, lead ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.

Sources:

California Office of Environmental Health Hazard Assessment (OEHHA). 2001. Health Effects of Diesel Exhaust. Website: <https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf>. Accessed November 28, 2023.

National Archives and Records Administration. 2009. Part II, United States Environmental Protection Agency. 40 Code of Federal Regulations Parts 50 and 58, Primary National Ambient Air Quality Standard for Nitrogen Dioxide; Proposed Rule. July 15. Website: <https://www.gpo.gov/fdsys/pkg/FR-2009-07-15/pdf/E9-15944.pdf>. Accessed November 28, 2023.

National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; United States. Department of Health and Human Services, Public Health Service. Benzene. November 3. Website: <http://ntp.niehs.nih.gov/ntp/roc/twelfth/profiles/Benzene.pdf>. Accessed November 28, 2023.

National Toxicology Program. 2016. Report on Carcinogens, 14th Edition; United States Department of Health and Human Services, Public Health Service. Diesel Exhaust Particles. November 3. Website: <https://ntp.niehs.nih.gov/ntp/roc/content/profiles/dieselexhaustparticulates.pdf>. Accessed November 28, 2023.

South Coast Air Quality Management District (South Coast AQMD). 2007. Final 2007 Air Quality Management Plan. June. Website: <https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2007-air-quality-management-plan/2007-aqmp-final-document.pdf?sfvrsn=2>. Accessed November 28, 2023.

United States Environmental Protection Agency (EPA). 2016. Nitrogen Dioxide (NO₂) Pollution. Basic Information about NO₂. Website: <https://www.epa.gov/no2-pollution/basic-information-about-no2#What%20is%20NO2>. Accessed November 28, 2023.

United States Environmental Protection Agency (EPA). 2020. Particulate Matter Pollution. Health and Environmental Effects of Particulate Matter (PM). Website: <https://www.epa.gov/pm-pollution/health-and-environmental-effects-particulate-matter-pm>. Accessed November 28, 2023.

United States Environmental Protection Agency (EPA). 2020. Health Effects Notebook for Hazardous Air Pollutants. Website: www.epa.gov/ttn/atw/hlthef/hapindex.html. Accessed November 28, 2023.

United States Environmental Protection Agency (EPA). 2021. Indoor Air Quality (IAQ). Volatile Organic Compounds' Impact on Indoor Air Quality. Website: <https://www.epa.gov/indoor-air-quality-iaq/volatile-organic-compounds-impact-indoor-air-quality>. Accessed November 28, 2023.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations,

painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engine exhaust that contains solid material known as diesel particulate matter (DPM). More than 90 percent of DPM is less than one micron in diameter (about 1/70 the diameter of a human hair) and thus is a subset of PM with aerodynamic diameters equal to or less than 2.5 microns (PM_{2.5}). Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.²

TACs are different from criteria pollutants because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic risk and by chronic (i.e., long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

TACs include both organic and inorganic chemical substances. While DPM is a main source, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. People exposed to toxic air pollutants at sufficient concentrations and durations may have an increased chance of developing cancer or experiencing other serious health effects. These health effects can include damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems.³

Air Quality

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features. Atmospheric conditions such as wind speed, wind direction, and air temperature inversions interact with the physical features of the landscape to determine the movement and dispersal of air pollutant emissions and, consequently, their effect on air quality.

Regional Air Quality

The Bay Area Air Quality Management District (BAAQMD) is the regional agency regulating air quality within the nine-county SFBAAB.

Air Pollutant Standards and Attainment Designations

Air pollutant standards have been adopted by the EPA and the California Air Resources Board (ARB) for the following six criteria air pollutants that affect ambient air quality: ozone, NO₂, CO, SO₂, lead, and PM, which is subdivided into two classes based on particle size: PM₁₀ and PM_{2.5}. These air pollutants are called “criteria air pollutants” because they are regulated by developing specific public health- and welfare-based criteria as the basis for setting permissible levels. California has also established standards for TACs such as visibility-reducing particles, sulfates, hydrogen sulfide (H₂S), and vinyl chloride. H₂S is regulated as a nuisance based on its odor detection level. If the standard were based on adverse health effects, it would be set at a much higher level. Vinyl chloride is a TAC

² California Air Resources Board (ARB). Inhalable Particulate Matter and Health (PM_{2.5} and PM₁₀). Website: <https://ww2.arb.ca.gov/resources/inhalable-particulate-matter-and-health>. Accessed November 29, 2023.

³ United States Environmental Protection Agency (EPA). Health and Environmental Effects of Hazardous Air Pollutants. Website: <https://www.epa.gov/haps/health-and-environmental-effects-hazardous-air-pollutants>. Accessed November 29, 2023.

and currently regulated as one, but California established a need to regulate it with a health-based “criteria” prior to the establishment of their toxics programs. Table 3.2-2, below, shows the federal and State air quality standards for various components.

Table 3.2-2: Federal and State Air Quality Standards in the SFBAAB

Air Pollutant	Averaging Time	California Standard	Federal Standard ^a
Ozone	1 Hour	0.09 ppm	—
	8 Hour	0.070 ppm	0.070 ppm ^f
Nitrogen dioxide ^b (NO ₂)	1 Hour	0.18 ppm	0.100 ppm
	Annual	0.030 ppm	0.053 ppm
Carbon monoxide (CO)	1 Hour	20 ppm	35 ppm
	8 Hour	9.0 ppm	9 ppm
Sulfur dioxide ^c (SO ₂)	1 Hour	0.25 ppm	0.075 ppm
	3 Hour	—	0.5 ppm
	24 Hour	0.04 ppm	0.14 (for certain areas)
	Annual	—	0.030 ppm (for certain areas)
Lead ^e	30-day	1.5 µg/m ³	—
	Quarter	—	1.5 µg/m ³
	Rolling 3-month average	—	0.15 µg/m ³
Particulate matter (PM ₁₀)	24 Hour	50 µg/m ³	150 µg/m ³
	Mean	20 µg/m ³	—
Particulate matter (PM _{2.5})	24 Hour	—	35 µg/m ³
	Annual	12 µg/m ³	12.0 µg/m ³
Visibility-reducing particles	8 Hour	See note below ^d	
Sulfates	24 Hour	25 µg/m ³	—
Hydrogen sulfide	1 Hour	0.03 ppm	—
Vinyl chloride ^e	24 Hour	0.01 ppm	—

Notes:

µg/m³ = micrograms per cubic meter

30-day = 30-day average

Annual = Annual Arithmetic Mean

ppm = parts per million (concentration)

Quarter = Calendar quarter

^a Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect public health. All standards listed are primary standards except for 3-hour SO₂, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

^b To attain the 1-hour nitrogen dioxide national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).

Air Pollutant	Averaging Time	California Standard	Federal Standard ^a
<p>^c On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 parts per billion (ppb). The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.</p> <p>^d Visibility-reducing particles: In 1989, the ARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are “extinction of 0.23 per kilometer” and “extinction of 0.07 per kilometer” for the Statewide and Lake Tahoe Air Basin standards, respectively.</p> <p>^e The ARB has identified lead and vinyl chloride as “toxic air contaminants” with no threshold level of exposure for adverse health effects determined. These actions allow for implementing control measures at levels below the ambient concentrations specified for these pollutants.</p> <p>^f The EPA Administrator approved a revised 8-hour ozone standard of 0.07 ppb on October 1, 2015. The new standard went into effect 60 days after publication the Final Rule in the Federal Register. The Final Rule was published in the Federal Register on October 26, 2015, and became effective on December 28, 2015.</p> <p>Source: California Air Resources Board (ARB). California Ambient Air Quality Standards. Website: https://ww2.arb.ca.gov/resources/california-ambient-air-quality-standards. Accessed November 29, 2023.</p> <p>California Air Resources Board (ARB). National Ambient Air Quality Standards. Website: https://ww2.arb.ca.gov/resources/national-ambient-air-quality-standards. Accessed November 29, 2023.</p>			

Air quality monitoring stations operated by the ARB and BAAQMD measure ambient air pollutant concentrations in the SFBAAB. In general, the SFBAAB experiences low concentrations of most pollutants compared to federal or State standards.

Both the EPA and ARB use ambient air quality monitoring data to designate areas according to their attainment status for criteria air pollutants. These designations identify the areas with air quality problems and initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. “Attainment” status refers to those regions that are meeting federal and/or State standards for a specified criteria pollutant. “Nonattainment” refers to regions that do not meet federal and/or State standards for a specified criteria pollutant. “Unclassified” refers to regions with insufficient data to determine the region’s attainment status for a specified criteria air pollutant. Each standard has a different definition, or “form” of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual PM_{2.5} standard is met if the 3-year average of the annual average PM_{2.5} concentration is less than or equal to the standard.

Air Pollutant Standards and Attainment Designations

Table 3.2-3 shows the current attainment designations for the SFBAAB. The SFBAAB is designated as nonattainment for the State ozone, PM₁₀, and PM_{2.5} standards and the national ozone and PM_{2.5} standards. Ozone and fine particle pollution, or PM_{2.5}, are the major regional air pollutants of concern in the San Francisco Bay Area. Ozone is primarily a problem in the summer, and fine particle pollution in the winter.

Table 3.2-3: Attainment Status

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	N/A
PM ₁₀	Nonattainment	Unclassified
PM _{2.5}	Nonattainment	Nonattainment
Sulfates	Attainment	N/A
Hydrogen Sulfates	Unclassified	N/A
Visibility-reducing Particles	Unclassified	N/A
Lead	N/A	Attainment
Notes: CO = carbon monoxide N/A = information not available NO ₂ = nitrogen dioxide PM ₁₀ = particulate matter, including dust, 10 micrometers or less in diameter PM _{2.5} = particulate matter including dust, 2.5 micrometers or less in diameter SO ₂ = sulfur dioxide Source: Bay Area Air Quality Management District (BAAQMD). 2017. Air Quality Standards and Attainment Status. January 5. Website: http://www.baaqmd.gov/research-and-data/air-quality-standards-and-attainment-status . Accessed November 29, 2023.		

Local Air Quality

The local air quality can be evaluated by reviewing relevant air pollution concentrations near the project area. The air quality monitoring station closest to the project site is the Vallejo – 304 Tuolumne Street Air Monitoring Station, located approximately six miles south of the project site. All data, with the exception of data on PM_{2.5}, are taken from this monitoring station. PM_{2.5} data are available at and taken from Napa Valley College Air Monitoring Station, located approximately six miles north of the project site.

Table 3.2-4 summarizes the recorded ambient air data at the representative monitoring stations for the years 2020 through 2022, which is the most current data available at the time of this analysis. Monitoring results for CO and SO₂ are not included on the table since no recent monitoring data for Napa County or the SFBAAB was available for these pollutants. Generally, monitoring is not conducted for pollutants that are no longer likely to exceed ambient air quality standards.

Table 3.2-4: Air Quality Monitoring Summary

Air Pollutant	Averaging Time	Item	2020	2021	2022
Ozone	1 Hour	Maximum 1 Hour (ppm)	0.096	0.099	0.066
		Days > State Standard (0.09 ppm)	1	1	0

Air Pollutant	Averaging Time	Item	2020	2021	2022
	8 Hour	Maximum 8 Hour (ppm)	0.078	0.072	0.058
		Days > State Standard (0.07 ppm)	1	1	0
		Days > National Standard (0.070 ppm)	1	1	0
NO ₂	Annual	Annual Average (ppm)	0.007	ID	0.006
	1 Hour	Maximum 1 Hour (ppm)	0.048	0.041	0.044
		Days > State Standard (0.18 ppm)	0	0	0
Inhalable coarse particles (PM ₁₀)	Annual	Annual Average (µg/m ³)	18.6	9.9	ID
	24 Hour	Maximum 24 Hour (µg/m ³)	125	22.9	ID
		Days > State Standard (50 µg/m ³)	2	0	ID
		Days > National Standard (150 µg/m ³)	0	0	ID
Fine particulate matter (PM _{2.5})	Annual	Annual Average (µg/m ³)	12.1	8.8	8.2
	24 Hour	Maximum 24 Hour (µg/m ³)	152.7	32	21
		Days > National Standard (35 µg/m ³)	12	0	0
<p>Notes: µg/m³ = micrograms per cubic meter Bold = exceedance ID = insufficient data National Standard = National Ambient Air Quality Standard ND = no data NO₂ = nitrogen dioxide PM₁₀ = particulate matter, including dust, 10 micrometers or less in diameter PM_{2.5} = particulate matter including dust, 2.5 micrometers or less in diameter ppm = parts per million State Standard = California Ambient Air Quality Standard (CAAQS) Source: California Air Resources Board (ARB). 2023. iADAM: Top 4 Summary. Website: https://www.arb.ca.gov/adam/select8/sc8start.php. Accessed November 29, 2023.</p>					

Air Pollution Sensitive Receptors

Air pollution does not affect every individual in the population in the same way, and some groups are more sensitive to adverse health effects than others. Residences, schools, day care centers, hospitals, nursing and convalescent homes, and parks are often identified as “sensitive receptors” since their occupants are sensitive to poor air quality. The groups identified with these land uses may have increased susceptibility to respiratory distress or, as in the case of residential receptors, their exposure time is greater than that for other land uses. BAAQMD defines sensitive receptors as children, adults, and seniors occupying or residing in residential dwellings, schools, day care centers, hospitals, and senior-care facilities.

Project Vicinity

The closest off-site air pollution sensitive receptors near the project site include:

- A single-family residence approximately 850 feet east of the project site.

- A neighborhood approximately 1,600 feet south of the project site.
- Napa Junction Magnet Elementary School, approximately 1,200 feet south of the project site.

Project Site

The project site is vacant and no sensitive receptors currently exist on the project site.

Existing Air Pollutant Emissions

Project Site Vicinity

The primary sources of air pollutants (both criteria air pollutant and TACs) in the project site vicinity include the various other surrounding industrial properties, building-related energy use, and motor-related vehicle trips associated with the local business uses. The project site shares a driveway with a neighboring industrial warehouse immediately to the south. The project site is located approximately 4,800 feet west of State Route (SR) 29 and approximately 1.57 miles southeast of Napa County Airport. Other activities that result in emissions include space and water heating, landscape maintenance, and any surrounding industrial uses that can store, produce, decommission, or otherwise handle hazardous materials.

Project Site

The project site itself is currently vacant and does not produce any air pollutants.

3.2.2 - Regulatory Framework

Federal

Clean Air Act

Congress established much of the basic structure of the Clean Air Act (CAA) in 1970 and made major revisions in 1977 and 1990. Six common air pollutants (also known as criteria pollutants) are addressed in the CAA. These are particulate matter, ground level ozone, CO, sulfur oxides, nitrogen oxides, and lead. The EPA calls these pollutants criteria air pollutants because it regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels. The set of limits based on human health are called primary standards. Another set of limits intended to prevent environmental and property damage are called secondary standards.⁴ The federal standards are called National Ambient Air Quality Standards (NAAQS). The air quality standards provide benchmarks for determining whether air quality is healthy at specific locations and whether development activities will cause or contribute to a violation of the standards. The criteria pollutants are:

- Ozone
- Nitrogen dioxide (NO₂)
- Lead
- Particulate matter (PM₁₀ and PM_{2.5})
- Carbon monoxide (CO)
- Sulfur dioxide

⁴ United States Environmental Protection Agency (EPA). 2014. Clean Air Act Requirements and History. Website: <https://www.epa.gov/clean-air-act-overview/clean-air-act-requirements-and-history>. Accessed November 29, 2023.

The federal standards were set to protect public health, including that of sensitive individuals; thus, the EPA is tasked with updating the standards as more medical research is available regarding the health effects of the criteria pollutants. Primary federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health.

The CAA also requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The federal CAA amendments of 1990 added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies.

EPA Emission Standards for New Off-Road Equipment

Before 1994, there were no standards to limit the amount of emissions from off-road equipment. In 1994, the EPA established emission standards for hydrocarbons, NO_x, CO, and PM to regulate new pieces of off-road equipment. These emission standards came to be known as Tier 1. Since that time, increasingly more stringent Tier 2, Tier 3, and Tier 4 (interim and final) standards were adopted by the EPA, as well as by the ARB. Each adopted emission standard was phased in over time. New engines built in and after 2015 across all horsepower sizes must meet Tier 4 final emission standards. In other words, new manufactured engines cannot exceed the emissions established for Tier 4 final emissions standards.

State

California Air Quality Control Plan (State Implementation Plan)

An SIP is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain federal standards. The SIP for the State of California is administered by the ARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's SIP incorporates individual federal attainment plans for regional air districts—an air district prepares their federal attainment plan, which is sent to the ARB to be approved and incorporated into the California SIP. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms for attaining and maintaining air quality standards.

Areas designated nonattainment must develop air quality plans and regulations to achieve standards by specified dates, depending on the severity of the exceedances. For much of the country, implementation of federal motor vehicle standards and compliance with federal permitting requirements for industrial sources are adequate to attain air quality standards on schedule. For many areas of California, however, additional State and local regulation is required to achieve the standards. Local air districts and other agencies prepare SIP elements and submit them to the ARB for review and approval. The ARB will then forward SIP revisions to the EPA for approval and publication in the Federal Register. The BAAQMD 2017 Clean Air Plan is the SIP for the SFBAAB. The 2017 Clean Air Plan accommodates growth by projecting the growth in emissions based on different indicators. For example, population forecasts adopted by the Association of Bay Area Governments (ABAG) are used

to forecast population-related emissions. Through the planning process, emissions growth is offset by basin-wide controls on stationary, area, and transportation sources of air pollution.

California Clean Air Act

The California Legislature enacted the California Clean Air Act (CCAA) in 1988 to address air quality issues of concern not adequately addressed by the federal CAA at the time. California's air quality problems were and continue to be some of the most severe in the nation, and required additional actions beyond the federal mandates. The ARB administers the California Ambient Air Quality Standards (CAAQS) for the 10 air pollutants designated in the CCAA. The 10 State air pollutants are the six federal standards listed above as well as visibility-reducing particulates, hydrogen sulfide, sulfates, and vinyl chloride. The EPA authorized California to adopt its own regulations for motor vehicles and other sources that are more stringent than similar federal regulations implementing the CAA. Generally, the planning requirements of the CCAA are more stringent than the federal CAA; therefore, consistency with the CCAA will also demonstrate consistency with the CAA.

Other ARB responsibilities include but are not limited to overseeing local air district compliance with California and federal laws; approving local air quality plans; submitting SIPs to the EPA; monitoring air quality; determining and updating area designations and maps; conducting basic research aimed at providing a better understanding between emissions and public well-being, and setting emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

California Health and Safety Code Section 39655 and California Code of Regulations Title 17 Section 93000 (Substances Identified as Toxic Air Contaminants)

The ARB identifies substances as TACs as defined in Health and Safety Code Section 39655 and listed in Title 17, Section 93000 of the California Code of Regulations, "Substances Identified As Toxic Air Contaminants." A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or 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. In general, for those TACs that may cause cancer, there are thresholds set by regulatory agencies below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined and for which the State and federal governments have set ambient air quality standards. According to the California Almanac of Emissions and Air Quality, the majority of the estimated health risk from TACs for the State of California can be attributed to relatively few compounds, the most important of which is DPM from diesel-fueled engines.

California Low Emission Vehicle Program

The ARB first adopted Low Emission Vehicle (LEV) program standards in 1990. These first LEV standards ran from 1994 through 2003. LEV II regulations, running from 2004 through 2010, represent continuing progress in emission reductions. As the State's passenger vehicle fleet continues to grow and more sport utility vehicles and pickup trucks are used as passenger cars rather than work vehicles, the more stringent LEV II standards were adopted to provide reductions necessary for California to meet federally mandated clean air goals outlined in the 1994 SIP. In 2012,

the ARB adopted the LEV III amendments to California’s LEV regulations. These amendments, also known as the Advanced Clean Car Program, include more stringent emission standards for model years 2017 through 2025 for both criteria pollutants and greenhouse gas (GHG) emissions for new passenger vehicles.⁵

The most recent amendments in 2022, the Advanced Clean Cars II Regulations, apply to light-duty passenger car, truck and SUV emissions starting with the 2026 model year through 2035. It will take augmenting the State’s already growing Zero-Emission Vehicle (ZEV) market and robust motor vehicle emission control rules to meet more aggressive tailpipe emissions standards and ramp up to 100 percent ZEVs. By 2035, all new passenger cars, trucks and SUVs sold in California will be zero emissions.

California On-Road Heavy-Duty Vehicle Program

The ARB has adopted standards for emissions from various types of new on-road heavy-duty vehicles. Section 1956.8, Title 13, California Code of Regulations contains California’s emission standards for on-road heavy-duty engines and vehicles, and test procedures. The ARB has also adopted programs to reduce emissions from in-use heavy-duty vehicles including the Heavy-Duty Diesel Vehicle Idling Reduction Program, the Heavy-Duty Diesel In-Use Compliance Program, the Public Bus Fleet Rule and Engine Standards, and the School Bus Program and others.⁶

The Truck and Bus regulation (California Code of Regulations [CCR] § 2025) and amendments requires diesel trucks and buses that operate in California to be upgraded to reduce emissions. The regulation applies to diesel-fueled trucks and buses with a gross vehicle weight of greater than 14,000 pounds to upgrade to 2010 or newer model year engines.

The California “Omnibus” regulation follows the completion of the Truck and Bus regulation with continued reduction of NO_x and PM emissions from heavy-duty gasoline and diesel on-road vehicles. This regulation updated standards, testing and compliance mechanisms for NO_x and PM emissions from heavy-duty on-road vehicles for model year 2024 through 2031. The rule will be implemented in phases with the standards becoming more stringent in 2027.

The Advanced Clean Truck Regulation and recently approved Advanced Clean Fleets (ACF) regulation are part of a holistic approach to accelerate a large-scale transition of zero-emission medium and heavy-duty vehicles. Together, these regulations will transition California’s truck fleet to ZEV by 2045. The regulation has a manufacturer sales requirement; by 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b–3 truck sales, 75 percent of class 4–8 straight truck sales, and 40 percent of truck tractor sales. The rule also has a company and fleet requirement that gathers information about shipments and shuttle services. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

⁵ California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: <http://www.arb.ca.gov/cc/ccms/ccms.htm>. Accessed November 29, 2023.

⁶ California Air Resources Board (ARB). 2013. The California Almanac of Air Quality and Emissions—2013 Edition. Website: <http://www.arb.ca.gov/aqd/almanac/almanac13/almanac13.htm>. Accessed November 29, 2023.

The Heavy-Duty Inspection and Maintenance regulation was approved on December 9, 2021, with implementation to be phased in starting January 2023.⁷ Its goal is to ensure that vehicles' emissions control systems are properly functioning when traveling on California's roadways. Trucks registered in other states would have to comply with the Clean Truck Check (HD I/M) regulation if they drive on California's roadways. HD I/M implements a program combining periodic vehicle testing requirements with other emissions monitoring techniques and expanded enforcement strategies. This will ensure that vehicles in need of emissions-related repairs are identified and will ensure that any needed repairs are performed. When fully implemented, the program will provide significant reductions in smog-forming and carcinogenic toxic air pollution necessary to achieve federal air quality mandates and healthy air in California's communities.

California In-Use Off-Road Diesel Vehicle Regulation

The In-Use Off-Road Diesel-Fueled Fleets (Off-Road Regulation) was enacted to accelerate retirement of older, higher-emitting engines, and increase purchases of newer, cleaner engines. It applies to all off-road, diesel, self-propelled equipment over 25 hp used in California that is not exempted under agricultural or cargo handling equipment provisions. This includes construction equipment such as excavators, loaders, backhoes, cranes, forklifts, oil-drilling rigs, and aircraft towing equipment.

The rule applies to fleets of construction equipment and establishes a 5-minute idling limit for off-road vehicles at construction sites as well as emission limits that become increasingly more stringent each year. These limits may be met by replacing older tier equipment with newer tiers or by installing exhaust retrofits (also known as Verified Diesel Emission Control Strategies [VDECS]). Recent 2022 amendments⁸ require the use of R99 or R100 renewable diesel in off-road diesel vehicles at the beginning of 2024. Starting in 2023, older tiers are banned and only Tier 3 or higher engines may be added to any fleet. A recent requirement requires that prime contractors and public works awarding bodies obtain and retain a fleet's valid Certificate of Reported Compliance prior to awarding a contract or hiring a fleet.

Small Off-Road Engine Regulation

Small off-road engines (SORE) are spark-ignition engines with rated power at or below 19 kilowatts (25 horsepower). The SORE regulations require new engines to be certified and labeled to meet emission standards and other requirements. Typical equipment types that use SORE include lawn and garden equipment, portable generators, and pressure washers. Recent amendments to the SORE regulation will require most landscaping equipment to be zero emissions beginning in 2024. Despite their small size, these engines are highly polluting. The volume of smog-forming emissions from this type of equipment has surpassed emissions from light-duty passenger cars and is projected to be nearly twice those of passenger cars by 2031. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-

⁷ California Air Resources Board (ARB). 2023. Clean Truck Check (HD I/M). Website: <https://ww2.arb.ca.gov/our-work/programs/heavy-duty-inspection-and-maintenance-program>. Accessed December 8, 2023.

⁸ California Air Resources Board (ARB). 2023. Website: <https://ww2.arb.ca.gov/news/carb-approves-amendments-road-regulation-further-reduce-emissions>. Accessed November 21, 2023.

emission standards starting in 2028.⁹ Engines that use diesel fuel and engines that are used in stationary equipment, including standby generators, are not subject to the SORE regulations.

Large Spark Ignition Regulation

The Large Spark Ignition (LSI) Fleet Rule and Amendments, commonly referred to as the “Forklift Rule” applies to forklifts, sweeper/scrubbers, industrial tow tractors, and airport ground support equipment. It applies to fleets (four or more vehicles) and includes off-road gasoline, propane, liquefied petroleum gas (LPG), compressed natural gas, and electric forklifts ≥ 25 hp.¹⁰ The regulation sets fleet average emission level requirements that decreases each year to encourage the use of electric vehicle (EV) and low-emissions engines.

Zero-Emission Forklifts

ARB is currently working on a zero-emission forklift regulation¹¹ that would drive greater deployment of zero-emission forklifts within fleets throughout the State. This regulation, currently in draft format, is one of several near-term actions intended to facilitate further zero-emission equipment penetration in the off-road sector and is scheduled for Board consideration in June 2024.

California Airborne Toxic Control Measures

As of December 2022, the ARB had developed 26 mobile and stationary source Airborne Toxic Control Measures (ATCMs).¹² The following summarizes the ATCMs that are potentially applicable for land use development projects such as logistics, warehouse, residential, mixed use, and retail development. Source and industry-specific requirements apply to industrial projects, gas stations, dry cleaners, and other types of facilities which are significant sources of TACs.

Transport Refrigeration Unit ATCM

Transport Refrigeration Units (TRUs) are refrigeration systems powered by small diesel-fueled engines (typically only 9-36 hp) designed to refrigerate or heat perishable products that are transported in various containers, including truck vans, semi-truck trailers, shipping containers, and railcars. TRUs typically operate at refrigerated warehouses or distribution centers, grocery stores, seaport facilities, intermodal railyards, and other locations that are often near sensitive receptors, and often in overburdened disadvantaged communities. TRUs can be found in different sizes and locations depending on the type of transport carrying the goods. Truck TRUs that are used to refrigerate insulated cargo vans are mounted on the frames of straight trucks, while trailer TRUs that refrigerate insulated trailers are mounted on semitrailers.

The ATCM for In-Use Diesel-Fueled TRUs and TRU Generator Sets and Facilities Where TRUs Operate establishes stringent emission standards to lower DPM emissions from all truck-mounted TRUs that operate in California, regardless of where the vehicle is registered. The regulation applies to

⁹ California Air Resources Board (ARB). 2021. Website: <https://ww2.arb.ca.gov/news/carb-approves-updated-regulations-requiring-most-new-small-road-engines-be-zero-emission-2024>. Accessed November 25, 2023.

¹⁰ California Air Resources Board (ARB). 2023. Large Spark-Ignition Fleet Regulation Overview. Website: <https://ww2.arb.ca.gov/sites/default/files/offroadzone/landing/lisi.html>. Accessed November 25, 2023.

¹¹ California Air Resources Board (ARB). 2023. Zero-Emission Forklifts. Website: <https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts>. Accessed November 16, 2023.

¹² California Air Resources Board (ARB). 2023. Website: <https://ww2.arb.ca.gov/resources/documents/airborne-toxic-control-measures>. Accessed November 16, 2023.

refrigerated warehouse facilities (20,000 square feet or greater) and has phase-in requirements for conversion to zero-emission technology from 2024–2029. TRU owners shall turnover at least 15 percent of their truck TRU fleet (defined as truck TRUs operating in California) to ZEV technology each year (for 7 years). By 2030, all truck TRUs operating in California will be ZE, eliminating all NO_x and DPM emissions from these sources.

The current TRU ATCM amendments do not apply to trailer-mounted (semi-trailer) TRUs or railcar TRUs. The ARB will assess zero-emission options for trailer TRUs and the remaining TRU categories as part of an additional rulemaking for Board consideration in the 2025 timeframe.¹³

Asbestos ATCM

In July 2001, ARB approved an ATCM for construction, grading, quarrying, and surface mining operations to minimize emissions of naturally occurring asbestos. The regulation requires application of Best Management Practices (BMPs) to control fugitive dust in areas known to have naturally occurring asbestos and requires notification to the local air district prior to commencement of ground-disturbing activities. The measure establishes specific testing, notification, and engineering controls prior to grading, quarrying, or surface mining in construction zones where naturally occurring asbestos is located on projects of any size. There are additional notification and engineering controls at work sites larger than 1 acre. These projects require the submittal of a “Dust Mitigation Plan” and approval by the ARB prior to the start of a project.

Asbestos is also found in a natural state, known as naturally occurring asbestos. Exposure and disturbance of rock and soil that naturally contain asbestos can result in the release of fibers into the air and consequent exposure to the public. Asbestos most commonly occurs in ultramafic rock that has undergone partial or complete alteration to serpentine rock (serpentine) and often contains chrysotile asbestos. In addition, another form of asbestos, tremolite, can be found associated with ultramafic rock, particularly near faults. Sources of asbestos emissions include unpaved roads or driveways surfaced with ultramafic rock, construction activities in ultramafic rock deposits, or rock quarrying activities where ultramafic rock is present.

Areas are subject to the regulation if they are identified on maps published by the Department of Conservation as ultramafic rock units or if the Air Pollution Control Officer or owner/operator has knowledge of the presence of ultramafic rock, serpentine, or naturally occurring asbestos on the site. The measure also applies if ultramafic rock, serpentine, or asbestos is discovered during any operation or activity. Review of the Department of Conservation maps indicates that no ultramafic rock has been found near the project site.¹⁴

¹³ California Air Resources Board (ARB). 2023. Website: <https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/new-transport-refrigeration-unit-regulation>. Accessed November 25, 2023.

¹⁴ United States Geological Survey (USGS). 2019. Reported Historic Asbestos Mines, Historic Asbestos Prospects, and Other Natural Occurrences of Asbestos in the Conterminous United States. Website: <https://www.usgs.gov/data/reported-historic-asbestos-mines-historic-asbestos-prospects-and-other-natural-occurrences>. Accessed November 25, 2023.

Portable Equipment Registration Program ATCM

Owners or operators of portable engines and other types of equipment which meet the qualifications of the ATCM can register their equipment to operate throughout California.¹⁵ Permits issued under the Portable Equipment Registration Program (PERP) must be honored by all air districts throughout California. However, owners and operators of portable engines which meet the qualifications of this ATCM who do not register their equipment under the PERP must obtain individual permits from local air districts.

Non-Vehicular Source ATCMs

The ARB has also adopted ATCM for non-vehicular sources¹⁶ in Title 17, Section 93100. These ATCMs are implemented by local Air Pollution Districts through their local regulations for stationary sources. They include 13 separate ATCM regulations detailed in Section 93101 through 93113 which address a variety of stationary and area sources of toxics emissions. The ATCMs most relevant to land use development include the Asbestos rule (for Construction and Grading Operations described above), the benzene ATCM for retail service stations, the ATCM for stationary compression-ignition engines (e.g., diesel generators and pumps), and the ATCM for DPM from portable engines rated 50 hp and greater.

California Significant New Alternatives Policy

As part of California's effort to reduce emissions of Short-Lived California Climate Pollutants under Senate Bill (SB) 1383, California is required to reduce hydrofluorocarbon (HFC) emissions 40 percent below 2013 levels by 2030. HFCs have a powerful impact on climate as they trap heat in the atmosphere at a rate thousands of times that of carbon dioxide.

The ARB was originally relying on EPA Significant New Alternatives Policy (SNAP) Rules to meet a large portion of HFC emission reductions required by SB 1383. However, on August 8, 2017, in *Mexichem Fluor v. U.S. EPA*, the D.C. District Circuit Court significantly limited the EPA's ability to regulate high global warming potential (GWP) HFCs under the federal SNAP Program Rules.¹⁷ As a result, in 2018, California adopted a new ARB HFC regulation and additional legislation under SB 1013, referred to as the California Cooling Act. The regulation and the Senate Bill together are referred to as California SNAP and cover all end-use specific HFC prohibitions except motor vehicle air conditioning systems. In 2020, the ARB amended the regulation to adopt GWP limits for new refrigeration and air conditioning equipment, which ensures that industry not only shifts away from the highest GWP refrigerants but swiftly transitions to technologies with the lowest GWP that are technologically and commercially feasible. The rule applies to air conditioning systems, household refrigerators and freezers, chillers, retail food facilities, retail refrigeration, cold storage facilities, and even vending machines.

¹⁵ California Air Resources Board (ARB). 2023. Portable Equipment Registration Program. Website: <https://ww2.arb.ca.gov/our-work/programs/portable-equipment-registration-program-perp>. Accessed November 25, 2023.

¹⁶ California Air Resources Board (ARB). 2023. Air Toxic Control Measures: Mobile and Stationary Sources. Website: <https://ww2.arb.ca.gov/resources/documents/airborne-toxic-control-measures>. Accessed November 25, 2023.

¹⁷ California Air Resources Board (ARB). 2023. California Significant New Alternatives Policy (SNAP). Website: <https://ww2.arb.ca.gov/our-work/programs/california-significant-new-alternatives-policy-snap/about>. Accessed November 25, 2023.

New cold storage facilities containing more than 50 pounds of refrigerants are subject to the GWP limit Section 95374(c) Table 3 and to the requirements under Section 95475 (c), which includes exceptions, and labeling and recordkeeping requirements. Cold Storage Warehouses are prohibited from using refrigerants with GWP of 150 or greater as of January 1, 2022.¹⁸

Verified Diesel Emission Control Strategies

The EPA and the ARB tiered off-road emission standards only apply to new engines, and off-road equipment can last several years. The ARB has developed VDECS, which are devices, systems, or strategies used to achieve the highest level of pollution control from existing off-road vehicles, to help reduce emissions from existing engines. VDECS are designed primarily for the reduction of DPM emissions and have been verified by the ARB. There are three levels of VDECS, the most effective of which is the Level 3 VDECS. Tier 4 engines are not required to install VDECS because they already meet the emissions standards for lower tiered equipment with installed controls.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

TACs in California are primarily regulated through the Tanner Air Toxics Act (Assembly Bill [AB] 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), also known as the Hot Spots Act. To date, the ARB has identified more than 21 TACs, and has adopted the EPA's list of Hazardous Air Pollutants (HAPs) as TACs.

Regional

BAAQMD California Environmental Quality Act Air Quality Guidelines

The BAAQMD is the primary agency responsible for ensuring that air quality standards (NAAQS and CAAQS) are attained and maintained in the SFBAAB through comprehensive planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The BAAQMD prepares plans to attain ambient air quality standards in the SFBAAB and prepares ozone attainment plans for the national ozone standard, clean air plans for the California standard, and PM plans to fulfill federal air quality planning requirements. The BAAQMD also inspects stationary sources of air pollution; responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the CAA and the CCAA.

In April 2023, BAAQMD updated the California Environmental Quality Act (CEQA) Guidelines that supersede the previous guidance. BAAQMD's CEQA Guidelines for implementation of the thresholds are for informational purposes only, to assist local agencies.

BAAQMD Particulate Matter Plan

To fulfill federal air quality planning requirements, the BAAQMD adopted a PM_{2.5} emissions inventory for the year 2010 at a public hearing on November 7, 2012. The Bay Area Clean Air Plan also included several measures for reducing PM emissions from stationary sources and wood-burning. In 2013, the EPA issued a final rule determining that the Bay Area has attained the 24-hour PM_{2.5}

¹⁸ California Air Resources Board (ARB). 2023. Cold Storage. Website: <https://ww2.arb.ca.gov/our-work/programs/california-significant-new-alternatives-policy-snap/cold-storage>. Accessed November 25, 2023.

NAAQS, suspending federal SIP planning requirements for the SFBAAB.¹⁹ Despite this EPA action, the SFBAAB will continue to be designated as nonattainment for the national 24-hour PM_{2.5} standard until the BAAQMD submits a redesignation request and a maintenance plan to the EPA and the EPA approves the proposed redesignation.

The Air Basin is designated nonattainment for the State PM₁₀ and PM_{2.5} standards, but the Air Basin is currently unclassified for the federal PM₁₀ standard and nonattainment for federal PM_{2.5} standards. The EPA lowered the 24-hour PM_{2.5} standard from 65 µg/m³ to 35 µg/m³ in 2006 and designated the Air Basin as nonattainment for the new PM_{2.5} standard effective December 14, 2009.

BAAQMD believes that it would be premature to submit a redesignation request and PM_{2.5} maintenance plan at this time. Therefore, BAAQMD will prepare a “clean data” SIP to address the required elements, including:

- An emission inventory for primary PM_{2.5}, as well as precursors to secondary PM formation; and
- Amendments to the BAAQMD’s New Source Review regulation to address PM_{2.5}.

The Air Basin will continue to be designated as nonattainment for the 24-hour PM_{2.5} NAAQS until the Air District elects to submit, and the EPA approves, a redesignation request and maintenance plan. At this time, BAAQMD does not have an applicable SIP with which the proposed project would be required to comply. However, development facilitated by the proposed project would be subject to the Bay Area Clean Air Plan, in addition to regulations set forth by BAAQMD.

BAAQMD 2017 Clean Air Plan

In May 2017, the BAAQMD adopted the final Bay Area 2017 Clean Air Plan. The BAAQMD prepared the 2017 Clean Air Plan in cooperation with the Metropolitan Transportation Commission (MTC) and ABAG. The goals of the 2017 Clean Air Plan are to reduce regional air pollutants and climate pollutants to improve the health of Bay Area residents for the next decades. The 2017 Clean Air Plan aims to lead the region into a post-carbon economy, continue progress toward attaining all State and federal air quality standards, and eliminate health risk disparities from air pollution exposure in Bay Area communities. The Plan includes 85 distinct control measures to help the region reduce air pollutants and has a long-term strategic vision that forecasts what a clean air Bay Area will look like in the year 2050. The 2017 Clean Air Plan envisions a future whereby the year 2050:

- Buildings will be energy efficient—heated, cooled and powered by renewable energy.
- Transportation will be a combination of EVs, both shared and privately owned, and autonomous public transit fleets, with a large share of trips by bicycling, walking, and transit.

¹⁹ United States Environmental Protection Agency (EPA). 2013. Determination of Attainment for the San Francisco Bay Area Nonattainment Area for the 2006 Fine Particle Standard; California; Determination Regarding Applicability of Clean Air Act Requirements. January 9. Website: <https://www.govinfo.gov/content/pkg/FR-2013-01-09/pdf/2013-00170.pdf>. Accessed November 25, 2023.

- The Bay Area will be powered by clean, renewable electricity and will be a leading incubator and producer of clean energy technologies leading the world in the carbon-efficiency of our products.
- Bay Area residents will have developed a low carbon lifestyle by driving electric vehicles, living in zero-net-energy homes, eating low carbon foods, and purchasing goods and services with low carbon content.
- Waste will be greatly reduced, waste products will be re-used or recycled, and all organic waste will be composted and put to productive use.

The focus of control measures includes aggressively targeting the largest source of GHG, ozone pollutants, and PM emissions: transportation. This includes more incentives for electric vehicle infrastructure, off-road electrification projects such as Caltrain and shore power at ports, and reducing emissions from trucks, school buses, marine vessels, locomotives, and off-road equipment. Additionally, the BAAQMD will continue to work with regional and local governments to reduce Vehicle Miles Traveled (VMT) through the further funding of rideshare, bike and shuttle programs.

BAAQMD Regulations

Regulation 2, Rule 1 (Permits–General Requirements)

The BAAQMD regulates new sources of air pollution and the modification and operation of existing sources through the issuance of authorities to construct and permits to operate. Regulation 2, Rule 1 provides an orderly procedure with which the project would be required to comply to receive authorities to construct or permits to operate from the BAAQMD for new sources of air pollutants, as applicable.

Regulation 2, Rule 5 (New Source Review Permitting)

The BAAQMD regulates backup emergency generators, fire pumps, and other sources of TACs through its New Source Review (Regulation 2, Rule 5) permitting process.²⁰ Although emergency generators are intended for use only during periods of power outages, monthly testing of each generator is required; however, the BAAQMD limits testing to no more than 50 hours per year. Each emergency generator installed is assumed to meet a minimum of Tier 2 emission standards (before control measures). As part of the permitting process, the BAAQMD limits the excess cancer risk from any facility to no more than 10 per 1 million population for any permits that are applied for within a 2-year period and would require any source that would result in an excess cancer risk greater than 1 per 1 million to install Best Available Control Technology (BACT) for Toxics.

Regulation 6, Rule 1 (Particulate Matter–General Requirements)

The BAAQMD regulates PM emissions through Regulation 6 by means of establishing limitations on emission rates, emissions concentrations, and emission visibility and opacity. Regulation 6, Rule 1 provides existing standards for PM emissions that could result during project construction or operation that the project would be required to comply with, as applicable, such as the prohibition

²⁰ Bay Area Air Quality Management District (BAAQMD). 2016. New Source Review Permitting Guidance. Website: <http://www.baaqmd.gov/permits/permitting-manuals/nsr-permitting-guidance>. Accessed November 25, 2023.

of emissions from any source for a period or aggregate periods of more than 3 minutes in any hour which are equal to or greater than 20 percent opacity.

Regulation 6, Rule 6, (Particulate Matter—Prohibition of Trackout)

One rule by which the BAAQMD regulates PM includes Regulation 6, Rule 6, which prohibits PM trackout during project construction and operation. Regulation 6, Rule 6 requires the prevention or timely cleanup of trackout of solid materials onto paved public roads outside the boundaries of large bulk material sites, large construction sites, and large disturbed surface sites such as landfills.

Regulation 8, Rule 3 (Architectural Coatings)

This rule governs the manufacture, distribution, and sale of architectural coatings and limits the reactive organic gases (ROG) content in paints and paint solvents. Although this rule does not directly apply to the proposed project, it does dictate the ROG content of paint available for use during the construction.

Regulation 8, Rule 15 (Emulsified and Liquid Asphalts)

Although this rule does not directly apply to the proposed project, it does dictate the reactive organic gases content of asphalt available for use during construction through regulating the sale and use of asphalt and limits the ROG content in asphalt.

Regulation 9, Rule 8 (Inorganic Gaseous Pollutants—Nitrogen Oxides and Carbon Monoxide from Stationary Internal Combustion Engines)

Under Regulation 9, Rule 8, the BAAQMD regulates the emissions of nitrogen oxides and carbon monoxide from stationary internal combustion engines with an output rated by the manufacturer at more than 50 brake horsepower. As such, any proposed stationary source equipment (e.g., backup generators, fire pumps) which would be greater than 50 horsepower would require a BAAQMD permit under Regulation 9, Rule 8 to operate.

Regulation 11, Rule 2 (Hazardous Pollutants—Asbestos Demolition, Renovation, and Manufacturing)

Under Regulation 11, Rule 2, the BAAQMD regulates emissions of asbestos to the atmosphere during demolition, renovation, milling, and manufacturing and establishes appropriate waste disposal procedures. Any of these activities which pose the potential to generate emissions of airborne asbestos are required to comply with the appropriate provisions of this regulation.

Regulation 1, Rule 301 (Odorous Emissions)

The BAAQMD is responsible for investigating and controlling odor complaints in the Bay Area. The agency enforces odor control by helping the public to document a public nuisance. Upon receipt of a complaint, the BAAQMD sends an investigator to interview the complainant and to locate the odor source if possible. The BAAQMD typically brings a public nuisance court action when there are a substantial number of confirmed odor events within a 24-hour period. An odor source with five or more confirmed complaints per year, averaged over 3 years, is considered to have a substantial effect on receptors.

Several BAAQMD regulations and rules apply to odorous emissions. Regulation 1, Rule 301 is the nuisance provision that states that sources cannot emit air contaminants that cause nuisance to

several people. Regulation 7 specifies limits for the discharge of odorous substances where the BAAQMD receives complaints from 10 or more complainants within a 90-day period. Among other things, Regulation 7 precludes discharge of an odorous substance that causes the ambient air at or beyond the property line to be odorous after dilution with four parts of odor-free air and specifies maximum limits on the emission of certain odorous compounds.

Lastly, the BAAQMD enforces the PERP ATCM on behalf of the ARB. Under the PERP, owners or operators of portable engines and other types of equipment which meet the qualifications of the ATCM can register their equipment to operate throughout California. However, owners and operators of portable engines which meet the qualifications of this ATCM who do not register their equipment under the PERP must obtain individual permits from local air districts. Permits issued under the PERP must be honored by all air districts throughout California.

Plan Bay Area

The Regional Transportation Plan and Sustainable Community Strategy (RTP/SCS) for the San Francisco Bay Area, named Plan Bay Area 2050 was jointly produced and adopted by the MTC and ABAG.²¹ On October 2021, the MTC approved Plan Bay Area 2050. Plan Bay Area includes integrated land use and transportation strategies for the region and was developed through OneBayArea, a joint initiative between ABAG, BAAQMD, MTC, and the San Francisco Bay Conservation and Development Commission. Plan Bay Area is also considered the ABAG/MTC Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In accordance with SB 743, Plan Bay Area included elements designed to encourage the type of land use development to meet three primary objectives. First, Roadway Level of Service (LOS) could not be considered an environmental impact under CEQA. Second, it introduced changes to VMT per capita as a determinant of environmental impact. Third, the use of VMT as an environmental impact in CEQA is considered a mechanism for achieving State and regional GHG reduction goals. As a regional land use plan, Plan Bay Area aims to reduce per capita GHG emissions through the promotion of more compact, mixed-use residential and commercial neighborhoods located near transit.

Local

City of American Canyon General Plan

The City of American Canyon adopted its General Plan in 1994, which contains objectives and policies that help address air quality and reduce the community's vulnerability to air pollution. The following objectives and policies from the City's General Plan are relevant to air quality and apply to the proposed project:²²

Goal 8F Reduce consumption of nonrenewable energy sources and support the development and utilization of new energy sources.

Objective 8.22 Minimize transportation-related energy consumption.

²¹ Association of Bay Area Government (ABAG). 2021. Plan Bay Area 2050. Website: <https://www.planbayarea.org/finalplan2050>. Accessed November 28, 2023.

²² City of American Canyon. 2020. General Plan. Website: <https://www.cityofamericancanyon.org/government/community-development/planning-zoning/general-plan-update>. Accessed November 25, 2023.

Policy 8.22.1 Encourage the development of mixed use, pedestrian friendly employment/residential centers that help minimize vehicle trips in American Canyon and contribute to a reduction in energy consumption.

Policy 8.22.3 Require that Development Plans provide for linkages between bicycle and pedestrian circulation systems and transit and employment centers, in accordance with established areawide plans.

Policy 8.22.4 Maintain a system of traffic signals and controls that minimizes waiting time and vehicle speed changes through routes.

Policy 8.22.5 Require that Development Plans provide for High-Occupancy Vehicles (HOV) and public transportation, where feasible, through the provision of appropriate transit areas and park-and-ride locations along public transportation routes.

Objective 8.23 Reduce Energy consumption in buildings.

Policy 8.23.1 Require that developers employ energy-efficient subdivision and site planning methods as well as building design. Measures to be considered include building orientation and shading, landscaping, building reflectance, use of active and passive solar heating and hot water system, etc. In establishing these energy related design requirements, the City shall balance energy-efficient design with good planning principles.

Objective 1.37 Consider initiatives to reduce direct and indirect greenhouse gas (GHG) emissions from transportation sources, and from new, renovated, and existing development in the City.

Policy 1.37.6 Reduce vehicle engine idling in American Canyon by educating the broader community (i.e., businesses, commuters, residents) on the greenhouse gas impacts caused by engine idling, and implementing feasible commercial vehicle regulations.

City of American Canyon Municipal Code

19.01.061, Industrial Use Greenhouse Gas Standards (Ordinance No. 2024-014)

A. Every Industrial Use Land Use Proposal for which the City of American Canyon is the Lead Agency shall use the following threshold to evaluate the significance of greenhouse gas (GHG) impact under the California Environmental Quality Act (CEQA):

- 1) **TIER 1.** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- 2) **Tier 2.** Consider whether the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.

- 3) **Tier 3.** Consider whether the project includes, at a minimum, the following project design elements:
- i. **Buildings**
 1. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
 2. The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
 - ii. **Transportation**
 1. The project will achieve a reduction in project-generated vehicle miles traveled ("VMT") below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent).
 2. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. If the project does not include the above project design elements, the Project has a significant GHG impact. If it does include the above project design elements, move to Tier 4.
- 4) **Tier 4.** Consider whether the project generates GHG emissions in excess of the South Coast Air Quality Management District's 10,000 MT CO₂e per year screening threshold for industrial uses and stationary projects. If so, the project has a significant GHG impact.

Chapter 19.09, Industrial Commerce Centers Sustainability Standards (Ordinance No. 2024-013)

Chapter 19.09 of the Municipal Code is applicable to all warehousing, logistics and distribution facilities throughout the City for which an NOP is issued after March 1, 2024 under the implementing Guidelines of the CEQA. The NOP for the proposed project was issued on October 27, 2023. As such, the proposed project is not subject to Chapter 19.09 of the Municipal Code (Ordinance No. 2024-013). However, for informational purposes, the extent to which the project complies is addressed in Section 3.7.7.

A warehousing, logistics or distribution facility means facilities used for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials and excludes bulk storage of materials, which are flammable, explosive, or create hazardous or commonly recognized offensive conditions) before their distribution to retail locations or other warehouses. The facilities are generally greater than 200,000 square feet in size, with a land coverage ratio of approximately 50 to 80 percent, and a dock-high loading door ratio of approximately 1:5,000-8,000 square feet. They are characterized by dock high loading doors, could be on opposing sides of the building (cross dock facility); significant movement and storage of products, materials, or

equipment; truck activities frequently outside of the peak hour of the adjacent street system; and freeway access, including:

- Freight yards/forwarding terminals;
- Warehousing distribution/high cube distribution centers;
- Moving agencies;
- Parcel delivery terminals;
- Railroad freight stations;
- Shipping/receiving yards; and
- Truck terminals.

The following sections shall supersede any existing requirements in the Municipal Code and Specific Plans:

1. On-site motorized operational equipment, including but not limited to forklifts, yard trucks, and pallet jacks, shall be ZE (zero emission). This includes electrical hook ups to the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors.
2. All outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and landscaping equipment) shall be zero-emission vehicles. Each building shall include the necessary charging stations or other necessary infrastructure for zero-emission cargo handling equipment.
3. Prior to issuance of a business license, the City shall ensure rooftop solar panels are installed and can be operated in such a manner that they will supply 100% of the power needed to operate all non-refrigerated portions of the facility including the parking areas.
4. Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide chilled, cooled, or freezer warehouse space, a conduit shall be installed during construction of the building shell from the electrical room to 100% of the loading dock doors that have potential to serve the refrigerated space. When tenant improvement building permits are issued for any refrigerated warehouse space, electric plug-in units shall be installed at every dock door servicing the refrigerated space to allow transport refrigeration units (TRUs) to plug in. Truck operators with TRUs shall be required to utilize electric plug-in units when at loading docks.
5. All generators, and all diesel-fueled off-road construction equipment greater than 75 horsepower, will be zero-emissions or equipped with CARB Tier IV-compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. After either (1) the completion of grading or, (2) the completion of an electrical hookup at the site, whichever is first, require all generators and all diesel-fueled off-road construction equipment, to be zero-emissions or equipped with CARB Tier IV-compliant

engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by the City in the event that the applicant documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment.

6. Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle charging stations on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) electric vehicle charging stations for 25% of the employee parking spaces required.
7. Install HVAC and/or HEPA air filtration systems in all warehouse facilities.

3.2.3 - Methodology

Model Selection and Guidance

Regional air pollutant emissions are composed of those on-site construction and operational emissions generated from all facets of the proposed project. Air pollutant emissions can be estimated by using emission factors and a level of activity. Emission factors represent the emission rate of a pollutant over a given time or activity, for example, grams of NO_x per vehicle mile traveled or grams of NO_x per horsepower hour of equipment operation. The activity factor is a measure of how active a piece of equipment is and can be represented as the amount of material processed, elapsed time that a piece of equipment is in operation, horsepower of a piece of equipment used, the amount of fuel consumed in a given amount of time, or VMT per day. The ARB has published emission factors for on-road mobile vehicles/trucks in the Emission Factor (EMFAC) mobile source emissions model and emission factors for off-road equipment and vehicles in the OFFROAD emissions model. An air emissions model (or calculator) combines the emission factors and the levels of activity and outputs the emissions for the various pieces of equipment.

The current version of the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.21, was released on May 27, 2022, as part of a coordinated development effort between the California Air Pollution Control Officers Association (CAPCOA) and the California Air Districts. Regional construction and operational emissions reported in this analysis were modeled using CalEEMod Version 2022.1.1.21.

Criteria Pollutants Assessed

The following air pollutants are assessed in this analysis:

- Reactive organic gases (ROG)
- Nitrogen oxides (NO_x)
- Carbon monoxide (CO)

- Sulfur oxides (SO_x)
- Particulate matter less than 10 microns in diameter (PM₁₀)
- Particulate matter less than 2.5 microns in diameter (PM_{2.5})

Note that the proposed project would emit ozone precursors ROG and NO_x. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

The proposed project would emit ultrafine particles. However, there is currently no standard separate from the PM_{2.5} standards for ultrafine particles and there is no accepted methodology to quantify or assess the significance of such particles.

Modeling Assumptions—Construction

Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and prevailing weather conditions. Construction emissions result from on-site and off-site activities. On-site emissions principally consist of exhaust emissions from the activity levels of heavy-duty construction equipment, motor vehicle operation, and fugitive dust (mainly PM₁₀) from disturbed soil. Additionally, paving operations and application of architectural coatings would release VOC emissions. Off-site emissions are caused by motor vehicle exhaust from delivery vehicles, worker traffic, and road dust (PM₁₀ and PM_{2.5}).

Construction activities occurring on the 10.45-acre project site would consist of site preparation, grading, building construction, paving, and architectural coating of the inside and outside of the building. A conceptual construction schedule is provided in Table 3.2-5 that presents the duration for each construction activity. Table 3.2-6 presents the number of assumed construction equipment along with hours of operation per day, horsepower, and load factor. Where project-specific information was not available or unknown, default assumptions were used to complete emissions modeling. The activity for construction equipment is based on the horsepower and load factors of the equipment. In general, the horsepower is the power of an engine—the greater the horsepower, the greater the power. The load factor is the average power of a given piece of equipment while in operation compared with its maximum rated horsepower. A load factor of 1.0 indicates that a piece of equipment continually operates at its maximum operating capacity. This analysis uses the CalEEMod default load factors for off-road equipment.

The anticipated construction schedule, as shown in Table 3.2-5, reflects the construction start date and construction phase durations assumed for the purposes of this environmental analysis. Based on applicant-provided information, construction would start September 2024 and would take approximately 11 months. The construction schedule used in the analysis represents a “worst-case” analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and compliance with more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required by State CEQA Guidelines.

Table 3.2-5: Construction Schedule

Construction Activity	Conceptual Construction Schedule		Working Days per Week	Working Days
	Start Date	End Date		
Site Preparation	9/2/2024	9/13/2024	5	10
Grading	9/14/2024	10/11/2024	5	20
Building Construction	10/12/2024	7/18/2025	5	200
Paving	7/19/2025	8/15/2025	5	20
Architectural Coating	7/19/2025	8/15/2025	5	20

Source: CalEEMod Output (Appendix B).

A summary of the on-site, off-road construction equipment usage assumptions used to estimate emissions is presented in Table 3.2-6.

Table 3.2-6: Project Construction Equipment Assumptions

Phase Name	Equipment Type	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Bulldozers	3	8	367	0.4
	Tractors/Loaders/Backhoes	4	8	84	0.37
Grading	Excavators	2	8	158	0.38
	Graders	1	8	148	0.41
	Rubber Tired Bulldozers	1	8	367	0.4
	Scrapers	2	8	423	0.48
	Tractors/Loaders/Backhoes	2	8	84	0.37
Building Construction	Cranes	1	7	367	0.29
	Forklifts	3	8	82	0.2
	Generator Sets	1	8	14	0.74
	Tractors/Loaders/Backhoes	3	7	84	0.37
	Welders	1	8	46	0.45
Paving	Pavers	2	8	81	0.42
	Paving Equipment	2	8	89	0.36
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	6	37	0.48

Source: CalEEMod Output (Appendix B).

A summary of the construction-related vehicle trips is shown in Table 3.2-7. Based on applicant-provided information, grading would require approximately 1,000 cubic yards (cy) of import soil.²³ CalEEMod default values for trip lengths and vehicle fleets were used. Note that the total number of off-site construction vehicle trips would not necessarily occur on the same day since construction activities would vary each day during the construction period.

Table 3.2-7: Construction Off-site Trips

Construction Activity	Worker (Trips per day)	Vendor (Trips per day)	Haul (Total Trips)
Site Preparation	18	0	0
Grading	20	0	31
Building Construction	141	55	0
Paving	15	0	4
Architectural Coating	28	0	0

Source: CalEEMod Output (Appendix A).

Fugitive Dust

During grading activities, fugitive dust can be generated from the movement of dirt on the project site. CalEEMod estimates dust from bulldozers moving dirt around, from graders or other construction equipment leveling the land, and from loading or unloading dirt into haul trucks. Every project within the BAAQMD’s jurisdiction is required to comply with the requirements of BAAQMD Regulation 6 and BMPs to reduce emissions of fugitive dust. As shown in Appendix B, the BMPs are accounted for in CalEEMod through selection of the appropriate measures in CalEEMod (“water unpaved roads twice daily” and “limit vehicle speeds on unpaved roads to 25 miles per hour [mph]”). Development of the proposed project would include design features which would reduce fugitive dust compared to default values.

Modeling Assumptions—Operation

The major sources of operational emissions that would occur over the long-term operations of the proposed project are summarized below.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the motor vehicles that would travel to and from and within the project site. The regional emissions from the proposed project’s mobile sources were estimated using CalEEMod and the daily trips estimated by the traffic consultant for the proposed project. The proposed project would generate passenger vehicle trips from employees and visitors traveling to and from the project site; additionally, the proposed project

²³ At the time of analysis, the amount of soil import was assumed to be 5,000 cubic yards. Therefore, a conservative analysis is presented here since it evaluated a higher amount of soil import and associated haul trips.

would also be served with daily truck deliveries. The number of vehicle trips that the proposed project would generate is presented in Table 3.2-8.

Table 3.2-8: Vehicle Trip Generation During Operations (Daily)

Vehicle Type	Daily Vehicle Trips
Passenger Cars	244
Trucks	128
Total Project Trips	372
Source: W-Trans. 2023. 1055 Commerce Court Memorandum of Assumptions. April. (Appendix I)	

As shown in Table 3.2-8, trips from passenger cars would account for 244 of the 372 total daily trips generated by the proposed project, while trucks would account for 128 of the total daily trips generated by the proposed project.

Industrial land use projects, including warehouse projects, can be expected to have longer than average truck trip lengths compared to the default trip length in CalEEMod (5.0 miles to 12.8 miles for Napa County). To estimate mobile source emissions from trucks during project operations, a one-way truck trip length of 35.6 miles was assumed based on a study of industrial warehouse travel behavior in American Canyon.²⁴ The truck trips are assigned to “refrigerated warehouse-no rail” land use and passenger vehicle trips are assigned to a “user defined industrial” land use so that different trip lengths can be assigned to the truck and passenger vehicle trips. The CalEEMod model output can be found in Appendix B.

Table 3.2-9 shows the adjusted fleet mixes applied in the operational portion of each CalEEMod run. The fleet mix for the operational passenger-vehicles-only CalEEMod run used the light-duty automobile (LDA), light-duty one-axle truck (LDT1), light-duty two-axle truck (LDT2), and medium-duty vehicle (MDV) classes to represent a reasonable assumption that employees would use light-duty vehicles, medium-duty vehicles, and pickup trucks as their personal vehicles. The trucks are modeled as a combination of medium heavy and heavy heavy-duty (HHD) categories based on the previously mentioned industrial warehouse travel study.²⁵

Table 3.2-9: Vehicle Type Classification

CalEEMod Run	Classification	Fleet Mix Applied in Modeling
Passenger Vehicles (employee trips)	LDA	51.6%
	LDT1	5.6%
	LDT2	24.9%
	MDV	17.9%

²⁴ Fehr and Peers. 2022. American Canyon Industrial Warehouse Travel Behavior Data. June.

²⁵ Fehr and Peers. 2022. American Canyon Industrial Warehouse Travel Behavior Data. June.

CalEEMod Run	Classification	Fleet Mix Applied in Modeling
	Passenger Vehicle Mix Total	100%
Trucks	HHD	85.1%
	MHD	14.9%
	Heavy-Duty Truck Mix Total	100%
Notes: HHD = heavy heavy-duty LDA = light-duty automobile LDT1 = light-duty one-axle truck MHD = medium heavy-duty MDV = medium-duty vehicle Source: Appendix B.		

The proposed warehouse is designed to accommodate wine storage. However, no TRU would be used while trucks are on-site. Based on similar uses nearby, most inbound trailers would not have TRUs as they would only be hauling directly from the winery. Outbound long-haul trailers would not be running the refrigeration units while at the loading dock as they would initially be loaded. No trucks would be at the loading dock longer than 30 minutes. These assumptions are input into the modeling accordingly.

Other Emission Sources

Area Sources

In addition to typical mobile- and energy-source emissions, long-term operational emissions also include area source emissions. Area source emissions include occasional architectural coating activities for repainting and maintenance of the warehouse building associated with the proposed project. CalEEMod assumes that repainting occurs at a rate of 10 percent of the buildings per year. Therefore, on average, it is assumed that the building would be fully repainted every 10 years.

Other area source emissions include consumer products that involve solvents that emit VOCs during use. CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products associated with parking uses. Electric forklifts would be used during project operation. Lastly, CalEEMod default emission factors for landscape maintenance equipment were used in this analysis.

Water/Wastewater

GHG emissions from this sector are associated with the embodied energy used to supply treat and distribute water, and then treat wastewater and fugitive GHG emissions from wastewater treatment. Indoor water consumption is based on applicant-provided information.

Energy

As discussed in the project description, the proposed project would not include natural gas plumbing or appliances. Emissions from this sector are principally from use of electricity for space and water

heating at the proposed buildings. The estimated energy consumption is based on consumption rate of the adjacent use²⁶ and extrapolated by project square footage.²⁷

Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant.

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project site. For solid waste disposal, CalEEMod calculates GHG emissions generated as solid waste generated by the proposed project decomposes in a landfill. For electricity-related emissions, CalEEMod contains default electricity intensity factors for various utilities throughout California. Pacific Gas and Electric Company (PG&E) 2021 intensity factors²⁸ were used for the facility operations starting with the 2025 buildout year conservatively assuming the base plan.

Refrigerants

During operation, there may be leakages of refrigerants (hydrofluorocarbons) from air conditioners and any refrigeration systems. Hydrofluorocarbons are typically used for refrigerants, which are long-lived GHGs. The type of refrigerant may vary depending on regulations in place at the time and emissions are based on leakage rates and other variables. CalEEMod defaults were used for these estimates. This presents a conservative estimate as recent GHG regulations are phasing in refrigerants with lower GWP.

Vegetation

The project site is currently undeveloped and contains small areas of wetland and some vegetation. Therefore, there is currently some carbon sequestration occurring on-site. The project applicant proposes to plant trees and integrate landscaping into the proposed design, which would provide carbon sequestration. However, the number of trees to be planted is unknown and data are insufficient to accurately determine the impact that the existing landscaping has on carbon sequestration. For this analysis, it was assumed that the loss and addition of carbon sequestration that are due to the proposed project would be balanced; therefore, emissions due to carbon sequestration were not included.

²⁶ City of American Canyon. Final Initial Study for SDG Commerce 217 Distribution Center Project (PL20-0008).

²⁷ The proposed project would take advantage of cool night air and would include solar improvements, which would result in some reduction in energy use. These features were not quantified as to represent a conservative analysis.

²⁸ California Energy Commission. 2023. Power Source Disclosure Program: Annual Power Content Labels for 2021. Website: <https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure/power-content-label/annual-power-content-2>. Accessed December 10, 2023.

Dispersion Modeling

An air dispersion model is a mathematical formulation used to estimate air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the AERMOD Version 22112. Specifically, the AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from project construction PM₁₀ exhaust emissions. The AERMOD model provides a refined methodology for estimating localized construction and operational impacts by utilizing long-term, measured representative meteorological data for the project site and representative construction and operational schedules.

Terrain elevations were obtained for the project site using United States Geology Survey (USGS) 1/3 arc-second Digital Elevation Models (DEMs) DEMS processed by the EPA Terrain Preprocessor (AERMAP) model, the AERMOD terrain data pre-processor. The rural dispersion option was used to describe air dispersion in the local vicinity of the project. The air dispersion model assessment utilized 5 years (2013-2017) of BAAQMD-preprocessed meteorological data for the Napa County Airport Station (KAPC 23155) which is located approximately 1.8 miles north of the project site.

The AERMOD model was used to estimate levels of air emissions at sensitive receptor locations from project construction PM₁₀ exhaust and on-road diesel truck exhaust. Receptors within the AERMOD model were placed at locations up to 1,500 meters from the project site in a nested risk-grid with a spacing of 25 meters up to 250 meters and then receptors of 100 meters spacing up to 1,000 meters from the project site. Discrete residential receptors were placed on residences in the neighborhood to the southeast as well as the single closest residence located 850 feet to the east of the project site. All receptors were placed conservatively at ground level.

Air Dispersion Modeling Assumptions—Construction

Each construction emission source to be evaluated requires geometrical and emission release specifications for use in the air dispersion model. The emission source configurations applied in this assessment are shown in Table 3.2-10.

The on-site construction area sources were assumed to cover the entire project site. Emissions from the on-site construction exhaust sources were assumed to be emitted at 5 meters above ground to account for the top of equipment exhaust stacks where emissions are released to the atmosphere and the increase in emission height due to its heated exhaust. The off-site (on-road) construction vehicle emissions were represented in the AERMOD model as line volume sources with a release height of 11.2 feet (3.4 meters) for diesel vehicles.

Table 3.2-10: Summary of Construction Diesel Emission Source Configurations

Emission Source Type	Configuration	Relevant Assumptions
Off-Road Construction Equipment	Area Source (Sitewide)	<ul style="list-style-type: none"> • Area Source of height 5 meters to account for plume rise from exhaust. • Emission factors: CalEEMod

Emission Source Type	Configuration	Relevant Assumptions
Heavy-Duty Haul Truck Traffic	Line Volume Sources	<ul style="list-style-type: none"> Truck travel was estimated for project-generated off-site travel extending on Commerce Boulevard within 1,000 feet of the project site Emission factors: CalEEMod (EMFAC2021)
Source: Appendix B.		

The construction emissions were assumed to be distributed over the project area with a working schedule of up to 8 hours per day and five days per week. Emissions were adjusted by a factor of 4.2 in AERMOD “Variable Emission” Option to convert 8-hour, 5 day per week construction emissions for use with a 24 hours per day, 365 days per year averaging period.

Health Risk Assessment

The primary TAC of concern for the proposed project would be diesel exhaust, characterized by the emissions of DPM as a surrogate, emitted both during construction and operation. The emissions of potential DPM associated with construction activities would be transient, temporary, and occur in varying locations within the project site. The exposure assessment for construction is limited to emissions over the time that construction is expected to occur (i.e., less than 1 year).

Exhaust emissions of DPM (as PM₁₀ exhaust) were obtained from the CalEEMod Version 2022.1 for the unmitigated emissions construction scenarios utilized for the criteria pollutant analysis (Appendix A). DPM emissions to be evaluated include on-site diesel exhaust from construction equipment and from diesel vendor and haul trucks along Commerce Boulevard. Air dispersion modeling (described above) was utilized to determine the concentration of DPM at different locations off-site from the proposed project. Receptors included off-site workers, residents and identified school receptors within the area of impact.

The concentration output files from AERMOD were postprocessed in the Hotspots Analysis and Reporting Program (HARP) Air Dispersion Modeling and Risk Tool (ADMRT) to determine the concentration of DPM at off-site receptors for the modeled emission scenarios. The HARP ADMRT program uses the concentrations, along with equations from the Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments,²⁹ to estimate the project’s cancer and non-cancer chronic health risks. For DPM, the only exposure pathway is inhalation, and the HARP ADMRT tool evaluates exposure from this single pathway.³⁰ The risk assessment was carried out using recommend ARB/CAPCOA Risk Management Policy assumptions.

²⁹ Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program. Risk Assessment Guidelines—Guidance Manual for Preparation of Health Risk Assessments. February. Website: <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>. Accessed November 28, 2023.

³⁰ California Air Resources Board (ARB) and California Air Pollution Control Officers Association (CAPCOA). 2015. Risk Management Guidance for Stationary Sources of Air Toxics. Website: <https://ww2.arb.ca.gov/sites/default/files/classic/toxics/rma/rmgssat.pdf>. Accessed November 13, 2023.

The Health Risk Assessment (HRA) evaluates cancer and chronic hazard risks for construction at the Maximally Exposed Individual Resident (MEIR), Maximally Exposed Individual Worker (MEIW), and at other sensitive receptors of interest, such as schools.

Estimation of Cancer Risks

Cancer risks are estimated as the upper-bound incremental probability that an individual would develop cancer as a direct result of exposure to potential carcinogens over a specified exposure duration. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). Cancer risk is expressed in terms of risk per million exposed individuals. A risk level of 10 in a million implies a likelihood (or risk) that up to 10 persons out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of TACs over a specified duration of time. This risk would be an excess cancer risk that is in addition to any environmental cancer risk borne by a person not exposed to these TACs.

The health risks associated with the exposure to these concentrations are then calculated for each individual receptor based on dose and response parameters. Factors such as an individual's age and body weight and breathing rate determine the dose. Individuals also have varying responses due to a number of factors, with children being more susceptible to health effects due to development. OEHHA's Risk assessment procedures were modified in 2015³¹ to account for early childhood health effects and age sensitivity factors are applied to the cancer health risk values. An age sensitivity factor of 10 is applied for infants with exposure starting in the third trimester until age 2. Children from ages 2 to 16 are assumed to be 3 times more sensitive than adults. No adjustments are made for adult exposure for ages greater than 16. OEHHA Health Risk assessment protocols specify HRAs for residential exposure should start with exposure starting at third trimester and this approach is used for both the Construction and Operational HRA for the proposed project.

The analysis utilized the Risk Management Guidance for evaluating an individual receptor based on a 30-year residential exposure over a 70-year averaging period.³² Specifically, the policy recommends using the 95th percentile breathing rate for age groups less than 2 years old and the 80th percentile breathing rate for age groups that are greater than or equal to 2 years old. The construction exposure period is less than two years and as per OEHHA guidance, exposure was evaluated starting in the third trimester and conservatively evaluated exposure for ages less than 2 years based on the 95th percentile breathing rate.

Residential Cancer Risk

Residents less than 16 years of age are assumed to be exposed continuously 24 hours per day, 7 days per week and represent the maximally exposed sensitive receptor. The Construction HRA considers exposure starting in third trimester of pregnancy for 11 months.

³¹ Office of Environmental Health Hazard Assessment (OEHHA). 2015. Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments. February. Website: <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>. Accessed November 15, 2023.

³² California Air Resources Board (ARB). 2015. Risk Management Guidance for Stationary Sources of Air Toxics. May. Website: https://ww2.arb.ca.gov/sites/default/files/classic/toxics/rma/rma_guidancedraft052715.pdf. Accessed December 8, 2023.

Off-site Worker Cancer Risk

Workers are assumed to have exposure 8 hours per day, 250 days per year and therefore experience a lower dose than residents at the same location. In addition, workers are assumed to be 16 years of age or older and age sensitivity factors are not applied to the risk values. Worker inhalation rates are specified to account for moderate activity. Finally, because AERMOD calculates a concentration based on a 365 day per year, 24-hour averages, receptors such as workers may experience higher than estimated coincident exposures when the source emits only when the receptor is present. One of the methods to address the higher exposure is to apply a worker adjustment factor (WAF) in HARP2 to align the worker hours with the times when the source is emitting. It should be noted that this method can be applied for adjusting the cancer risk for workers or students but not for residents. The WAF is estimated by first adjusting for the hours that a source is emitted and then making a corresponding adjustment accounting for the hours when a receptor would be present at the site: A worker adjustment factor of 4.2 is used in this analysis to properly evaluate the risks to off-site workers. The factor adjusts the AERMOD 24 -hour, 7 day a week average to the concentrations coincident with the 5-day, 8-hour week construction schedule when DPM is emitted.

School Cancer Risk

Similarly, students would be present less than 24 hours per day and utilizing exposure times of less than 24 hours. AERMOD long-term concentrations may underestimate student risk. The use of the residential cancer risk to evaluate maximum risk at student locations would provide a conservative estimate since it would assume students are exposed to the entirety of the source emissions. It would also encompass all student age ranges since the exposure for residential risk starts at the third trimester of pregnancy.

Estimation of Chronic Non-Cancer Hazards

An evaluation of potential non-cancer effects of chronic chemical exposures was also conducted.

Risk characterization for non-cancer health hazards from TACs is expressed as a hazard index (HI). The HI is a ratio of the predicted concentration of the project's emissions to a concentration considered acceptable to public health professionals, termed the Reference Exposure Level (REL). The HI assumes that chronic exposures to TACs adversely affect a specific organ or organ system (toxicological endpoint) of the body. For each discrete chemical exposure, target organs presented in regulatory guidance were used. To calculate the HI, each chemical concentration or dose is divided by the appropriate toxicity REL. For compounds affecting the same toxicological endpoint, this ratio is added together. Where the total equals or exceeds 1, a health hazard is presumed to exist.

To quantify non-carcinogenic impacts, the chronic HI is derived by using the annual average concentration of TAC as derived from the air dispersion model ($\mu\text{g}/\text{m}^3$). This value is then compared to the REL above which a significant impact is assumed to occur ($\mu\text{g}/\text{m}^3$).

OEHHA has defined a REL for Diesel Exhaust of $5 \mu\text{g}/\text{m}^3$. The principal toxicological endpoint assumed in this assessment was the respiratory system via the inhalation exposure pathway. DPM does not have any identified short-term or acute RELs.

Estimation of Acute Non-Cancer Hazards

The project's non-cancer acute health risks were not estimated because OEHHA has not established an acute REL for DPM and there are no acute non-cancer risk values associated with DPM.

3.2.4 - Thresholds of Significance

Appendix G to the State CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts to air quality are significant. These questions reflect the input of planning and environmental professionals at the Governor's Office of Planning and Research and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. On the subject of air quality, Appendix G states that, "[w]here available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations." As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G and input from relevant air districts. The City has chosen to do so for this project.

Additional guidance on the significance of air quality impacts is found in State CEQA Guidelines Section 15065, subdivision (a)(4), which provides that a lead agency shall find that a project may have a significant effect on the environment if "the environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly." According to the California Supreme Court, this "mandatory finding of significance" applies to potential effects on public health from environmental impacts such as those associated with air pollutant emissions from projects. (*California Business Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 386-392.)

In light of the foregoing, the proposed project would have a significant effect related to air quality if the project would:

- a) Conflict with or obstruct implementation of the applicable air quality plan;
- b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard;
- c) Expose sensitive receptors to substantial pollutant concentrations (and thereby possibly cause substantial adverse effects on human beings, directly or indirectly); or
- d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

Significance Criteria

The preceding thresholds of significance are stated in general terms. It is therefore desirable to formulate additional, more precise thresholds based on guidance from the BAAQMD, as is encouraged in Appendix G to the State CEQA Guidelines. As explained earlier, BAAQMD's 2022 CEQA Air Quality Guidelines were prepared to assist in evaluating air quality impacts of projects and plans

proposed within the Bay Area. The guidelines provide recommended procedures for evaluating potential air quality impacts during the environmental review process, consistent with CEQA requirements, and include recommended thresholds of significance, mitigation measures, and background air quality information. They also include recommended assessment methodologies for air toxics, odors, and GHGs. The analysis below was prepared using these BAAQMD CEQA Guidelines.

Regional Significance Criteria

Table 3.2-11: shows the BAAQMD’s criteria for regional significance for project construction and operations.

Table 3.2-11: BAAQMD Regional (Mass Emissions) Air Pollutant Significance Thresholds

Pollutant	Construction Phase	Operational Phase	
	Average Daily Emissions (pounds/day)	Average Daily Emissions (pounds/day)	Maximum Annual Emissions (tons/year)
ROG	54	54	10
NO _x	54	54	10
PM ₁₀	82 (Exhaust)	82	15
PM _{2.5}	54 (Exhaust)	54	10
PM ₁₀ and PM _{2.5} Fugitive Dust	Best Management Practices	None	None

Notes:
 NO_x = oxides of nitrogen
 PM₁₀ = particulate matter, including dust, 10 micrometers or less in diameter
 PM_{2.5} = particulate matter, including dust, 2.5 micrometers or less in diameter
 ROG = reactive organic gas
 Source: Bay Area Air Quality Management District (BAAQMD). 2022. April. California Environmental Quality Act Air Quality Guidelines.

In developing the above significance thresholds, the BAAQMD considers the emission levels for which a project’s individual emissions would be cumulatively considerable. If a project were to exceed the emission thresholds in Table 3.2-11:, that project’s emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region’s existing air quality conditions. Known health effects related to ozone include worsening of bronchitis, asthma, and emphysema and a decrease in lung function. Health effects associated with PM include premature death of people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, decreased lung function, and increased respiratory symptoms. Reducing emissions would further contribute to reducing possible health effects related to criteria air pollutants. However, for projects that exceed the emissions thresholds shown in Table 3.2-11:, it is speculative to determine how exceeding regional thresholds would affect the number of days the region is in nonattainment—as mass emissions are not linearly correlated with concentrations of emissions—or how many additional individuals in the Air Basin would be affected by the health effects cited above.

In *Sierra Club v. County of Fresno (Friant Ranch, LP)* (2018) 6 Cal.5th 502, 510, 517-522, the California Supreme Court held generally that an EIR should “make a reasonable effort to substantively connect a project's air quality impacts to likely health consequences.” A possible example of such a connection would be to calculate a project’s “impact on the days of nonattainment per year” (*Id.* at pp. 521). But the court recognized that there might be scientific limitations on an agency’s ability to make the connection between air pollutant emissions and public health consequences in a credible fashion, given limitations in technical methodologies (*Id.* at pp. 520-521). Thus, the court acknowledged that another option for an agency preparing an EIR might be “to explain why it was not feasible to provide an analysis that connected the air quality effects to human health consequences” (*Id.* at p. 522).

For Napa County where the project is located, the BAAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of emissions in the Air Basin. At present, the BAAQMD has not provided any methodology to assist local governments in reasonably and accurately assessing the specific connection between mass emissions of ozone precursors (e.g., ROG and NO_x) and other pollutants of concern on a regional basis and any specific effects on public health or regional air quality concentrations that might result from such mass emissions. The City has therefore concluded that it is not feasible to predict how mass emissions of pollutants of regional concern from the proposed project could lead to specific public health consequences, changes in pollutant concentrations, or changes in the number of days for which the SFBAAB will be in nonattainment for regional pollutants.

Ozone concentrations, for instance, depend upon various complex factors, including the presence of sunlight and precursor pollutants, natural topography, nearby structures that cause building downwash, atmospheric stability, and wind patterns. Because of the complexities of predicting ground level ozone concentrations related to the NAAQS and CAAQS, it is not possible to link health risks to the magnitude of emissions exceeding the significance thresholds. To achieve the health-based standards established by the EPA, the air districts prepare air quality management plans that detail regional programs to attain the Ambient Air Quality Standards (AAQS). However, if a project within the BAAQMD exceeds the regional significance thresholds, the proposed project could contribute to an increase in health effects in the basin until the attainment standards are met in the Air Basin.

On the other hand, it is technically feasible to predict with reasonable accuracy the potential localized health consequences of localized pollutants such as TACs and PM_{2.5}. As discussed below, a HRA has been prepared that addresses the potential for additional incidences of cancer resulting from both the construction-related emissions and the operational emissions of the proposed project.

Consistency with Air Quality Plan

The applicable air quality plan is BAAQMD’s 2017 Bay Area Clean Air Plan, which identifies measures to:

- Reduce emissions and reduce ambient concentrations of air pollutants;

- Safeguard public health by reducing exposure to the air pollutants that pose the greatest health risk, with an emphasis on protecting the communities most heavily affected by air pollution; and
- Reduce GHG emissions to protect the climate.

A project would be determined to conflict with or obstruct implementation of an applicable air quality plan if it would result in substantial new regional emissions not foreseen in the air quality planning process.

Local CO Hotspots

Congested intersections have the potential to create elevated concentrations of CO, referred to as CO hotspots. The significance criteria for CO hotspots are based on the CAAQS for CO, which is 9.0 ppm (8-hour average) and 20.0 ppm (1-hour average). However, with the turnover of older vehicles, the introduction of cleaner fuels, and implementation of control technology, the SFBAAB is in attainment of the CAAQS and NAAQS, and CO concentrations in the SFBAAB have steadily declined. Because CO concentrations have improved, the BAAQMD does not require a CO hotspot analysis if all the following criteria are met:

- The project is consistent with an applicable congestion management program established by the County Congestion Management Agency for designated roads or highways, the regional transportation plan, and local congestion management agency plans; and
- The project would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
- The project traffic would not increase traffic volumes at affected intersection to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).³³

Community Risk and Hazards

The BAAQMD's significance thresholds for local community risk and hazard impacts apply to both the siting of a new source and to the siting of a new receptor. Local community risk and hazard impacts are associated with TACs and PM_{2.5} because emissions of these pollutants can have significant health impacts at the local level.

- The proposed project would generate TACs and PM_{2.5} during construction activities that could elevate concentrations of air pollutants at the nearby school and residential sensitive receptors. The thresholds for construction-related local community risk and hazard impacts are the same as for project operations. Construction-related TAC and PM_{2.5} impacts should be

³³ Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa-guidelines-2022/ceqa-guidelines-chapter-4-screening_final-pdf.pdf?rev=ac551d35a52d479dad475e7d4c57afa6&sc_lang=en. Accessed November 29, 2023.

addressed on a case-by-case basis, considering each project's specific construction-related characteristics and proximity to off-site receptors, as applicable.³⁴

- The proposed project involves the construction of new warehouse facilities and would be a source of operational TACs and PM_{2.5} from trucking activity. The BAAQMD thresholds related to siting new sources of TACs and PM_{2.5} near existing or planned sensitive receptors are applicable.

Since the City of American Canyon does not have a qualified risk reduction plan, a site-specific analysis of TACs and PM_{2.5} impacts on sensitive receptors was conducted. The thresholds identified below are applied to the proposed project's construction and operational phases.

Community Risk and Hazards: Project

Project-level emissions of TACs or PM_{2.5} from individual sources that exceed any of the thresholds listed below are considered a potentially significant community health risk:

- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute)HI greater than 1.0 would be a significant cumulatively considerable contribution.
- An incremental increase of greater than 0.3 micrograms per cubic meter (µg/m³) annual average PM_{2.5} from a single source would be a significant cumulatively considerable contribution.

Community Risk and Hazards: Cumulative

Cumulative sources represent the combined total risk values of each of the individual sources within the 1,000-foot evaluation zone. A project would have a cumulatively considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000-foot radius from the fence line of a source or location of a receptor, plus the contribution from the proposed project, meets any of these conditions:

- Has excess cancer risk levels of more than 100 in one million or a chronic non-cancer HI (from all local sources) greater than 10.0.
- Exceeds 0.8 µg/m³ annual average PM_{2.5}.

In February 2015, the California Office of Environmental Health Hazard Assessment (OEHHA) adopted additional HRA guidance that includes several efforts to be more protective of children's health. These updated procedures include age sensitivity factors to account for the higher sensitivity of infants and young children to cancer-causing chemicals, and age-specific breathing rates.³⁵

³⁴ Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed November 29, 2023.

³⁵ California Office of Environmental Health Hazard Assessment (OEHHA). 2015. Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments. February. Website: <https://oehha.ca.gov/media/downloads/crn/2015guidancemanual.pdf>. Accessed November 23, 2023.

Odors

The BAAQMD thresholds for odors are qualitative based on BAAQMD Regulation 7, Odorous Substances. This rule places general limitations on odorous substances and specific emission limitations on certain odorous compounds. Odors are also regulated under BAAQMD Regulation 1, Rule 1-301, Public Nuisance, which states that no person shall 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 the public; or which endangers the comfort, repose, health, or safety of any such persons or the public; or which causes, or has a natural tendency to cause, injury, or damage to business or property. Under BAAQMD Rule 1-301, the BAAQMD has established odor screening thresholds for land uses that have the potential to generate substantial odor complaints, including wastewater treatment plants, landfills or transfer stations, composting facilities, confined animal facilities, food manufacturing, and chemical plants. Table 3.2-12 shows the screening distances for various land uses that are considered to have objectionable odors.³⁶

Table 3.2-12: BAAQMD Odor Screening-level Distances Thresholds

Land Use/Type of Operation	Project Screening Distance
Wastewater Treatment Plant	2 miles
Wastewater Pumping Facilities	1 mile
Sanitary Landfill	2 miles
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	2 miles
Chemical Manufacturing	2 miles
Fiberglass Manufacturing	1 mile
Painting/Coating Operations	1 mile
Rendering Plant	2 miles
Coffee Roaster	1 mile
Food Processing Facility	1 mile
Confined Animal Facility/Feed Lot/Dairy	1 mile
Green Waste and Recycling Operations	1 mile
Metal Smelting Plants	2 miles
Source: Bay Area Air Quality Management District (BAAQMD). 2022.	

³⁶ Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: <https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>. Accessed June 2, 2023.

3.2.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Consistency with Air Quality Management Plan

Impact AIR-1: The proposed project could conflict with or obstruct implementation of the applicable air quality plan.

Impact Analysis

The BAAQMD is responsible for reducing emissions from area, stationary, and mobile sources in the SFBAAB to achieve National and California AAQS. The BAAQMD 2017 Clean Air Plan is a regional and multiagency effort to reduce air pollution in the Air Basin. A consistency determination with the Air Quality Management Plan (AQMP) plays an important role in local agency project review by linking local planning and individual projects to the 2017 Clean Air Plan. It fulfills the CEQA goal of informing decision-makers of the proposed project's environmental effects under consideration early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals in the 2017 Clean Air Plan.

The BAAQMD compiles the regional emissions inventory for the SFBAAB. In part, the regional population, housing, and employment projections developed by the ABAG are based on cities' general plan land use designations. These projections form the foundation for the emissions inventory of the 2017 Clean Air Plan. These demographic trends are incorporated into Plan Bay Area, compiled by ABAG and the MTC, to determine priority transportation projects and VMT in the Bay Area. Projects consistent with the local general plan are considered consistent with the regional air quality plan.

The proposed project would build a 219,834-square-foot warehouse on approximately 10.45 acres. As previously described, demographic trends such as employment and population growth were estimated in ABAG's Plan Bay Area 2040 based on local general plan land use patterns, which the BAAQMD utilized in part to inform the emissions inventory and projections contained in the 2017 Clean Air Plan.

The project site is designated Commercial Recreation (CR) by the City of American Canyon General Plan and zoned Recreation (REC). A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zoning district.

It is unclear whether ABAG's projections account for the possible conditional uses allowed under certain land use designations. As such, the proposed project would not automatically be considered consistent with employment and VMT growth projections identified in local plans, upon which applicable ambient Air Quality Plans (AQPs) are based. Therefore, further analysis is needed to determine whether the proposed project would conflict with or obstruct implementation of the applicable air quality plan.

With respect to local air quality plans, the City has adopted Ordinance No. 2024-014 which establishes thresholds to evaluate the significance of GHG impact for industrial land use projects. The industrial project is analyzed against four tiers (whether the project is exempt, whether the project would be consistent with a qualified adopted GHG reduction plan, whether the project incorporates the necessary design elements, and whether the project meets a numeric GHG emissions threshold) to determine its GHG impact significance. As discussed in Section 3.7, Greenhouse Gas Emissions, the proposed project would meet Tier 4 of the City’s GHG threshold and therefore would not conflict with the City’s GHG threshold.

The analysis below evaluates whether the proposed project would conflict with the Clean Air Plan based on the project’s emissions inventory and incorporation of relevant clean air measures contained in the Clean Air Plan.

As noted in Impact AIR-2 below, project-generated emissions would not exceed BAAQMD’s project-level significance thresholds and impacts would be less than significant.

Table 3.2-13 identifies the project-applicable control measures in the 2017 Clean Air Plan required by BAAQMD to reduce emissions for a wide range of stationary and mobile sources and the project’s consistency analysis with these control measures. As shown in Table 3.2-13, the proposed project would not conflict with the control measures of the 2017 Clean Air Plan.

Table 3.2-13: Consistency With 2017 Clean Air Plan Control Measures

Type	Measure Number/Title	Consistency Analysis
Stationary Source Control Measure	<p>SS18: Basin-Wide Combustion Strategy. Stabilize and then reduce emissions of GHGs, criteria air pollutant and toxic emissions from stationary combustion sources throughout the Air District by first establishing carbon intensity caps on major GHG sources, and then adopting new rules to (1) reduce fuel use on a source-type by source-type basis, and (2) evaluate alternatives to decarbonize abatement devices.</p> <p>SS21: New Source Review for Air Toxics. Propose revisions to Air District Rule 2-5, New Source Review of Toxic Air Contaminants, based on OEHHA’s 2015 Health Risk Assessment Guidelines and ARB/CAPCOA’s 2015 Risk Management Guidance. Revise the Air District’s Health Risk Assessment trigger levels for each toxic air contaminant using the 2015 Guidelines and most recent health effects values.</p>	<p>Consistent. Stationary sources are regulated directly by the BAAQMD, which routinely adopts/revises rules or regulations to implement the Stationary Source (SS) control measures to reduce stationary source emissions. Therefore, any new stationary sources associated with the proposed project would be required to comply with BAAQMD’s regulations. Based on the proposed warehousing use for the project site, it is not anticipated that the proposed project would result in any new major stationary source emissions. Additionally, in the event stationary equipment is installed on-site, it is anticipated that the equipment would be small-quantity emitters and would require review by BAAQMD for permitted sources of air which would ensure consistency with the 2017 Clean Air Plan.</p>
	<p>SS 36: PM from Trackout.</p>	<p>Consistent with mitigation. BAAQMD’s recommended mitigation measures for</p>

Type	Measure Number/Title	Consistency Analysis
	<p>Develop new Air District rule to prevent mud/dirt and other solid trackout from construction, landfills, quarries and other bulk material sites.</p>	<p>construction fugitive dust control, incorporated as MM AIR-1 for this project, would be implemented to reduce fugitive dust and trackout during project construction. In addition, mud and dirt that may be tracked out onto the nearby public roads during construction activities shall be removed promptly by the contractor based on BAAQMD’s requirements.</p>
	<p>SS 37: PM from Asphalt Operations. Develop an Air District rule to require abatement/control of blue smoke emissions related to asphalt delivery to roadway paving projects.</p>	<p>Consistent. Asphalt application during the construction of the proposed project would be subject to BAAQMD Regulation 8, Rule 15-Emulsified and Liquid Asphalts.</p>
<p>Transportation Control Measures</p>	<p>TR 2: Trip Reduction Programs. Implement the regional Commuter Benefits Program (Rule 14-1) that requires employers with 50 or more Bay Area employees to provide commuter benefits. Encourage trip reduction policies and programs in local plans, e.g., general and specific plans while providing grants to support trip reduction efforts. Encourage local governments to require mitigation of vehicle travel as part of new development approval, to adopt transit benefits ordinances in order to reduce transit costs to employees, and to develop innovative ways to encourage rideshare, transit, cycling, and walking for work trips. Fund various employer-based trip reduction programs.</p>	<p>Consistent. Transportation (TR) control measures are strategies to reduce vehicle trips, vehicle use, VMT, vehicle idling, and traffic congestion to reduce motor vehicle emissions. Although most of the TR control measures are implemented at the regional level—that is, by MTC or California Department of Transportation (Caltrans)—the 2017 Clean Air Plan relies on local communities to assist with the implementation of some measures.</p> <p>The proposed project would also be subject to the Bay Area’s Commuter Benefits Program, which requires all employers in BAAQMD’s jurisdiction that have 50 or more full-time employees to offer commuter benefits to their employees. Therefore, the proposed project is consistent with this measure.</p> <p>In addition, MM TRANS-2 requires the project applicant to develop and implement a Transportation Demand Management (TDM) program to encourage employees to choose non-personal vehicle models of transportation for commuting. MM TRANS-2 would further support the measure’s trip reduction goals.</p>
	<p>TR 9: Bicycle and Pedestrian Access and Facilities. Encourage planning for bicycle and pedestrian facilities in local plans, e.g., general and specific</p>	<p>Consistent. The proposed project would provide pedestrian circulation throughout the project site in accordance with California Disabled</p>

Type	Measure Number/Title	Consistency Analysis
	<p>plans, fund bike lanes, routes, paths and bicycle parking facilities.</p> <p>TR 19: Medium and Heavy-Duty Trucks. Directly provide, and encourage other organizations to provide, incentives for the purchase of (1) new trucks with engines that exceed ARB’s 2010 NO_x emission standards for heavy-duty engines, (2) new hybrid trucks, and (3) new zero-emission trucks. The Air District will work with truck owners, industry, ARB, the California Energy Commission, and others to demonstrate additional battery-electric and hydrogen fuel cell zero-emission trucks.</p>	<p>Accessibility Guidebook (CalDAG) and Americans with Disabilities Act (ADA) recommendations and standards. The proposed project would also provide three bicycle lockers, each of which would accommodate up to four bicycles, for a total of 12 bicycle parking spaces. The proposed 12 bicycle parking spaces would be five more than required per the City’s Zoning Ordinance Chapter 19.14.090 (A), Bicycle Parking Requirements.</p> <p>Consistent. The truck fleet used for the proposed project is required to comply with the State’s rigorous on-road heavy-duty vehicle programs aimed to transition truck fleets from diesel to Zero-Emission Vehicle (ZEV). Relevant regulations include the “omnibus” regulation, Advanced Clean Truck and Advance Clean Fleets regulations, and TRU Arborne Toxics Control Measure (ACTM), all discussed above in Section 3.2.2-Regulatory Framework.</p>
<p>Energy and Climate Control Measures</p>	<p>EN1: Decarbonize Electricity Production. Engage with PG&E, municipal electric utilities and CCAs to maximize the amount of renewable energy contributing to the production of electricity within the Bay Area as well as electricity imported into the region. Work with local governments to implement local renewable energy programs. Engage with stakeholders including dairy farms, forest managers, water treatment facilities, food processors, public works agencies and waste management to increase use of biomass in electricity production.</p> <p>EN2: Decrease Electricity Demand. Work with local governments to adopt additional energy efficiency policies and programs. Support local government energy efficiency program via best practices, model ordinances, and technical support. Work with partners to develop messaging to decrease electricity demand during peak times.</p>	<p>Consistent. The Energy and Climate (EN) control measures are intended to reduce energy use as a means of reducing adverse air quality emissions. Solar would be installed on the project’s building roof top and would produce an estimated 235,000 kilowatt-hour (kWh) per year.</p>
<p>Buildings Control Measures</p>	<p>BL2: Decarbonize Buildings. Explore potential Air District rulemaking options regarding the sale of fossil fuel-based space and water heating systems for both</p>	<p>Consistent. The proposed project would not include natural gas plumbing or appliances and is therefore consistent with this measure.</p>

Type	Measure Number/Title	Consistency Analysis
	residential and commercial use. Explore incentives for property owners to replace their furnace, water heater or natural gas powered appliances with zero-carbon alternatives. Update Air District guidance documents to recommend that commercial and multi-family developments install ground source heat pumps and solar hot water heaters.	
Natural and Working Lands Control Measures	NW 3—Carbon Sequestration in Wetlands. Identify federal, State, and regional agencies, and collaborative working groups that the Air District can assist with technical expertise, research or incentive funds to enhance carbon sequestration in wetlands around the Bay Area. Assist agencies and organizations that are working to secure the protection and restoration of wetlands in the San Francisco Bay.	Consistent. The control measure focuses on increasing carbon sequestration on wetlands. The proposed project would preserve the on-site wetlands and would include the planting of various ornamental and shade trees throughout the project site. These actions would support the State’s working lands and would therefore make the proposed project consistent with this measure.
Waste Management Control Measures	WA 4—Recycling and Waste Reduction. Develop model policies to facilitate local adoption of ordinances and programs to reduce the amount of green waste going to landfills.	Consistent. The control measure includes strategies to increase waste diversion rates through efforts to reduce, reuse, and recycle. The proposed project would comply with Assembly Bill (AB) 341, which requires mandatory commercial recycling for businesses that generate four cubic yards or more of commercial solid waste per week. Additionally, the proposed project would be required to reduce construction waste by 75 percent and use 30 percent recycled content during the construction of the proposed facility. Therefore, the proposed project would not conflict with these WA control measures.
Water Control Measures	WR 2—Support Water Conservation. Develop a list of best practices that reduce water consumption and increase on-site water recycling in new and existing buildings; incorporate into local planning guidance.	Consistent. The 2017 Clean Air Plan includes measures to reduce water use. The proposed project would include water efficiency measures required under CALGreen. In addition, the proposed project would include water-efficient indoor fixtures consistent with the requirements of CALGreen and water-efficient landscaping outdoors.
Super GHG Control Measures	SL 1—Short-Lived Climate Pollutants. Reduce methane from landfills and farming activities through various control measures listed under waste and agriculture sectors.	Consistent. Super-GHGs include methane, black carbon, and fluorinated gases. These compounds are sometimes referred to as short-lived climate

Type	Measure Number/Title	Consistency Analysis
	Develop a rule to reduce methane emissions from natural gas pipelines and processing operations, and amend regulations to reduce emissions of methane and other organic gases from equipment leaks at oil refineries. Enforce applicable regulations on the servicing of existing air conditioning units in motor vehicles, support the adoption of more stringent regulations by the ARB and/or EPA, and encourage better HFC disposal practices.	pollutants because their lifetime in the atmosphere is generally fairly short. Measures to reduce super-GHGs are addressed on a sector-by-sector basis in the 2017 Clean Air Plan. The proposed project would comply with AB 341, which mandates commercial recycling for businesses that generate four cubic yards or more of commercial solid waste per week, which could contribute to reducing methane by diverting waste from landfills.
<p>Notes: AG = Agricultural BL = Buildings EN = Energy and Climate FSM = Further Study Measures NW = Natural and Working Lands SL = Super GHG (Short-Lived) SS = Stationary Sources TR = Transportation WA = Waste Management WR = Water Control Measures</p> <p>Source: Bay Area Air Quality Management District (BAAQMD). 2017, April 19. Final 2017 Clean Air Plan, Spare the Air, Cool the Climate: A Blueprint for Clean Air and Climate Protection in the Bay Area. Website: https://www.baaqmd.gov/~media/files/planning-and-research/plans/2017-clean-air-plan/attachment-a_-proposed-final-cap-vol-1-pdf.pdf?la=en. Accessed November 30, 2023.</p>		

As shown in Table 3.2-13, the proposed project would not conflict with the relevant clean air measures contained in the Clean Air Plan after mitigation. Nonetheless, the BAAQMD’s CEQA Air Quality Guidelines further recommend determining a project’s consistency with the 2017 Clean Air Plan, in part, by determining a project’s consistency with the regional significance thresholds presented in Table 3.2-11.³⁷ As discussed under Impact AIR-2, the proposed project’s emissions are below BAAQMD’s significance thresholds and would be considered less than significant.

The BAAQMD does not have a bright-line emissions threshold for determining potentially significant impacts related to construction fugitive dust. Instead, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project’s intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs.

³⁷ Bay Area Air Quality Management District (BAAQMD). 2017. California Environmental Quality Act Air Quality Guidelines. Website: https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en. Accessed June 2, 2023.

Therefore, Mitigation Measure (MM) AIR-1 would be required to ensure implementation of construction BMPs recommended by the BAAQMD.

Consequently, implementation of MM AIR-1 would sufficiently maintain project construction emissions at less than significant levels. As previously discussed, the BAAQMD's CEQA Air Quality Guidelines recommend determining a project's consistency with the 2017 Clean Air Plan, in part, by determining a project's consistency with the BAAQMD significance thresholds. As discussed under Impact AIR-2, the proposed project would not generate emissions which would exceed the BAAQMD's significance thresholds. Therefore, the proposed project would not conflict with the applicable air quality plan and impacts would be less than significant with mitigation.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM AIR-1 Implement BAAQMD Best Management Practices to Control Dust During Construction

The following dust control measures, as recommended by the Bay Area Air Quality Management District (BAAQMD), shall be included in the design of the proposed project and implemented during construction:

- All exposed non-paved surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and access roads) shall be watered at least two times per day and/or non-toxic soil stabilizers shall be applied to exposed non-paved surfaces.
- All haul trucks transporting soil, sand, or other loose material off-site shall be covered and/or shall maintain at least 2 feet of freeboard.
- All visible mud or dirt tracked out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- All vehicle speeds on unpaved roads shall be limited to 15 miles per hour.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes, as required by the California Airborne Toxics Control Measure (ACTM) Title 13, Section 2485 of California Code of Regulations. Clear signage regarding idling restrictions shall be provided for construction workers at all access points.
- All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- The prime construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding dust complaints. The construction contractor shall take corrective action within 48 hours. The

BAAQMD's and the City's phone numbers shall also be visible to ensure compliance with applicable regulations.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Cumulative Criteria Pollutant Emissions Impacts

Impact AIR-2: The proposed project could result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or State ambient air quality standard.

Impact Analysis

This impact is related to the cumulative effect of a project's regional criteria pollutant emissions. By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants results from past and present development within the Air Basin, and this regional impact is a cumulative impact. Therefore, new development projects (such as the proposed project) within the Air Basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited, but cumulatively considerable when evaluated in combination with past, present, and future development projects.

As discussed above, BAAQMD sets emission thresholds for NO_x, PM₁₀, PM_{2.5}, CO, and ROG. NO_x emissions are of concern because of potential health impacts from exposure to NO_x emissions during both construction and operation and as a precursor in the formation of airborne ozone. PM₁₀ and PM_{2.5} are of concern during construction because of the potential to emit exhaust emissions from the operation of off-road construction equipment and fugitive dust during earth-disturbing activities (construction fugitive dust). CO emissions are of concern during project operation because operational CO hotspots are related to increases in on-road vehicle congestion and potential health effects. ROG emissions are also important because of their participation in the formation of ground level ozone. Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and can cause substantial damage to vegetation and other materials. Elevated ozone concentrations result in reduced lung function, particularly during vigorous physical activity. This health problem is particularly acute in sensitive receptors such as the sick, elderly, and young children.

The cumulative analysis focuses on whether a specific project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the State CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that the project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether the proposed project would result in regional emissions that exceed the BAAQMD regional thresholds of significance for construction and operations on a project level. The significance thresholds represent the allowable amount of emissions each project can generate without generating a cumulatively considerable contribution to regional air quality impacts.

Therefore, a project that would not exceed the BAAQMD thresholds of significance on the project level also would not be considered to result in a cumulatively considerable contribution to these regional air quality impacts. Construction and operational emissions are discussed separately below.

Construction

During construction, fugitive dust would be generated from site grading and other earthmoving activities. The majority of this fugitive dust would remain localized and deposited near the project site; however, fugitive dust's potential impacts exist unless control measures are implemented to reduce this source's emissions. Exhaust emissions would also be generated from the operation of the off-road construction equipment and on-road construction vehicles.

Construction Fugitive Dust

The BAAQMD does not recommend a numerical threshold for fugitive dust PM emissions. Instead, the BAAQMD bases the determination of significance for fugitive dust on the consideration of the control measures to be implemented, referred to as BMPs. If all appropriate emissions control measures are implemented for a project as recommended by the BAAQMD, then fugitive dust emissions during construction are not considered significant. Therefore, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project's intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs. Therefore, MM AIR-1 would be required to ensure implementation of construction BMPs recommended by the BAAQMD irrespective of the emissions reductions achieved by those BMPs. With the incorporation of this mitigation, short-term construction impacts associated with violating an air quality standard or contributing substantially to an existing or projected air quality violation would be less than significant for fugitive dust.

Construction Air Pollutant Emissions: ROG, NO_x, PM₁₀, PM_{2.5}

CalEEMod, Version 2022.1, was used to estimate the proposed project's construction emissions. CalEEMod provides a consistent platform for estimating construction and operational emissions from various land use projects and is the model recommended by the BAAQMD for estimating project emissions. Estimated construction emissions are compared with the applicable thresholds of significance established by the BAAQMD to assess ROG, NO_x, exhaust PM₁₀, and exhaust PM_{2.5} construction emissions to determine significance for this impact.

At the time of this analysis, the construction of the proposed project was anticipated to begin in the third quarter of 2024 and be completed 11 months later. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements.

Construction activities such as grading, excavation, and travel on unpaved surfaces would generate dust and lead to elevated concentrations of PM₁₀ and PM_{2.5}. According to the project site plans and applicant-provided information, an estimated 1,000 cubic yards of soil are anticipated to be imported during site grading activities. The operation of construction equipment results in exhaust

emissions, which include ROG and NO_x. Table 3.2-14 presents construction-period emissions that would result from the development of the proposed project. As shown in Table 3.2-14, construction-related criteria pollutant emissions would not exceed BAAQMD thresholds.

Table 3.2-14: Unmitigated Construction Emissions

Construction Activity	Criteria Pollutant Emissions (Tons)			
	ROG	NO _x	PM ₁₀ (Exhaust)	PM _{2.5} (Exhaust)
Site Preparation (2024)	0.019	0.180	0.008	0.007
Grading (2024)	0.038	0.387	0.016	0.014
Building Construction (2024)	0.053	0.405	0.015	0.014
Building Construction (2025)	0.123	0.930	0.032	0.030
Paving (2025)	0.012	0.079	0.004	0.003
Architectural Coating (2025)	0.277	0.010	0.000	0.000
Total Construction Emissions (Tons)	0.522	1.992	0.075	0.069
Average Daily Emissions				
Total Construction Emissions (Pounds)	1,044	3,984	149	137
Average Daily Construction Emissions (Pounds/Day)	4.2	15.9	0.60	0.55
BAAQMD Significance Thresholds	54	54	82	54
Significant Impact?	No	No	No	No
Notes: This analysis relies on a 250-day construction schedule, consistent with the construction schedule and modeling results contained in Appendix A. BAAQMD = Bay Area Air Quality Management District NO _x = nitrogen oxides PM ₁₀ = particulate matter, including dust, 10 micrometers or less in diameter PM _{2.5} = particulate matter, including dust, 2.5 micrometers or less in diameter ROG = reactive organic gases Source: Appendix A.				

Operation

Operational Air Pollutant Emissions: ROG, NO_x, PM₁₀, and PM_{2.5}

Operational emissions would include area, energy, and mobile sources. Area sources would include emissions from architectural coatings, consumer products, and landscape equipment. Energy sources include emissions from the combustion of natural gas for water heaters and other heat sources. Mobile sources include exhaust and road dust emissions from the automobiles that would travel to and from the project site. Pollutants of concern include ROG, NO_x, PM₁₀, and PM_{2.5}.

Project operations were analyzed at full buildout immediately following the completion of construction in August 2025 as a conservative estimate of operational emissions beginning in the earliest year of full operation. During full operation, the proposed project is expected to generate

1.69 trips per 1,000 square feet or an estimated 372 daily trips.³⁸ A recent American Canyon industrial warehouse travel collection study³⁹ was used to apportion the trips between passenger vehicles (244 daily) and medium-duty (19 daily) and heavy-duty truck (109 daily) trips. An average truck trip length of 35.6 miles was also assumed, based on eight existing Napa County industrial warehousing sites in full operation.⁴⁰

Operational emission estimates for the proposed project are contained in Table 3.2-15. For detailed assumptions used to estimate emissions, see Appendix B.

Table 3.2-15: Unmitigated Operational Emissions

Emissions Source	ROG	NO _x	PM ₁₀ Total	PM _{2.5} Total
	Tons per Year			
Area	1.10	0.01	0.002	0.002
Energy	–	–	–	–
Mobile–Trucks	0.055	3.615	0.772	0.237
Mobile–Passenger Vehicles	0.116	0.095	0.312	0.080
Stationary	–	–	–	–
<i>Total (tons/year)</i>	1.27	3.72	1.09	0.32
Significance Threshold (Tons/Year)	10	10	15	10
Exceeds Significance Threshold?	No	No	No	No
<i>Total Average (pounds/day)²</i>	7.0	20.4	6.0	1.7
Significance Threshold (Tons/Year)	54	54	82	54
Exceeds Significance Threshold?	No	No	No	No
Notes:				
¹ Totals may not add up due to rounding. Calculations use unrounded results.				
² Pounds/day emissions data is derived from tons/year emissions data by converting tons to pounds. 365 working days per year is assumed to estimate average daily emission rates.				
lb. = pounds				
ND = No Data				
NO _x = oxides of nitrogen				
PM ₁₀ = particulate matter 10 microns in diameter PM _{2.5} = particulate matter 2.5 microns in diameter				
ROG = reactive organic gases				
Source: CalEEMod Output (see Appendix A).				

³⁸ W-Trans. 2023. 1055 Commerce Court Memorandum of Assumptions. April.

³⁹ Fehr and Peers, 2022. Memorandum, American Canyon Industrial Warehouse Travel Behavior Data, from Joe Livaich, Buzz Oates Construction, Inc., June 16, 2023.

⁴⁰ Ibid.

Table 3.2-15 indicates that the proposed project would result in operational-related criteria air pollutants or ozone precursors below the BAAQMD's thresholds of significance for all criteria pollutants.

Operational Carbon Monoxide Hotspot

The CO emissions from traffic generated by the proposed project are a concern at the local level. Congested intersections can result in high, localized concentrations of CO.

The BAAQMD recommends a screening analysis to determine whether a project has the potential to contribute to a CO hotspot. The screening criteria identify when site-specific CO dispersion modeling is necessary. The proposed project would result in a less than significant impact to air quality for local CO if all the following screening criteria are met:

1. The project is consistent with an applicable congestion management program established by the county congestion management agency for designated roads or highways, regional transportation plan, and local congestion management agency plans; and
2. The project traffic would not increase traffic volumes at affected intersections to more than 44,000 vehicles per hour; and
3. The project traffic would not increase traffic volumes at affected intersections to more than 24,000 vehicles per hour where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway).

SR-29, located approximately 4,800 feet east of the project site, would experience the most traffic volume as compared to other roadways in the vicinity. The segment of SR-29 near the project site has a peak-hour traffic volume of 2,900 vehicle trips as of 2021.^{41,42} Therefore, the proposed project would not result in any nearby intersection having peak-hour traffic volumes exceeding 44,000 vehicles per hour.

Nonetheless, CO hotspots can occur when a transportation facility's design or orientation prevents the adequate dispersion of CO emissions from vehicles, resulting in the accumulation of local CO concentrations. The design or orientation of a transportation facility that may prevent the dispersion of CO emissions include tunnels, parking garages, bridge underpasses, natural or urban canyons, below-grade roadways, or other features where vertical or horizontal atmospheric mixing is substantially limited. Adjacent roadways that would receive new vehicle trips generated by the proposed project do not include roadway segments where vertical or horizontal atmospheric mixing is substantially limited.

Finally, the proposed project would not conflict with a program, plan, ordinance, or policy of the circulation system, including transit, roadway, bicycle, and pedestrian facilities. As discussed in

⁴¹ California Department of Transportation (Caltrans). 2021. Traffic Volumes for All Vehicles on CA State Highways. Website: <https://dot.ca.gov/programs/traffic-operations/census>. Accessed November 30, 2023.

⁴² Postmile of the nearest SR-29 segment is obtained from Caltrans Postmile Services. Website: <https://postmile.dot.ca.gov/PMQT/PostmileQueryTool.html?>. Accessed November 20, 2023.

Section 3.13, Transportation, General Plan Policy 4.6 indicates that industrial uses should be located in the City's north industrial area to minimize the impacts of truck traffic on residential neighborhoods. The proposed project is located adjacent to similar warehouse projects, and with the redesign of Commerce Court as a cul-de-sac, the roadway connection to the residential neighborhood to south of the project is not available, and truck traffic would be required to access the site via Green Island Road. As the proposed project would minimize truck traffic impacts on residential neighborhoods, the proposed project would not conflict with this policy.

Therefore, based on the above criteria, the proposed project would not exceed the CO screening criteria and would have a less than significant impact related to CO.

The proposed project would generate criteria pollutant and ozone precursor emissions during construction and operation; however, as previously indicated, emissions would be below BAAQMD thresholds and therefore would have less than significant effects in this respect.

The proposed project would generate construction fugitive dust. The BAAQMD does not have a bright-line emissions threshold for determining potentially significant impacts related to construction fugitive dust. Instead, the BAAQMD determines a project to result in a potentially significant impact if that project were not to implement construction BMPs to minimize the extent of fugitive dust emissions, such as soil erosion, sediment migration, roadway dust re-entrainment, and soil trackout, during project construction. In the absence of specific information related to the proposed project's intended implementation of construction BMPs to minimize fugitive dust emissions, the proposed project is assumed to not include any construction BMPs. Therefore, MM AIR-1, discussed above, would be required to ensure implementation of construction BMPs recommended by the BAAQMD irrespective of the emissions reductions achieved by those BMPs.

Consequently, implementation of MM AIR-1 would sufficiently reduce project construction emissions to less than significant levels.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement MM AIR-1.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Sensitive Receptors Exposure to Pollutant Concentrations

Impact AIR-3:	The proposed project would not expose sensitive receptors to substantial pollutant concentrations.
----------------------	---

Impact Analysis

The proposed project could expose sensitive receptors to elevated pollutant concentrations if it causes or contributes significantly to elevated pollutant concentration levels. As described in Section 3.2.1,

Environmental Setting, beneath Table 3.2-4, the closest sensitive receptors include a single-family residence located approximately 850 feet east of the project site, Napa Junction Magnet Elementary School located approximately 1,200 feet south of the project site, and a neighborhood located approximately 1,600 feet south of the project site. Unlike regional emissions, localized emissions are typically evaluated in terms of air concentration rather than mass so they can be more readily correlated to potential health effects. As the proposed project would constitute the development of 219,834 square feet of industrial warehouse space and the operation of heavy-duty trucking fleets, a construction and operational HRA was prepared for the proposed project and is contained in Appendix B. The results of the HRA are summarized below.

Construction

Table 3.2-16 presents a summary of the results of the HRA prepared for the proposed project during project construction. The HRA analyzes the proposed project’s construction emissions over a period of 11 months consistent with the BAAQMD’s Health Risk Assessment Guidelines.⁴³ The HRA also analyzes the proposed project’s impacts at the maximally impacted receptor, which is a residence, the closest off-site worker receptor and the school receptor exposure at the Napa Junction Magnet Elementary School.

As shown in Table 3.2-16, health risks resulting from the construction of the proposed project were found to be less than the BAAQMD’s project-level significance thresholds.

Table 3.2-16: Summary of Construction Health Risks at the Maximum Impacted Receptor

Impact Scenario	UTM E	UTM N	Cancer Risk ¹ (risk per million)	Chronic Non-Cancer Hazard Index ²	TAC Concentration ³ (µg/m ³)
Residential MIR Impact	563979	4226674	0.8	0.001	0.0044
Worker MIR Impact	563625	4226775	1.0	0.019	0.0925
School MIR Impact	563877	4226209	0.2	0.002	0.00112
Thresholds of Significance			10	1	0.3
Exceeds Individual Source Threshold?			No	No	No
Notes: DPM = diesel particulate matter MIR = Maximally Impacted Sensitive Receptor REL = Reference Exposure Level TAC = toxic air contaminants µg/m ³ = micrograms per cubic meter ¹ Cancer risk is identified by multiplying the risk sum from HARP2 by 1,000,000. ² Chronic non-cancer hazard index was estimated by dividing the annual DPM concentration (as PM _{2.5} exhaust) by the DPM REL of 5 µg/m ³ . ³ TAC concentration taken from AERMOD is always at the MIR identified from the project air dispersion models. The school MIR was identified as the Napa Junction Elementary School. Emissions Source: Appendix B. Thresholds Source: Bay Area Air Quality Management District (BAAQMD). 2022. California Environmental Quality Act Air Quality Guidelines. April. Website: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines . Accessed November 30, 2023.					

⁴³ Bay Area Air Quality Management District (BAAQMD). 2016. BAAQMD Air Toxics NSR Program Health Risk Assessment Guidelines. December. Website: https://www.baaqmd.gov/~media/files/planning-and-research/permit-modeling/hra_guidelines_12_7_2016_clean-pdf.pdf?la=en. Accessed September 16, 2023.

Community Health Risk Assessment

A community HRA was conducted for construction in accordance with BAAQMD recommendations. The cumulative health risk values were determined by adding the health risk values from refined modeling of the proposed project construction to the screening-level health risk values from each individual stationary and mobile source within a 1,000-foot radius of the site. The HRA revealed that the main sources of health risks come from existing sources (i.e., roadways) rather than the proposed project. The analysis results presented in the HRA, contained in Appendix B, are shown in Table 3.2-17. As shown therein, health risks to nearby sensitive receptors would not exceed the BAAQMD community health risk significance thresholds. As the proposed project did not result in an exceedance of project-level BAAQMD significance thresholds, the proposed project would not result in a potentially significant impact and the proposed project’s impacts would not be cumulatively considerable. Therefore, this impact would be less than significant.

Table 3.2-17: Summary of Construction Health Risks at the Maximum Impacted Receptor

Source	Source Type	Distance from MIR ¹ (feet)	Cancer Risk (per million)	Chronic HI	PM _{2.5} Concentration (µg/m ³)
Project					
Residential MIR	Diesel Construction Equipment, Trucking Fleets, and Passenger Vehicles	—	0.8	0.001	0.0044
Roadways		—	1.19	0.003	0.025
Cumulative Health Risks					
Cumulative Maximum with Project DPM Emissions			2	0.004	0.029
BAAQMD’s Cumulative Thresholds of Significance			100	10	0.8
Threshold Exceedance?			No	No	No
Notes: BAAQMD = Bay Area Air Quality Management District DPM = diesel particulate matter HI = health index MIR = Maximally Impacted Sensitive Receptor ND = No Data PM _{2.5} = particulate matter, including dust, 2.5 micrometers or less in diameter µg/m ³ = micrograms per cubic meter ¹ The residential MIR located at 563979 UTM E 4226674 UTM N was identified as the primary MIR here as it would experience the greatest health impact between residential and school receptors. ² Assumes emissions remain constant with time. Values represent the greatest identified among all MIRs presented in this analysis, including the two previously identified residences and the previously identified school. Source: Appendix A.					

Toxic Air Contaminant Operational Analysis

For project operation, potential TAC emissions would be from the exhaust of the trucks entering, exiting, and idling on the site. Diesel exhaust particulate emissions from on-road heavy-duty trucks are substantially less than those from off-road construction equipment and are dispersed over a larger linear roadway path. Projects with the potential for health risk from DPM are those with high level of truck traffic or sites where trucks with TRUs (small diesel engines used to run refrigeration devices on trucks) idle for a significant amount of time. The ARB's Air Quality and Land Use Handbook provides guidance on levels of activity that could result in a potential impact:⁴⁴

Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units [TRUs] per day, or where TRU unit operations exceed 300 hours per week).

The traffic analysis estimates the daily HHD truck trips accessing the project site would be 128 trips, which is 64 HHD trucks per day. Since these project HHD truck trips are less than the 100-truck advisory threshold in the Air Quality and Land Use Handbook, an operational HRA is not necessary and therefore not analyzed in this study. As previously discussed, no TRUs would be operated while on-site. Therefore, risks due to DPM from this level of truck traffic would be less than significant.

Best Management Practices for Warehouses

The California Attorney General published a list of best practices for warehouse development that aim to reduce air quality emissions and health risks to sensitive receptors.⁴⁵ The ARB Concept Paper for the Freight Handbook also provides best practices for warehouse projects.⁴⁶ The design of the proposed project considered and is consistent with many of these best practices.

The proposed project includes the following design features and best management strategies, to minimize and reduce air quality and health risk impacts:

- As discussed in Chapter 2, Project Description, the proposed project would provide adequate amounts of on-site parking to prevent trucks and other vehicles from parking or idling on public streets and to reduce demand for off-site truck yards.
- As shown in Exhibit 2-4a, facility entry and exit points from the public street were placed away from sensitive receptors south and east of the project.
- Rooftop Solar Photovoltaic system with Battery Storage would be provided as required by Title 24 Part 6 Section 140.10(a).
- Heat pump for space Conditioning in Single-Zoned Office Spaces would be provided as required by Title 24 Part 6 Section 140.4(a).2.

⁴⁴ California Air Resources Board (ARB). Air Quality and Land Use Handbook: A Community Health Perspective. 2005. Website: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/california-air-resources-board-air-quality-and-land-use-handbook-a-community-health-perspective.pdf>. Accessed November 16, 2023.

⁴⁵ California Office of the Attorney General. 2022. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: <https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf>. Accessed November 14, 2023.

⁴⁶ California Air Resources Board (ARB). 2020. California Sustainable Freight Initiative: Concept Paper for the Freight Handbook. Website: <https://ww2.arb.ca.gov/resources/documents/concept-paper-freight-handbook>. Accessed November 14, 2023.

- The proposed project would provide electrical Infrastructure ready to support future ZEV medium heavy-duty trucks (MHDT) and heavy heavy-duty trucks (HHDT), as required by California Building Standards Code (CBC) 5.106.5.4.1 Electric vehicle charging readiness requirements for warehouses with planned off-street loading spaces.
- Water-efficient landscaping would be provided in accordance with Municipal Code Chapter 16.14 Water-Efficient Landscaping.
- Low-flow water fixtures would be provided per CALGreen Building Code Section 4.303.1.
- Energy-efficient light-emitting diode (LED) lighting would be provided per the California Energy Code.
- The proposed project would use compliant low-GWP refrigerants per ARB HFC regulation.

As shown above, the proposed project incorporates many best practices for warehouse development. It is worth noting that one of the best practices is to site warehouse facilities at least 1,000 feet from the nearest sensitive receptors. Although the proposed project is within 1,000 feet of residential uses, the above health risk impact analysis demonstrates that the proposed project would not have significant impacts on the nearest receptors.

Carbon Monoxide Hotspot

As discussed in Impact AIR-2, the proposed project would not generate sufficient vehicle traffic during project operation to substantiate creating a CO hotspot. Therefore, this impact would be less than significant with regard to exposing sensitive receptors to substantial concentrations of CO emissions. As such, the proposed project would result in less than significant impacts related to exposing sensitive receptors to substantial pollutant concentrations.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Objectionable Odors Exposure

Impact AIR-4: **The proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**

Impact Analysis

Construction

During construction activities, construction equipment exhaust and application of asphalt and architectural coatings would temporarily generate odors. Any construction-related odor emissions would be temporary and intermittent. Additionally, noxious odors would be confined to the immediate vicinity of the construction equipment. It is anticipated that by the time such emissions reach any sensitive receptor sites, they would be diluted to well below any air quality or odor concern level. Therefore, construction odor impacts would be less than significant.

Operation

The proposed project would construct and operate a wine storage warehouse and distribution center. Operation of this type of project would likely not generate objectionable odors that may affect a substantial number of nearby receptors. The types of uses that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities.

Minor sources of odors that would be generated by the proposed project, such as exhaust from mobile sources, are not typically associated with numerous odor complaints, but are known to have temporary and less concentrated odors. The nearest sensitive receptor is a single-family residence located approximately 850 feet east of the project site. Because of distance from this sensitive receptor, operation of the proposed project would not have an impact related to odors.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.2.6 - Cumulative Impacts

The geographic scope of the cumulative air quality analysis is the SFBAAB, which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. Air quality is impacted by topography, dominant air flows, atmospheric inversions, location, and season; therefore, using the Air Basin represents the area most likely to be impacted by air emissions. The BAAQMD CEQA Guidelines cumulative significance criteria are used in the cumulative analysis of air quality.

In developing thresholds of significance for air pollutants, BAAQMD established numerical thresholds for determining when a project's individual contributions would be cumulatively considerable. If a project does not exceed the identified significance thresholds, its emissions would not be cumulatively considerable, resulting in less than significant air quality impacts to the region's existing air quality conditions.

Criteria Pollutants

By its nature, air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants is a result of past and present development within an air basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the project) within the SFBAAB would contribute to this impact only on a cumulative basis. No single project would be sufficient in size, by itself, to result in nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited but cumulatively considerable when taken in combination with past, present, and future

development projects. All new development that would result in an increase in air pollutant emissions above those assumed in regional AQPs would contribute to cumulative air quality impacts.

The cumulative analysis focuses on whether the proposed project would result in cumulatively considerable emissions. According to Section 15064(h)(4) of the State CEQA Guidelines, the existence of significant cumulative impacts caused by other projects alone does not constitute substantial evidence that a project's incremental effects would be cumulatively considerable. Rather, the determination of cumulative air quality impacts for construction and operational emissions is based on whether a project would result in regional emissions that exceed the BAAQMD regional thresholds of significance. Projects, such as the proposed project, that generate emissions below the significance thresholds would be considered consistent with regional air quality planning efforts and would not generate cumulatively considerable emissions. Therefore, the proposed project would not have a cumulative impact related to construction or operation criteria pollutants.

Toxic Air Contaminants

Construction and Operational Emissions at the Site and Maximum Impacted Receptor

As discussed previously, localized risks are primarily associated with exposure to TAC emissions. Operation of the proposed project would not contribute to significant operational TAC emissions. Potential cumulative sources of TAC emissions could occur during construction or operation impacting the nearby Maximally Impacted Sensitive Receptor. Sensitive receptors could be impacted by new stationary sources in the vicinity of the site (e.g., dry cleaners, diesel backup generators, and gasoline stations) or by the construction or operation of other developments. Any proposed new stationary source of TAC emissions would be subject to BAAQMD permit requirements, which involves New Source Review for air toxics and an evaluation of health risks.⁴⁷ Freeways, major roadways and railroads are also significant sources of TAC emissions of diesel particulate; however, land use and zoning restrictions preclude these from becoming new significant sources of TAC exposure in the project area and they do not figure into cumulative considerations. The final potential sources of TACs for a cumulative risk would be diesel exhaust exposure from off-road sources such as construction equipment from other land use development. New construction from other development projects are a potential additional source of TAC emissions and risk to sensitive receptors; however, the CEQA process and current BAAQMD thresholds for cumulative community risk would consider these impacts. In these cases, sensitive receptors for other cumulative projects would be considered in their environmental planning analysis under BAAQMD risk thresholds. This would ensure that there are no significant impacts to these sensitive receptors and risks would be less than significant.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

⁴⁷ Bay Area Air Quality Management District (BAAQMD). 2023. Regulation 2 Rule 2: New Source Review. Website: <https://www.baaqmd.gov/rules-and-compliance/rules/reg-2-rule-2-new-source-review>. Accessed November 17, 2023.

THIS PAGE INTENTIONALLY LEFT BLANK

3.3 - Biological Resources

3.3.1 - Introduction

This section describes the existing biological setting and potential effects from implementation of the proposed project on the project site and the surrounding area. This section also identifies mitigation measures to reduce these potential effects to less than significant levels where applicable. Descriptions and analysis in this section are based, in part, on a Biological Resources Assessment (BRA) prepared by First Carbon Solutions (FCS), including field and focused surveys. Additional information used for analysis includes wildlife and floristic rare plant surveys, conducted by Pinecrest Research Corporation (Pinecrest); Jurisdictional Determination Reverification and previous field surveys, conducted by Monk & Associates (M&A); and analyses completed for the adjacent Commerce 217 project. All supporting documents are contained in Appendix C of this Draft EIR. Within Appendix C are three subfolders: Appendix C.1 contains the Commerce Court 220 BRA; Appendix C.2 contains Commerce Court 217 supporting documents; and Appendix C.3 contains Commerce Court 220 supporting documents.

The following public comments pertaining to biological resources were received in response to the Notice of Preparation (NOP):

- The Draft EIR should evaluate environmental impacts given that the project site has already been cleared of vegetation and graded.
- The Draft EIR should evaluate the ability of animals to utilize the wetland and provide recommendations.
- The Draft EIR should ensure that the wetland is monitored and protected.
- The Draft EIR should evaluate the effect of lighting and noise from the warehouses on birds and wildlife.
- The Draft EIR must evaluate impacts on California Endangered Species Act (CESA) species in order to receive an Incidental Take Permit (ITP).
- The Draft EIR must evaluate impacts on nesting birds pursuant to the Migratory Bird Treaty Act.
- The Draft EIR should provide sufficient information regarding the environmental setting or “baseline” for habitats of special-status plant, fish, and wildlife species located and potentially located within the project site.
- The Draft EIR should describe aquatic habitats, such as wetlands, as well as any sensitive natural communities occurring on or adjacent to the project site.
- The Draft EIR should describe City regulations regarding wetland set back distances.
- The Draft EIR should include habitat descriptions and the potential for species occurrences from multiple sources, such as aerial imagery, historical and recent survey data, field reconnaissance, scientific literature, databases from relevant agencies, etc.

- The Draft EIR should include surveys for special-status species and rare plants and recommended protocols.
- The Draft EIR should describe direct and indirect impacts related to the loss or modification of breeding, nesting, dispersal and foraging habitat as well as the obstruction of movement corridors.
- The Draft EIR should describe direct and indirect impacts related to permanent and temporary habitat disturbances associated with ground disturbance, noise, lighting, reflection, air pollution, traffic, etc.
- The Draft EIR should describe cumulative impacts to biological resources.

3.3.2 - Project History

The project site is a portion of a larger, 35.85-acre site that was subsequently subdivided into three lots in February 2021 (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330). The southern parcel (SDG Commerce 330) was developed in 2020. The northern parcel (SDG Commerce 217) was entitled in 2021 and at the time of this writing is currently being developed. The central parcel (SDG Commerce 220) is the project site evaluated in this analysis.

While the BRA site boundary includes a total of 10.17 acres, project site boundaries were subsequently increased to 10.45 acres to include adjacent, off-site improvement areas. However, field surveys for the BRA and additional supporting studies did include the entire 10.45-acre project site, as these areas were located within original survey buffer areas. Please see Section 2.0 (Project Description) for further details regarding project site boundaries.

It should be noted that as part of the SDG Commerce 217 development (located directly north of the project site), much of the SDG Commerce 220 project site was graded between May 29 and July 2, 2023, to procure existing, stockpiled soil for use as clean fill material for the SDG Commerce 217 site (Appendix C.2: *BRA for SDG 217 ISMND*). As a part of the SDG Commerce 217 project, M&A authored an *Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site* in September 2020 which analyzed grading impacts (Appendix C.2: *Addendum to Biological Constraints*). Additionally, an approved grading plan was issued by the City of American Canyon in March 2023 (Appendix C.2: *Borrow Site Grading Plan*).

3.3.3 - Environmental Setting

The project site is located in the City of American Canyon, which is part of the greater north San Francisco Bay Area (Exhibit 2-1). The project site is located within the *Cuttings Wharf, California*, United States Geological Survey (USGS) 7.5-Minute Topographic Quadrangle Map.

The project area is generally located in the northern portion of the City of American Canyon, where commercial development is the dominant land use. The project site is bordered by a eucalyptus grove and North Slough beyond which is the Napa River (west), a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 (north), Commerce Court, beyond which is a

paintball recreation area (east), and a wine distribution warehouse known as SDG Commerce 330 (south); refer to Exhibit 2-2.

Soils, Topography, and Hydrology

The project area experiences a Mediterranean climate characterized by warm, dry summers and cool, wet winters. The project area typically exhibits annual low/high temperatures between 40-80°F (degrees Fahrenheit) and an annual average rainfall of approximately 20 inches.

Soil survey information for the project site was obtained from the National Resources Conservation Service (NRCS) Web Soil Survey.¹ The NRCS Web Soil Survey (WSS) depicts one soil type within the project site (Exhibit 3.3-1); Haire clay loam (148), 2 to 9 percent slopes. Haire Clay Loam is characterized as alluvium, derived from sedimentary rock. These soils are moderately well drained and non-saline to very slightly saline.

The 10.45-acre project site is currently undeveloped land. A linear wetland (LW1) and three isolated wetlands (W1, W2, and W3) are located within the northern portion of the property. The location and extent of each wetland is shown on Exhibit 3.3-2, *Vegetation Communities and Land Cover Types*. The project site is relatively flat with elevations ranging from 13 to 25 feet above sea level. The ground is undulating due to past land use disturbances including eucalyptus tree removal in 2012. The site slopes gently to the west toward the North Slough and the Napa River.

In 2023, M&A reverified a 0.023 acre of seasonal wetlands and 0.042 acre of linear wetlands within the delineation survey area (Exhibit 3.3-2). These wetlands have surface hydrologic connectivity to North Slough, which flows to the Napa River to the west. The Napa River is a traditional navigable water.

Vegetation Communities and Land Cover Types

Vegetation communities are assemblages of plant species growing in an area of similar biological and environmental factors. The following section describes the vegetation communities and land cover types present in the project area. The location and extent of each vegetation community is shown on Exhibit 3.3-2.

Non-native Annual Grassland—Avena spp.—Bromus spp. Herbaceous Semi-Natural Alliance

This vegetation type is typically described by being dominated by non-native annual grasses and annual or perennial forbs from dense to sparse cover with less than 10 percent tree or shrub cover. With a few exceptions, the plants are dead through the summer and fall dry season, persisting as seeds. This community usually occurs below 3,000 feet and is the most common herbaceous vegetation type of the region. This vegetation type is classified by the Manual of California Vegetation (MCV) as *Avena spp.—Bromus spp. Herbaceous Semi-Natural Alliance*, which has broad membership rules, but is dominated by a non-native annual grass species. The herb layer in this alliance is generally less than 1.2 meters and vegetation cover ranges from open to continuous.

¹ United States Department of Agriculture. 2023. National Resources Conservation Service Web Soil Survey. Website: <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>. Accessed September 27, 2023.

Legend

 Project Site 10.45 acres

Soil Classification

 148 - Haire clay loam, 2 to 9 percent slopes 10.45 acres



Source: Bing Aerial Imagery. USDA Soils Data Mart, County of American Canyon.



**Exhibit 3.3-1
Soils Map**

THIS PAGE INTENTIONALLY LEFT BLANK

Legend

 Project Site 10.45 acres

Vegetation Communities and Land Cover Types

	Avena spp.-Bromus spp. Herbaceous Semi-Natural Stand	9.64 acres
	Developed	0.75 acre
	Seasonal wetland (W)	0.02 acre
	Linear Wetland (LW)	0.04 acre



Source: Bing Aerial Imagery. Monk & Associates Environmental Consultants, 08/2023.



**Exhibit 3.3-2
Vegetation Communities and
Land Cover Types**

THIS PAGE INTENTIONALLY LEFT BLANK

Trees and shrubs may be present at low cover. This community is found on various substrates including foothills, waste spaces, rangelands, and openings in woods.

The vast majority of the project site is generally considered non-native annual grassland, with a species composition that trends strongly toward ruderal. Individual scattered shrubs (including coyote brush [*Baccharis pilularis*]) and eucalyptus saplings and resprouts are not considered their own vegetation type due to small patch size, but rather a component of the grassland matrix (see membership rules, below).

The most predominant grass species within the project site included wild oats (*Avena sp*), canary-grass (*Phalaris aquatica*), medusahead (*Taeniatherum caput-medusae*), and wall barley (*Hordeum murinum*), but equally dominant are ruderal species including mustard (*Hirschfeldia incana*), stinkwort (*Dittrichia graveolens*), Italian rye grass (*Festuca perennis*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), slender wild oat (*Avena barbata*), common vetch (*Vicia sativa*), red-stem filaree (*Erodium cicutarium*), bull thistle (*Cirsium vulgare*), Italian thistle (*Carduus pycnocephalus*), bristly ox-tongue (*Helminthotheca echioides*), California burclover (*Medicago polymorpha*), and cut-leaf geranium (*Geranium dissectum*).

As previously noted, large areas of this vegetation type were graded between May 29 and July 2, 2023 (see Appendix C.2: *Borrow Site Grading Plan*; and *Addendum to Biological Constraints*). The grading did not encroach into the wetlands features or associated wetland buffer areas. The grading effectively eliminated the non-native grassland throughout much of the site.

Seasonal Wetland

Seasonal wetland habitat is present on the project site (Exhibit 3.3-2), reflecting current conditions. Over the past 12 years, the United States Army Corps of Engineers (USACE) has twice verified its jurisdiction via delineations, as explained below.

In 2011, the USACE confirmed 0.049-acre of wetlands and 0.004-acre of “other waters” adjacent to the former gravel road on the eastern edge of the project site. On December 6, 2011, the USACE confirmed the extent of its jurisdiction on the project site (USACE File Number 2011-00322N). This determination expired on January 31, 2017, so M&A conducted a reverification wetland delineation of the project site on November 16, 2016. The map was field confirmed by the USACE on May 18, 2017, and an approved jurisdictional determination (AJD) was issued on May 16, 2018. It should be noted that the 2018 AJD included one isolated wetland that is no longer part of the project site.

In 2023, M&A reverified and mapped 0.023 acre of seasonal wetlands (W1-W3) and 0.042 acre of linear wetlands (LW1) within the project site. On August 30, 2023, the USACE issued a Preliminary Jurisdictional Determination (PJD) (Appendix C.3: *Preliminary Jurisdictional Determination Map, SDG Commerce 220 Project Site*).

Vegetation observed within the seasonal wetlands included non-native and native species. Non-native species included spiny-fruit buttercup (*Ranunculus muricatus*; facultative wetland [FACW]) and Italian ryegrass (*Festuca perennis*; facultative [FAC]). Native species included creeping spikerush (*Eleocharis macrostachya*; obligate wetland species [OBL]), brown-headed rush (*Juncus*

phaeocephalus; FACW) and spreading rush (*Juncus patens*; FACW). Mapped wetlands on the project site remain inundated and/or saturated seasonally for sufficient duration to satisfy wetland hydrology criteria. Hydrological indicators in the mapped wetlands include the presence of oxidized rhizosphere (a “primary” hydrological indicator) as well as biotic crust. Soil matrix colors in the wetland area identified in the field were noted as 10YR 3/2 with redoximorphic features. Soil matrix colors in areas mapped as non-hydric soils were noted as 10YR 3/3 and 10YR 3/2, with insufficient redoximorphic features. These wetland features were not impacted during the grading that occurred within upland portions of the project site between May 29 and July 2, 2023.

Developed

While not a natural habitat type, urban/developed areas typically consist of buildings, hardscape such as asphalt or concrete, and other human-caused structures. Such areas typically provide little habitat value to most wildlife species. On-site, this landcover type can be found within the southeastern corner in the form of a construction trailer, a staging area, and a paved road that allows access into the site via Commerce Boulevard. The paved road runs half the length of the southern border of the project site (Exhibit 3.3-2).

Sensitive Natural Communities

The California Department of Fish and Wildlife (CDFW) maintains a list of natural communities that classifies vegetation types found within the State of California and ranks them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.² Wetlands and riparian habitats are also typically considered sensitive natural communities and are addressed below.

Seasonal Wetland Community

Vegetation observed within the seasonal wetlands included non-native and native species. As indicated in subsection 3.3.3, Seasonal Wetland, non-native species included spiny-fruit buttercup (*Ranunculus muricatus*) and Italian ryegrass (*Festuca perennis*). Native species included creeping spikerush (*Eleocharis macrostachya*), brown-headed rush (*Juncus phaeocephalus*) and spreading rush (*Juncus patens*). Naturally occurring seasonal wetland vegetation communities can be considered sensitive natural communities. However, due to the nature of these wetlands, presence of non-native species, and lack of special-status plant species, the seasonal wetlands on-site would not be considered a sensitive natural community. Additionally, the proposed project would avoid all wetland features through the implementation of a wetland buffer avoidance area (Exhibit 3.3-4).

Common Wildlife

The vegetation community and land cover types discussed above provide habitat for numerous wildlife species. Wildlife activity during the 2023 field surveys consisted primarily of avian species, including Say's phoebe (*Sayornis saya*), American crow (*Corvus brachyrhynchos*), western bluebird (*Sialia mexicana*), Anna's hummingbird (*Calypte anna*), lesser goldfinch (*Spinus psaltria*), yellow-rumped warbler (*Setophaga coronate*), turkey vulture (*Cathartes aura*), red-shouldered hawk (*Buteo lineatus*), and California towhee (*Melospiza crissalis*). Additionally, Botta's pocket gopher (*Thomomys*

² California Department of Fish and Wildlife (CDFW). 2023. Natural Communities List, Sacramento: California Department of Fish and Wildlife. Website: <https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities#sensitive%20natural%20communities>. Accessed August 21, 2023.

bottae) burrows, black-tailed jackrabbit (*Lepus californicus*), and Columbian black-tailed deer (*Odocoileus hemionus ssp. columbianus*) were observed. Notably, no signs of current or past presence of California ground squirrel (*Otospermophilus beecheyi*) burrows were observed on-site during the 2023 surveys.

In general, FCS and Pinecrest field surveys found that the conditions related to wildlife habitat are consistent with the results presented in the March 2020 M&A BRA which lists the following common wildlife species as observed on or near the project site: wild turkey (*Meleagris gallopavo*), house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), Say's phoebe, American crow, mourning dove (*Zenaida macroura*), black-tailed jackrabbit, California meadow vole (*Microtus californicus*), Botta's pocket gopher, and mule deer (*Odocoileus hemionus*), among others, all of which have been observed on the project site. Red-shouldered hawk, tree swallows (*Tachycineta bicolor*), Nuttall's woodpecker (*Picooides nuttallii*), and northern flicker (*Colaptes auratus*), among others, likely nest in the eucalyptus trees that surround the project site. Chestnut-backed chickadee (*Poecile rufescens*), brown creeper (*Certhia americana*), American robin (*Turdus migratorius*), northern mockingbird (*Mimus polyglottos*), spotted towhee (*Pipilo maculatus*), California towhee (*Pipilo crissalis*), dark-eyed junco (*Junco hyemalis*), Bullock's oriole (*Icterus bullockii*) and western gray squirrel (*Sciurus griseus*) were also observed in the immediate project vicinity.

Wildlife use is expected to have decreased since M&A's surveys because these surveys were conducted prior the construction of the warehouse to the south (SDG Commerce 330) and before the current construction began on the warehouse to the north (SDG Commerce 217). A comprehensive list of wildlife and plant species observed by FCS and Pinecrest can be found in Appendix C.3: 220 Commerce Animal Survey Report, and 220 Commerce Plant Survey Report.

Special-status Species

Special-status species include those species listed by the federal and state governments as endangered, threatened, or rare or candidate species for these lists. Endangered or threatened species are protected by the federal Endangered Species Act of 1973 as amended, the California Native Plant Protection Act of 1977, and the California Endangered Species Act of 1970. The California Environmental Quality Act (CEQA) provides additional protection for unlisted species that meet the "rare" or "endangered" criteria defined in Title 14, California Code of Regulations Section 15380. Special-status species also include those species listed by the CDFW as Species of Concern which face extirpation in California if current population and habitat trends continue, those identified as Fully Protected in the California Fish and Game Code (a designation that provides additional protection to those animals that are rare or face possible extinction), and bird species designated as Bird Species of Conservation Concern by the United States Fish and Wildlife Service (USFWS). These State and federal Species of Concern must be evaluated in the context of evaluation under CEQA. Under Title 14, California Code of Regulations Section 15380, mentioned above, many Biologists and the lead agencies for whom they work evaluate impacts to plant species on California Native Plant Society (CNPS) Lists 1 and 2. Special-status species included in CEQA review also include bat species that have been designated with conservation priority by the Western Bat Working Group.

The CDFW maintains records for the distribution and known occurrences of special-status species and sensitive habitats in the California Natural Diversity Database (CNDDDB). The CNDDDB is organized into map areas based on 7.5-minute topographic quadrangle maps produced by the United States Geologic Survey (USGS). All known occurrences of special-status species are mapped onto quadrangle maps maintained by the CNDDDB. The database gives further detailed information on each occurrence, including specific location of the individual, population, or habitat (if possible) and the presumed current state of the population or habitat.

Special-status Plant Species

The CNDDDB and CNPS list 45 special-status or sensitive plant species that have been recorded within the *Cuttings Wharf, California*, USGS Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix C: Database Searches]).^{3,4,5} The CNDDDB occurrences within the vicinity of the project site are shown on Exhibit 3.3-3. A list of all plant species recorded on-site during the protocol-level floristic surveys is included in Appendix C.3: *220 Commerce Plant Survey Report*. No rare or special-status plant species were observed during the appropriately timed protocol-level floristic surveys and are therefore determined to be absent from the site.

Special-Status Wildlife Species

The CNDDDB identifies 43 federal and State-listed threatened and/or endangered wildlife species and State Species of Special Concern that have been recorded within the *Cuttings Wharf, California*, USGS Topographic Quadrangle Map and the eight surrounding quadrangles (Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix C: Database Searches]).^{6,7} The CNDDDB occurrences within the vicinity of the project site are shown on Exhibit 3.3-3. Thirty-five of these species are unlikely to occur on-site, as discussed in the *Special-status Wildlife Species Habitat Value Evaluation Table* (Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix B: Special-Status Species Tables, Table 2]).

The remaining eight species (and functional groups like nesting birds and roosting bats that include special-status species) could have at least theoretical potential to occur on-site, perhaps as vagrant, dispersing, or foraging individuals, and are therefore discussed in more detail below.

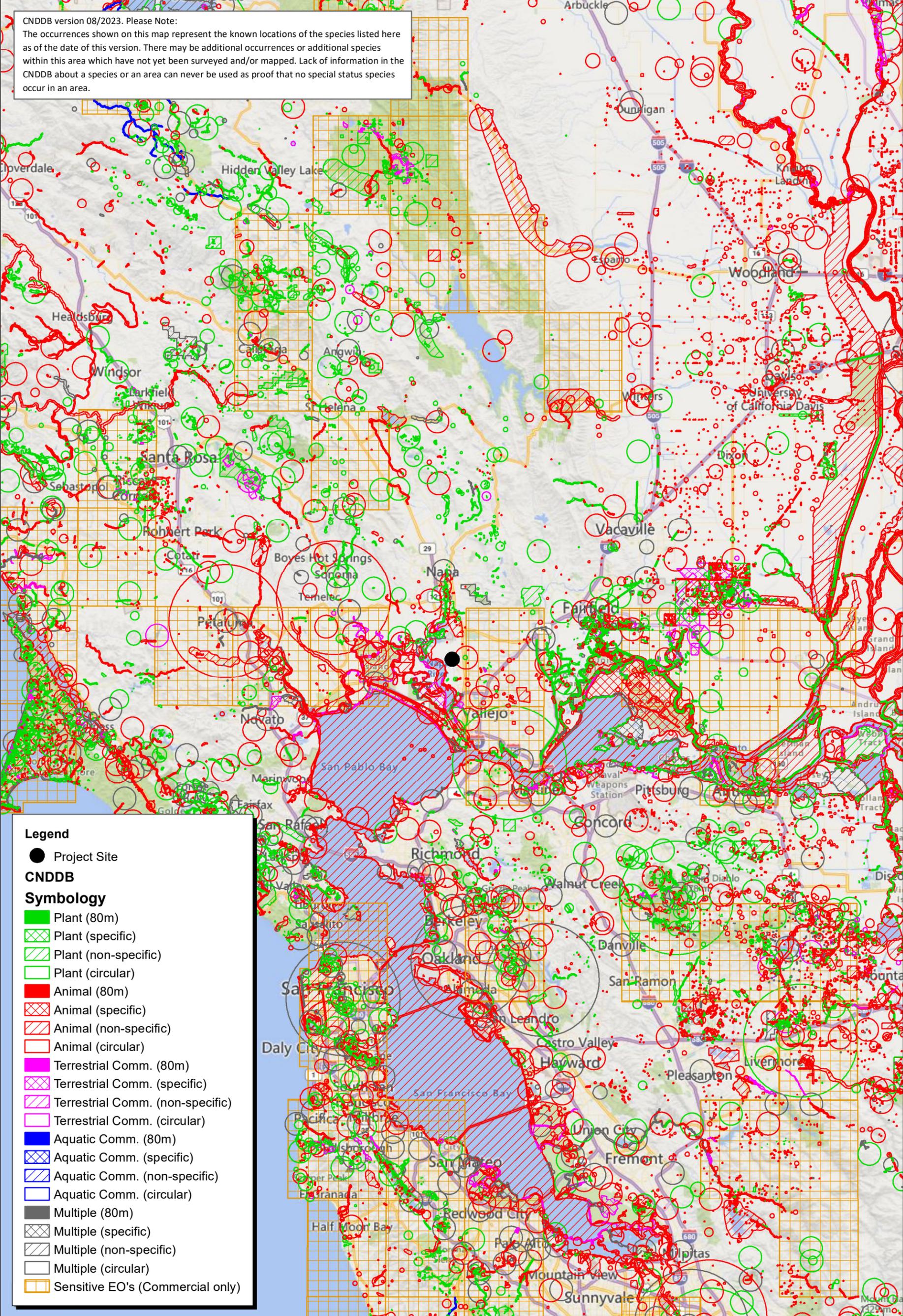
³ United States Geological Survey (USGS). 2023. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed September 14, 2023.

⁴ California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed September 14, 2023.

⁵ California Native Plant Society (CNPS). 2023. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. Accessed September 14, 2023.

⁶ California Department of Fish and Wildlife (CDFW). 2023. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed September 14, 2023.

⁷ California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: <https://map.dfg.ca.gov/bios/>. Accessed September 14, 2023.



Source: Bing Street Imagery. California Natural Diversity Database (CNDDB), August 2023.



Exhibit 3.3-3
CNDDB Special-Status
Species Occurrences

THIS PAGE INTENTIONALLY LEFT BLANK

Swainson's hawk inhabits open to semi-open areas at low to middle elevations in valleys, dry meadows, foothills, and level uplands. It nests almost exclusively in trees and will nest in almost any tree species that is at least 10 feet tall.

Foraging habitats include grasslands, alfalfa fields, fallow fields, beet, tomato, and other low growing row or field crops, dry-land and irrigated pasture, and rice land when not flooded. Swainson's hawk generally forages in open habitats with short vegetation containing small mammals, reptiles, birds, and insects. Its primary prey in the Central Valley is California meadow vole. Agricultural areas are often preferred over more natural grassland habitats due to larger prey populations. During the nesting season Swainson's hawk usually forage within 2 miles of the nest.

Swainson's hawk does not require habitats that contain many perches because it most often searches for prey aerially, therefore it can occupy habitats with few or no perches except the nest tree. Swainson's hawks are regular summer visitors and breeders throughout the western states. In the fall months, most Swainson's hawks migrate to Argentina before returning to the United States to breed in the late spring (typically April). For decades, Argentina farmers were spraying insecticides over habitats that included gregarious night roosts of the Swainson's hawk, killing many thousands of these hawks. This practice was halted in the last 10 years and the Swainson's hawk population appears to be dramatically responding in California. While in the 1970s through 1990s there were only two relatively small populations of Swainson's hawks that remained resident in California year-round in the Davis area and in the Sacramento River Delta, resident and migrant populations of the Swainson's hawks are now dramatically expanding their nesting distribution in California since insecticide use over Argentinian wintering grounds was halted. For example, Swainson's hawks were never recorded nesting in the Napa County area until relatively recently.⁸

The closest known record for nesting Swainson's hawk is 1.5 miles north of the project site (CNDDDB Occurrence No. 2839). No individual Swainson's hawk or nests have been observed on the project site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. However, the eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, there is the possibility that Swainson's hawks could nest near this project site in future years.

Western Burrowing Owl

The western burrowing owl (*Athene cunicularia*) is a California Species of Special Concern. Its nest, eggs, and young are also protected under California Fish and Game Code (FGC §§ 3503, 3503.5, and 3800). The burrowing owl is also protected from direct take under the MBTA (50 Code of Federal Regulations [CFR] 10.13).

Burrowing owl occurs in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species utilizes, modifies, and nests in burrows

⁸ Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.

created by other species, most notably the California ground squirrel. They may also on occasion dig their own burrows or use human-caused objects such as concrete culverts or rip-rap piles for cover.

The closest CNDDDB record within the last 10 years was documented 2.7 miles north of the project site (CNDDDB Occurrence No. 935). No evidence of burrowing owl activity was observed during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site, or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Furthermore, no California ground squirrel burrows were observed, and no other burrows, dens, or human-caused objects were observed that would provide suitable nesting habitat for burrowing owl. However, it cannot be ruled out entirely that a vagrant burrowing owl may visit the site under unlikely circumstances before the start of construction.

Northern Harrier

The northern harrier (*Circus hudsonius*) is a California Species of Special Concern. This raptor is protected under California Fish and Game Code Section 3503.5 that protects nesting raptors and their eggs/young and is also protected from direct take under the MBTA (50 CFR 10.13). Northern harriers build grass-lined nests on the ground within dense, low-lying vegetation in a variety of habitats, though they are typically found nesting in grassland or marsh habitats. They usually nest on level to near level ground. This species is particularly vulnerable to ground predators such as coyotes (*Canis latrans*), red fox (*Vulpes vulpes*), and various snake species.⁹

The closest CNDDDB record was documented 2.8 miles west of the project site (CNDDDB Occurrence No. 29). No individual northern harriers or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Northern harriers have the potential to nest in the open ruderal habitats on-site that provide marginal nesting habitat for this species. However, it should be noted that due to the recent grading on the project site large areas of this vegetation type were graded between May 29 and July 2, 2023 (see Appendix C.2: Borrow Site Grading Plan; and Addendum to Biological Constraints). The grading effectively eliminated the non-native grassland throughout much of the site. Although there is the possibility that northern harriers could nest on or near this project site in the future, site conditions due to recent grading would reduce the potential for northern harrier to occur on-site.

Golden Eagle

The golden eagle is a migratory California resident that resides in rolling foothills, mountain areas, sage-juniper flats, and deserts from sea level to 11,500 feet (3,833 meters). It feeds mostly on lagomorphs and rodents, and occasionally other mammals, birds, reptiles, and some carrion. The golden eagle hunts in open terrain including grasslands, deserts, savannas, and early successional stages of forest and shrub habitats. It is known to hunt in pairs and pirate food from other predators. This species nests in large trees in open areas on cliffs. The breeding season for the golden eagle ranges from January through August, with a peak in March through July.

⁹ Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.

The closest CNDDDB record was documented 4.5 miles southeast of the project site (CNDDDB Occurrence No. 40). No individual golden eagles or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. Regardless, the eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, it cannot be ruled out that golden eagles could nest near this project site in the future.

White-tailed Kite

The white-tailed kite (*Elanus leucurus*) is a whitish falcon-shaped raptor. This sensitive bird is designated by CDFW as a Fully Protected Species (FGC § 3511). Fully protected animal species may not be taken or possessed at any time and no licenses or permits may be issued for their take except for collecting these species for necessary scientific research and relocation of the bird species for the protection of livestock.

Nesting white-tailed kite habitat consists mainly of oak and sycamore woodlands, but the birds also use mature willows. White-tailed kite nests have been documented in a variety of tree species, including oak (*Quercus sp.*), cottonwood (*Populus sp.*), willow (*Salix sp.*), California sycamore (*Platanus racemosa*), and elder (*Acer sp.*).¹⁰ Nests are placed near the top of dense oak, willow, or other tree stand approximately 20-100 feet above ground.¹¹ Nest trees have a dense canopy or are within a dense group of trees, such as riparian forest or oak woodland. Adjacent to their nesting woodland must be open foraging grasslands, where the birds can find their small mammal prey.¹²

White-tail kites forage in undisturbed, open grasslands, meadows, emergent wetlands, farmlands, crops, pastures, and other cultivated habitats. The white-tailed kite preys mostly on voles, but also takes other small, diurnal mammals, and occasionally birds, insects, reptiles, and amphibians.

The closest CNDDDB record was documented 5.3 miles north of the project site (CNDDDB Occurrence No. 181). Several white-tailed kite individuals were observed foraging over the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site and the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. This species was observed on the following dates during 2023 surveys: March 20, April 4, April 5, April 6, April 7, April 24, April 28, and July 2. These individuals were observed to be continually harassed by several crows who were observed loitering around the eucalyptus grove. After continued interactions with the crows, white-tailed kite individuals flew off to the southwest out of sight and the location of their nest could not be determined.

The eucalyptus trees growing adjacent to the project site could provide suitable nesting habitat. Therefore, it cannot be ruled out that white-tailed kite could nest within relevant disturbance distance.

¹⁰ Science Applications International Corporation (SAIC). 2007. Draft Ecological Baseline Report for the Butte Regional Habitat Conservation Plan/Natural Community Conservation Plan. Prepared for the Butte County Association of Governments. May 2007.

¹¹ California Department of Fish and Wildlife (CDFW). 1988. California's Wildlife, Volume II: Birds. State of California Resources Agency. Sacramento, California.

¹² Gallagher, Sylvia. 1997. Atlas of Breeding Birds, Orange County, California. Sea and Sage Audubon Press, Irvine, CA.

Protected Nesting Birds (Including All Special-status Bird Species)

In addition to the specific special-status bird species discussed in more detail above, the active nests of most resident and migratory (game and non-game) birds (including the nests of additional special-status bird on-site) are protected by the MBTA and/or Fish and Game Code; and are therefore categorized as “special-status” wildlife functional group during this time. While a juvenile, red-shouldered hawk was observed perched off-site within a large eucalyptus tree to the north of the SDG Commerce 217 site during the 2023 surveys, no active nests were observed.

The project site is adjacent to eucalyptus groves which provide nesting opportunities for different taxa of birds, and the site itself contains the potential for ground nesters. Although the site has been significantly disturbed in the past, the grassland on-site may provide marginal foraging opportunities to support nesting and rearing habitat. Therefore, it cannot be ruled out that protected bird nests are present on or within the disturbance distance of the project site during the nesting season (typically considered to last from February 1 to August 31 for most species).

Bats (Including Special-status Bats)

The project site is adjacent to eucalyptus groves which offer potentially viable roosting habitat for bat species. There is a CNDDDB recorded presence of bat species 5.2 miles northwest of the project site (CNDDDB Occurrence No. 44). Bats could potentially use cavities in trees to roost and forage over the grassland and shrubland. Of the special-status bat species that have potential to occur in the region, the pallid bat (*Antrozous pallidus*) would be more likely to roost in natural features, such as the adjacent eucalyptus grove rather than artificial structures.

Roosts are used during the daytime to seek refuge; at night between foraging excursions to rest, digest prey, seek refuge from predators or poor weather conditions, or for social purposes; and in winter for hibernation. Adult females and their young use some particularly secure roosts as maternity roosts. The number of bats occupying a given roost can vary from a solitary individual to a large colony, depending on the species. Roosting sites are very sensitive to human disturbance, especially when bats are hibernating or rearing young.

At dusk, bats leave their roosts to forage for insects in nearby ponds or riparian habitats. Bats generally prey on insect species that are locally abundant near water bodies. Ecotone areas (areas of transition between habitats) are also used as foraging areas. The grassland habitat of the project site and eucalyptus grove adjacent has foraging and roosting potential for bat species. Therefore, it cannot be ruled out that bat roosts are within disturbance distance of the project site.

Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) is a California Species of Special Concern. This species feeds on aquatic plant material (including pond lilies), beetles, fishes, frogs, and a variety of invertebrate species. Pond turtles require basking sites such as partially submerged logs, rocks, mats of floating vegetation, or open mud banks. Turtles slip from basking sites to underwater retreats at the approach of humans or potential predators. In colder areas, this species hibernates underwater in bottom mud.

The closest CNDDDB record was documented 0.4 mile northeast of the project site (CNDDDB Occurrence No. 552). No western pond turtle individuals or nests have been observed on the site or in the vicinity of the project site during the 11 surveys conducted by Pinecrest on the SDG Commerce 220 site or the seven surveys conducted by FCS on the adjacent SDG Commerce 217 site between January and July 2023. While there are seasonal wetland features present on-site, there are no ponds or streams on-site that would be suitable for foraging or breeding. It cannot be ruled out entirely that a vagrant western pond turtle may be present on-site under unlikely circumstances before start of construction and could potentially be impacted by the project.

Monarch Butterfly

The monarch butterfly (*Danaus plexippus*) is listed as Candidate under the Endangered Species Act, and wintering roosts are protected under the Fish and Game Code.

Preferred monarch habitat is filled with diverse nectar sources which support monarchs and native bees. Native milkweeds (*Asclepias* spp.) and other nectar sources provide monarchs with breeding habitat, resting, and refueling stops during migration, and food at overwintering sites.

Overwintering habitats consist of tree groves that typically occur within 1.5 miles of the Pacific coastline, or within the San Francisco Bay Area, where the proximity to large water bodies moderate temperature fluctuations. Overwintering begins in September or October. Suitable grove conditions include temperatures above freezing, high humidity, dappled sunlight, access to water and nectar, and protection from high winds and storms. Monarchs will select the native Monterey pine, Monterey cypress, western sycamore, and other native tree species when they are available, but will also utilize non-native eucalyptus species if other optimal habitat conditions are met. During breeding season in the late spring and summer, female monarch butterflies will lay their eggs on the underside of young leaves or flower buds of milkweeds. Caterpillars then hatch within 3-5 days and begin to feed on milkweed leaves that provide energy and protective toxic compounds that protect the caterpillars from predation. Within a month, the caterpillars will grow, produce a chrysalis, and emerge as fully formed adult butterflies.

While no milkweed has been recorded on-site as confirmed through protocol-level rare plant surveys, see Appendix C.3: *220 Commerce Plant Survey Report*. The project site is bounded by dense stands of eucalyptus trees, potentially suitable for overwintering monarchs. Overwintering colonies have been documented on Mare Island, approximately 7 miles to the south. For these reasons, the presence of overwintering monarchs within disturbance distance cannot be ruled out.

State or Federally Protected Waters and Wetlands

There are four wetlands features present within the project site as shown on Exhibit 3.3-2, and in Appendix C.3: *Preliminary Jurisdictional Determination Map, SDG Commerce 220 Project Site*.¹³ The USACE issued a PJD on August 30, 2023, which includes 0.023 acre of seasonal wetlands and 0.042 acre of linear wetlands mapped within the project site. These wetlands have surface hydrologic connectivity to North Slough, which flows to the Napa River. The Napa River is a traditional navigable

¹³ Monk & Associates (M&A). 2023. Request for Reverification of Jurisdictional Determination and a PJD SDG Commerce 220 Project Site; USACE File Number: 2011-00322N American Canyon, California. May 31, 2023.

water. Consequently, the seasonal wetlands identified within the project site would likely be subject to USACE and Regional Water Quality Control Board (RWQCB) jurisdiction.

Wildlife Movement Corridors and Nursery Sites

A wildlife corridor is an area of habitat connecting wildlife populations that can be separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, development, or human disturbance. Wildlife corridors allow an exchange of individuals between populations, which may help prevent the negative effects of inbreeding and reduced genetic diversity (via genetic drift) that often occur within isolated populations. The project site and adjacent areas are not identified by CDFW (The Critical Linkages: Bay Area and Beyond project; BIOS 6)¹⁴ as critical linkages. CDFW describes critical linkages as essential to maintain or restore functional connectivity among wildlands for all species or ecological processes of interest in the California Bay Area. Critical linkages are a vital adaptation strategy to conserve biodiversity during climate change.

The project site has been subject to decades of varying degrees of anthropogenic disturbances. More recently, adjacent developments include the construction of SDG Commerce 330 to the south and the current construction of SDG Commerce 217 to the north. Dense industrial developments are located north of the project site while a school and single-family residences are found to the south. Therefore, non-volant wildlife movement through the site is limited, and the site does not connect habitats suitable for sustainable wildlife populations. Wildlife may utilize the off-site eucalyptus grove and aquatic habitats (e.g., North Slough and Napa River) to the west for dispersal; however, the proposed project would be set back from the eucalyptus grove and aquatic habitats.

There are no native wildlife nursery sites present within the project site.

3.3.4 - Regulatory Framework

Federal

Clean Water Act—Section 404

The USACE administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States.

As of the preparation of this report on October 26, 2023, the final “Revised Definition of Waters of the United States” rule was published in the Federal Register on January 18, 2023, and took effect on March 20, 2023. However, the final rule is not currently operative in certain states and for certain parties due to litigation. Moreover, the United States Environmental Protection Agency (EPA) and USACE (hereafter known as the agencies) are in receipt of the U.S. Supreme Court’s May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. On August 29, 2023, the U.S. EPA and Department of the Army issued a final rule to amend the final “Revised Definition of ‘Waters of the United States’” rule, published on January 18, 2023. This final rule conforms the definition of “waters of the United States” to the U.S. Supreme Court’s May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*. In light of this decision, the agencies will interpret the

¹⁴ California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 6): The Critical Linkages: Bay Area & Beyond project. Website: <https://map.dfg.ca.gov/bios/>. Accessed September 14, 2023.

phrase “waters of the United States” consistent with the Supreme Court’s decision in *Sackett*.¹⁵ As a result of ongoing litigation, the agencies are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice.

Therefore, since the agencies are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime until further notice, our analysis follows 40 Code of Federal Regulations 230.3(s) in effect under the pre-2015 regulatory regime, which defines “waters of the United States” as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
2. All interstate waters including interstate wetlands.
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
 - a) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - b) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - c) Which are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under this definition.
5. Tributaries of waters identified in paragraphs(s) (1) through (4) of this section.
6. The territorial sea.
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs(s) (1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds as defined in 40 Code of Federal Regulations 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

Clean Water Act—National Pollution Discharge Elimination System Requirements

In 1972, the CWA was amended to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments established a framework for regulating municipal, industrial, and construction-related stormwater discharges under the NPDES Program. On November 16, 1990, the EPA published final regulations that establish stormwater permit application requirements for specified categories of industries. The regulations

¹⁵ United States Environmental Protection Agency (EPA). 2023. Website: <https://www.epa.gov/wotus/current-implementation-waters-united-states>. Accessed September 14, 2023.

provide that discharges of stormwater from construction projects that encompass one or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES permit.

The State Water Board has developed a general construction stormwater permit to implement the requirements for the federal NPDES permit. The permit requires submittal of a Notice of Intent (NOI) to comply, fees, and the implementation of a Storm Water Pollution Prevention Plan (SWPPP) that specifies Best Management Practices (BMPs) that would prevent construction pollutants from entering stormwater and keep products of erosion from migrating off-site into downstream receiving waters. The Construction General Permit includes post-construction requirements that include no increase in overall site runoff or the concentration of drainage pollutants and requires implementation of Low Impact Development (LID) design features. The Construction General Permit is implemented and enforced by California's nine RWQCBs.

The RWQCBs have also adopted requirements for NPDES stormwater permits for medium and large municipalities, and the State Water Board has adopted a General Permit for the discharge of stormwater from small municipal storm sewer systems. This General Permit requires projects to develop and implement a post-construction Storm Water Management Plan (SWMP) to reduce the discharge of pollutants to the maximum extent practicable.

Federal Endangered Species Act

The United States Congress passed the Endangered Species Act in 1973 to protect those species that are endangered or threatened with extinction. The Endangered Species Act is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The Endangered Species Act establishes an official listing process for plants and animals considered in danger of extinction, requires development of specific plans of action for the recovery of listed species, and restricts activities perceived to harm or kill listed species or affect critical habitat (16 USC 1532 and 1536).

The Endangered Species Act prohibits the "take" of endangered or threatened wildlife species. "Take" is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting wildlife species, or any attempt to engage in such conduct (16 USC 1532). Taking can result in civil or criminal penalties. Federal regulation 50 Code of Federal Regulations 17.3 further defines the term "harm" in the take definition to mean any act that actually kills or injures a federally listed species, including significant habitat modification or degradation. Therefore, the Endangered Species Act is invoked when the property contains a federally listed threatened or endangered species that may be affected by a permit decision.

In the event that listed species are involved and a USACE permit is required for impacts to jurisdictional waters, the USACE must initiate consultation with the USFWS or the National Marine Fisheries Service (NOAA Fisheries) pursuant to Section 7 of the Endangered Species Act (16 USC 1536; 40 CFR § 402). Section 7 of the Endangered Species Act requires federal agencies to ensure that their actions do not jeopardize the continued existence of listed species or adversely modify critical habitat (16 USC 1536). In the regulations found at 50 Code of Federal Regulations 402.2, destruction or adverse modification is defined as a "direct or indirect alteration that appreciably

diminishes the value of critical habitat for both the survival and recovery of a listed species.” Critical habitat is defined in Endangered Species Act Section 3(5)(A) as specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and that “may require special management considerations or protection.” Critical habitat may also include areas outside the current geographical area occupied by the species that are nonetheless “essential for the conservation of the species.” Critical habitat designations identify, with the best available knowledge, those biological and physical features (primary constituent elements) which provide for the life history processes essential to the conservation of the species.

If formal consultation is required, USFWS or NOAA Fisheries will issue a Biological Opinion stating whether the permit action is likely to jeopardize the continued existence of the listed species, recommending reasonable and prudent measures to ensure the continued existence of the species, establishing terms and conditions under which the proposed project may proceed, and authorizing incidental take of the species.

For discretionary permit actions by non-federal entities, Section 10 of the Endangered Species Act provides a mechanism for obtaining take authorization through submittal and approval of a Habitat Conservation Plan that details species impacts, measures to minimize or mitigate such impacts, and funding mechanisms to implement mitigation requirements.

Migratory Bird Treaty Act

The MBTA implements international treaties devised to protect migratory birds and any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. The regulations governing migratory bird permits are in 50 Code of Federal Regulations Part 13 General Permit Procedures and 50 Code of Federal Regulations Part 21 Migratory Bird Permits. Most bird species within California fall under the provisions of the MBTA. Excluded species include non-native species such as house sparrow, starling, and ring-necked pheasant and native game species such as quail.

On December 22, 2017, the United States Department of Interior’s Office of the Solicitor issued Memorandum M-37050, which states an interpretation that the MBTA does not prohibit the accidental or “incidental” taking or killing of migratory birds. In response to the Trump administration’s attempted changes to the MBTA, eight states, including California, filed suit in September of 2018, arguing that the new interpretation inappropriately narrows the MBTA and should be vacated. On August 11, 2020, the Southern District of New York ruled in favor of the long-standing interpretation of the MBTA to protect migratory birds, reinstating the historical ban on incidental take. Just days before leaving office, the Trump administration finalized its pullback of MBTA regulations, despite the ruling of the federal court. On his first day in office, President Biden placed Trump’s changes to the MBTA on hold, pending further review.

State

CEQA Guidelines

The California Environmental Quality Act (CEQA) requires public agencies to evaluate potential impacts to special-status species and their habitat. The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a proposed project on biological resources. Impacts are considered significant if a project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a Candidate, Sensitive, or Special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally and State-protected wetlands as defined by Section 404 of the CWA (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.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

Oak Woodlands Conservation Act

California Senate Bill (SB) 1334, the Oak Woodlands Conservation Act, became law on January 1, 2005, and was added to the CEQA statutes as 21083.4. This statute requires that a county must determine whether or not a project will result in a significant impact on oak woodlands and, if it is determined that a project may result in a significant impact on oak woodlands then the county shall require one or more of the following mitigation measures:

- Conserve oak woodlands through the use of conservation easements.
- Plant an appropriate number of trees, including maintenance of plantings and replacement of failed plantings.
- Contribute funds to the Oak Woodlands Conservation Fund for the purpose of purchasing oak woodlands conservation easements.
- Other mitigation measures developed by the county.

Section 401 of the Federal Clean Water Act/Porter-Cologne Water Quality Control Act

As stated in Section 401 of the CWA, “any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the

State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the Federal Clean Water Act.” Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the RWQCB.

California Endangered Species Act

The State of California enacted CESA in 1984. The CESA is similar to the Endangered Species Act but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with the CDFW when preparing CEQA documents. CESA generally prohibits the taking of State-listed endangered or threatened plant and wildlife species; however, for projects resulting in impacts to State-listed species, the CDFW may authorize take through issuance of an ITP pursuant to Section 2081 of the California Fish and Game Code. Section 2081 requires preparation of mitigation plans in accordance with published guidelines that require, among other things, measures to fully mitigate impacts to State-listed species. The CDFW exercises authority over mitigation projects involving State-listed species, including those resulting from CEQA mitigation requirements. No authorization of take under Section 2081 is permitted for species listed in State statutes as Fully Protected Species. Where Fully Protected Species are involved, projects must be designed to avoid all take of the species. The CDFW cannot issue an ITP until the CEQA Lead Agency has provided documentation in the form of a Notice of Determination that the proposed project has complied with CEQA.

California Department of Fish and Wildlife—Lake and Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires any person, governmental agency, or public utility proposing any activity that will divert or obstruct the natural flow or change the bed, channel or bank of any river, stream, or lake, or proposing to use any material from a streambed, to first notify the CDFW of such proposed activity. Based on the information contained in the notification form and a possible field inspection, the CDFW may propose reasonable modifications in the proposed construction as would allow for the protection of fish and wildlife resources. Upon request, the parties may meet to discuss the modifications. If the parties cannot agree and execute a Lake and Streambed Alteration Agreement, then the matter may be referred to arbitration. The CDFW cannot issue a Streambed Alteration Agreement until CEQA compliance has been achieved, usually through the CEQA Lead Agency providing documentation in the form of a Notice of Determination that the Lead Agency has complied with CEQA by preparing a negative declaration or Environmental Impact Report (EIR).

CDFW’s regulations implementing the Fish and Game Code define the relevant rivers, streams, and lakes over which the agency has jurisdiction to constitute “all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which have intermittent flows of water” (Title 14 California Code of Regulations [CCR] § 720). The CDFW takes jurisdiction under its Lake and Streambed Alteration Agreement Program for any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. The CDFW does not have a methodology for the identification and delineation of the jurisdictional limits of streams except for the general guidance provided in *A Field Guide to Lake and Streambed Alteration Agreements, Section 1600-1607 California Fish and Game Code*.⁹ In making jurisdictional determinations, the CDFW staff typically rely on field observation of physical features that provide evidence of water

flow through a bed and channel such as observed flowing water, sediment deposits and drift deposits and that the stream supports fish or other aquatic life. Riparian habitat is not specifically mentioned in the Fish and Game Code provisions governing Lake and Streambed Alteration Agreement, but the CDFW often asserts jurisdiction over areas within the flood plain of a body of water where the vegetation (grass, sedges, rushes, forbs, shrubs, and trees) is supported by the surface or subsurface flow.

California Department of Fish and Wildlife—Fish and Game Code Section 3503, 3503.5, and 3513.

The State of California also incorporates the protection of non-game birds and birds of prey, including their nests, in Sections 3503, 3503.5, and 3513 of the California Fish and Game Code. Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or needlessly destroy the nests or eggs of any bird. Fish and Game Code Section 3503.5 makes it unlawful to take or possess birds of prey (hawks, eagles, vultures, owls) or destroy their nests or eggs. In December of 2018, California issued new guidance specifying that State law includes “a prohibition on incidental take of migratory birds, notwithstanding any federal reinterpretation of the Migratory Bird Treaty Act” by the Department of Interior.

California Department of Fish and Wildlife – Swainson’s Hawk Nesting Survey Guidelines

For locating nesting Swainson’s hawks, CDFW recommends using the “*Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley*” dated May 31, 2000. This set of survey recommendations was developed by the Swainson’s Hawk Technical Advisory Committee to maximize the potential for locating nesting Swainson’s hawks, and thus reducing the potential for nest failures as a result of project activities/disturbances. In summary, surveys should be conducted in a manner that maximizes the potential to observe the adult Swainson’s hawks, as well as the nest/chicks. To meet the CDFW recommendations for mitigation and protection of Swainson’s hawks, surveys should be conducted for a 0.5-mile radius around all project activities, and if active nesting is identified within the 0.5-mile radius, consultation with CDFW to determine nesting buffers is required under these guidelines. The guidelines provide specific recommendations regarding the number of surveys based on when the project is scheduled to begin and the time of year the surveys are conducted.

California Department of Fish and Wildlife – Special-status Native Plant Survey Protocol

For conducting botanical surveys to detect special-status plant species, CDFW developed survey protocols identified in “*Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities*” dated March 20, 2018. Botanical field surveys provide information used to determine the potential environmental effects of proposed projects on special-status plants as required by law (e.g., CEQA, CESA, federal Endangered Species Act). According to the protocol, botanical field surveys should be conducted in a manner which maximizes the likelihood of locating special-status plants and sensitive natural communities that may be present. Botanical field surveys should be floristic in nature, meaning that every plant taxon that occurs in the project area is identified to the taxonomic level necessary to determine rarity and listing status. “Focused surveys” that are limited to habitats known to support special-status plants or that are restricted to lists of likely potential special-status plants are not considered floristic in

nature and are not adequate to identify all plants in a project area to the level necessary to determine whether they are special-status plants.

California Department of Fish and Wildlife – Staff Report on Burrowing Owl Mitigation

CDFW issued survey protocols for conducting burrowing owl breeding and nonbreeding season surveys and pre-construction surveys in the *Staff Report on Burrowing Owl Mitigation* dated March 7, 2012.

In summary, for breeding season surveys, a minimum of four survey visits shall be conducted: 1) at least one site visit between February 15 and April 15, and 2) a minimum of three survey visits, at least three weeks apart, between April 15 and July 15, with at least one visit after June 15. The survey shall be conducted in all portions of the project site that fit the description of habitat in Appendix A of the staff report. Surveys shall be walked in straight-line transects spaced 7 meters (m) to 20 m apart, adjusting for vegetation height and density. At the start of each transect and at least every 100 m, the surveyor shall scan the entire visible project area for burrowing owls using binoculars and record all potential burrows used by burrowing owls as determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration. For nonbreeding season surveys, the methods described above for breeding season surveys are followed, but at least four visits, spread evenly, are conducted throughout the nonbreeding season.

Pre-construction surveys, referred to as “take avoidance surveys” in the staff report, are intended to detect the presence of burrowing owls on a project site at a fixed period in time and inform necessary take avoidance actions. Take avoidance surveys may detect changes in owl presence such as colonizing owls that have recently moved onto the site, migrating owls, resident burrowing owls changing burrow use, or young of the year that are still present and have not dispersed. In summary, survey methodology for pre-construction surveys should be conducted no less than 14 days prior to initiating ground disturbance activities.

California Native Plant Society

The CNPS, a nongovernmental organization, has no regulatory authority but provides information that is often used by regulatory bodies. The CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review, especially for those plant species included in Lists 1 and 2. The following identifies the definitions of the CNPS listings:

- **Rank 1A:** Plants presumed extirpated in California and either rare or extinct elsewhere.
- **Rank 1B:** Plants Rare, Threatened, or Endangered in California and elsewhere.
- **Rank 2A:** Plants presumed extirpated in California but more common elsewhere.
- **Rank 2B:** Plants Rare, Threatened, or Endangered in California, but more common elsewhere.
- **Rank 3:** Plants about which more information is needed.
- **Rank 4:** Watch List: Plants of limited distribution.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals, objectives, and policies relevant to biological resources on the project site:

Goal 8 Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.

Objective 8.1 Maintain data and information regarding areas of significant biological value within the Planning Area to facilitate resource conservation and the appropriate management of development.

Policy 8.1.1 Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.

Policy 8.1.4 Regularly monitor and review developments proposed within the City's Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.

Objective 8.2 Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.

Policy 8.2.1 Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats (see Figure 8-1) [General Plan], or with areas potentially occupied by vernal pools (see Figure 8-2) [General Plan] shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 [General Plan] for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site, in instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.

Objective 8.3 Protect natural drainages and riparian corridors within the American Canyon Planning Area.

Policy 8.3.1 Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:

- a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.
- b. Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection “g” (below).
- c. Where riparian corridors are retained, they shall be protected by an adequate buffer with a minimum 100-foot protection zone from the edge of the tree, shrub, or herb canopy . . .
- d. Development shall incorporate habitat linkages (wildlife corridors) to adjacent open spaces, where appropriate and feasible.
- e. Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages, or corridors from built environment.
- f. Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.
- g. Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.
- h. Future development shall mitigate unavoidable adverse impacts to waters of the United States, wetlands, and riparian habitats (pursuant to the federal Clean Water Act and the California Fish and Game Code, Section 1600 *et seq.*) by replacement on an in-kind basis. Furthermore, replacement shall be based on a ratio determined by the California Department of Fish and Wildlife and/or United States Army Corps of Engineers in order to account for the potentially diminished habitat values of replacement habitat. Such replacement should occur on the original development site, whenever possible. Alternatively, replacement can be affected, subject to State and federal regulatory approval, by creation or restoration of replacement habitats elsewhere (off-site but preferably within the City’s Planning Area), protected in perpetuity by provision for an appropriate conservation easement or dedication.

Policy 8.3.5 Establish a network of open spaces along the City’s natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.

Policy 8.3.6 Preserve and integrate the City’s natural drainages in new development, as opposed to their channelization or undergrounding, emphasizing opportunities for the development of pedestrian paths and greenbelts along their lengths throughout the City.

Objective 8.4 Protect local vernal pools as well as the habitats of endangered species living within American Canyon’s Planning Area.

- Policy 8.4.1** Require that development plans incorporate all reasonable mitigation measures to avoid significantly impacting vernal pools for projects located within American Canyon’s Planning Area.
- Policy 8.4.2** Preserve, where possible, the habitat of several in-fact endangered species, including those shown on Figure 8-2 and listed in Table 8-1, as well as those that may be considered by the City in the future.
- Policy 8.4.3** Encourage activities that improve the biological value and integrity of the City’s natural resources through vegetation restoration, control of alien plants and animals, and landscape buffering.

Municipal Code

Municipal Code Chapter 18.40.110 sets forth the City’s Tree Ordinance. The ordinance states that existing trees shall be preserved on the site unless otherwise approved by the City Council as a part of the site development plans. Additionally, unless specifically approved by the City Council, any tree removed shall be replaced on the site. Replacement trees shall be a minimum size of a 24-inch box of the same species unless specifically approved by the City Council.

3.3.5 - Methodology

Literature Review

A literature review was conducted to analyze existing documentation regarding biological resources and habitat conditions within the project site and vicinity and is summarized below.

Existing Documentation

As part of the literature review, an FCS Biologist compiled and analyzed existing environmental documentation for the project site and relevant areas in its vicinity. This documentation included literature pertaining to the habitat requirements of special-status species with the potential to occur in the project vicinity and federal register listings, protocols, and species data provided by the USFWS, CDFW, and CNPS. Additionally, FCS reviewed and evaluated all available supporting documentation provided by the applicant, including a finalized USACE jurisdictional determination, and species-specific studies and habitat assessments. These documents are attached to this BRA (Appendix C.2: Commerce Court 217 supporting documents; and Appendix C.3: Commerce Court 220 supporting documents), and include the following:

SDG Commerce 217 Documents

- Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. City of American Canyon, California. March 2020.
- Monk & Associates (M&A). 2020. Addendum Letter to CEQA Biology Report Discussing Proposed Borrow Site SDG Commerce 217 Distribution Center. September 2020.
- FirstCarbon Solutions (FCS). 2023. Pre-Construction Surveys and Implementation of CEQA Mitigation Measures BIO-1, BIO-2, BIO-3, BIO-4, and BIO-5 per the Mitigation Monitoring and

Reporting Program for the Commerce 217 Warehouse Project, American Canyon, California.
April 2023.

- RSA+. 2023. Commerce 217 Distribution Center Borrow Site Grading Plan. March 2023.

SDG Commerce 220 Documents

- Pinecrest Research Corp., Inc. 2023. Special-Status Animal Survey Report. August 2023.
- Pinecrest Research Corp., Inc. 2023. Special-Status Plant Survey Report. July 2023.
- Monk & Associates (M&A). 2023. Request for Reverification of Jurisdictional Determination and a PJD SDG Commerce 220 Project Site; USACE File Number: 2011-00322N American Canyon, California. May 2023.

Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity.¹⁶ Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS).¹⁷ Aerial photographs provided a perspective of the current site conditions relative to on-site and off-site land use, vegetation community locations, and potential locations of wildlife movement corridors.

Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.¹⁸ These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to inform whether the soil conditions on-site are potentially suitable for any special-status plant species. However, NRCS soil maps utilize an approximately 1.4-acre minimum mapping unit, and line placement may not be accurate on a large (i.e., parcel-level) scale.

Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project vicinity based on a search of the USFWS Information for Planning and Consultation (IPaC) database,¹⁹ the CNDDb, and the CNPS Electronic Inventory (CNPSEI)

¹⁶ United States Geological Survey (USGS). 2022. National Geospatial Program. Website: https://www.usgs.gov/core-science-systems/national-geospatial-program/us-topo-maps-america?qt-science_support_page_related_con=4#qt-science_support_page_related_con. Accessed September 14, 2023.

¹⁷ United States Environmental Protection Agency (EPA). 2022. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: <https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system>. Accessed September 14, 2023.

¹⁸ Natural Resources Conservation Service (NRCS). 2022. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed September 14, 2023.

¹⁹ United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: <https://ecos.fws.gov/ipac/>. Accessed September 14, 2023.

of Rare and Endangered Vascular Plants of California for the Cuttings Wharf, California USGS 7.5-minute Topographic Quadrangle Map, and the eight surrounding quadrangles.^{20,21} The CNDDDB Biogeographic Information and Observation System (BIOS 6) was used to determine the distance between the known occurrences of special-status species and the project site.²²

Field Surveys and Focused Surveys

FCS Biologists familiar with the biological resources of the region conducted field surveys on December 2, 2022, and March 17, 2023. The objective of the field surveys was to ascertain general site conditions, wildlife use, and identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. Potentially sensitive areas identified during the literature review were ground-truthed during the field survey for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

Wildlife species detected during the reconnaissance-level surveys by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the project site.²³ Appropriate field guides were used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.^{24,25,26} Online resources such as eBird and California Herps were also consulted, as necessary.^{27,28}

M&A performed 10 field surveys on the greater 35-acre project site before it was subdivided into three lots (SDG Commerce 217, SDG Commerce 220, and SDG Commerce 330). Consequently, the SDG Commerce 220 project site was included in these surveys which were conducted on March 1 and April 27, 2006; June 14, 2011; February 14, March 21, and June 12, 2012; May 18, 2017; March 30, 2018; December 19 and December 27, 2019. Additional details concerning these surveys can be found in Appendix C.1 [Appendix D.1] of this document.

Pre-construction Surveys for SDG Commerce 217

Seven pre-construction surveys were conducted by FCS between January 18 and April 7, 2023, for a total of approximately 30 survey hours. Surveys were conducted for the entirety of the Commerce 217 project site and relevant adjacent areas (which included the adjacent SDG Commerce 220 site). Surveys were conducted pursuant to the January 2021 Mitigation, Monitoring, and Reporting Program (MMRP) for the Commerce 217 Warehouse Project. Surveys included nesting birds

²⁰ California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDDB) RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed September 14, 2023.

²¹ California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: <http://www.rareplants.cnps.org/>. September 14, 2023.

²² California Department of Fish and Wildlife (CDFW). 2022. Biogeographic Information and Observation System (BIOS 6). Website: <https://map.dfg.ca.gov/bios/>. Accessed September 14, 2023.

²³ California Department of Fish and Wildlife (CDFW). 2022. CNDDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: <https://map.dfg.ca.gov/rarefind/view/RareFind.aspx>. Accessed September 14, 2023.

²⁴ Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4th Edition. Boston: Houghton Mifflin Harcourt.

²⁵ Reid, F. 2006. A Field Guide to Mammals of North America, 4th Edition. Boston: Houghton Mifflin Harcourt.

²⁶ Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.

²⁷ eBird. 2022. Online bird occurrence database. Website: <http://ebird.org/content/ebird/>. Accessed September 14, 2023.

²⁸ California Herps. 2022. A Guide to the Amphibians and Reptiles of California. Website: <http://www.californiaherps.com/>. Accessed September 14, 2023.

(including Swainson’s hawk) and burrowing owl detection. Surveys for western pond turtle adults and nests were also performed simultaneously while walking the site. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley (Protocol)* and the *Staff Report on Burrowing Owl Mitigation*.^{29,30} Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Additional details concerning these surveys can be found in Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix D.1: SDG Commerce Site 217 Documents].

Special-status Animal Surveys for SDG Commerce 220

Eleven special-status animal surveys were conducted between January 18 and July 2, 2023, by Pinecrest for the entirety of the Commerce 220 project site. Surveys were conducted by Dr. Christopher DiVittorio to determine the presence or absence of several special-status species, including burrowing owl, Swainson’s hawk, nesting raptors, nesting passerine birds, and western pond turtle. Survey methods followed established procedures and applicable protocols, including the *Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley*, and the *Staff Report on Burrowing Owl Mitigation*.^{31,32} Survey equipment included high-quality binoculars and a high-quality spotting scope. Surveys were conducted during the appropriate times of day (including peak bird detection periods between sunrise and 10:00 a.m.). Additional details concerning these surveys can be found in Appendix C.1: *SDG Commerce Court 220 BRA* [Appendix D.2: SDG Commerce Site 220 Documents] of this document.

Protocol-level Rare Plant Surveys for SDG Commerce 220

Protocol-level rare plant surveys were conducted by Pinecrest during the growing season of 2023. An early-season site visit was performed on March 20. Mid-season site visits were performed on April 6, April 7, and May 29. A late-season site visit was also performed on July 2. Between the mid-season and late-season site visits, the majority of the site was graded; thus, the late-season site visit focused on remaining vegetation surrounding the areas of disturbance. Rare plants recorded and mapped in the field, if present, include all plants that are federal or State-listed as Rare, Threatened, or Endangered, all federal and State candidates for listing, all plants included in Lists 1 through 4 of the CNPS Inventory, and plants that qualify under the definition of “rare” in CEQA Guidelines Section 15380.

Botanical surveys were performed by Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by Dr. Zoya Akulova. During the site visit, Dr. DiVittorio surveyed the entirety of the project area using methods as specified in the CDFW publication titled *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and*

²⁹ Swainson’s Hawk Technical Advisory Committee. 2000. *Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley*. California Department of Fish and Wildlife, May 31, 2000.

³⁰ California Department of Fish and Wildlife (CDFW). 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

³¹ Swainson’s Hawk Technical Advisory Committee. 2000. *Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley*. California Department of Fish and Wildlife, May 31, 2000.

³² California Department of Fish and Wildlife (CDFW). 2012. *Staff Report on Burrowing Owl Mitigation*. State of California Natural Resource Agency Department of Fish and Game. March 7, 2012.

Sensitive Natural Communities.³³ Surveys were conducted by walking the entire project area on foot in parallel lines approximately 15 feet apart, identifying every species that was flowering, and making note of any species that were past flowering or that had not yet flowered. Voucher specimens were taken of any species that required identification in the laboratory. All terminology follows currently accepted nomenclature as described in The Jepson Manual. Additional details concerning these surveys can be found in Appendix C.1: *SDG Commerce Court 220 BRA, Section 3: Methods*, of this document.

Wildlife Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, development, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated “islands” of wildlife habitat, forming separated populations. Corridors act as an effective link between populations.

The project site was evaluated for evidence of a wildlife movement corridor during the reconnaissance-level survey and review of aerial photographs, and CDFW’s BIOS 6 information on Bay Area Linkages. The focus of this study was to determine whether a change in land use at the project site could have significant impacts on the regional movement of wildlife. Conclusions are based on the information compiled during the literature review, aerial photographs, USGS topographic maps and resource maps for the vicinity; the field survey; and professional experience with the desired topography, habitat, and resource requirements of the special-status species potentially utilizing the project site and vicinity.

3.3.6 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study checklist that includes questions for determining whether impacts to biological resources are significant. These questions reflect the input of planning and environmental professionals at the Governor’s Office of Planning and Research (OPR) and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. They also reflect the requirements of laws other than CEQA that protect biological resources (e.g., the federal CWA, the Porter-Cologne Water Quality Control Act, the Endangered Species Act and CESA, and the Natural Community Conservation Planning Act). As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project.

Additional guidance on the significance of biological resource impacts is found in CEQA Guidelines Section 15065, subdivision (a)(1), which provides that a lead agency shall find that a project may have a significant effect on the environment if “[t]he project has the potential to: . . . substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; [or]substantially reduce the number or

³³ California Department of Fish and Wildlife (CDFW). 2018. Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Sensitive Natural Communities. March 20, 2018.

restrict the range of an endangered, rare or threatened species[.]” The “mandatory findings of significance” are also found in the Appendix G sample Initial Study checklist, though near the end.

In light of the foregoing, the proposed project would have a significant effect related to biological resources if the proposed project would:

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service. (Refer to Section 7, Effects Found not to be Significant)
- c) 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.
- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.
- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan. (Refer to Section 4, Effects Found not to be Significant)
- g) Substantially reduce the habitat of a fish or wildlife species.
- h) Cause a fish or wildlife population to drop below self-sustaining levels.
- i) Threaten to eliminate a plant or animal community. (Refer to Section 4, Effects Found not to be Significant)
- j) Substantially reduce the number or restrict the range of an endangered, rare or threatened species.

3.3.7 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Special-status Species

Impact BIO-1: The proposed project could have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or United States Fish and Wildlife Service.

Impact Analysis

This impact analysis addresses thresholds a), g), and h).

Special-status Plant Species

No rare or special-status plant species were observed during the appropriately timed protocol-level floristic surveys (see Section 3.3.3, *Special-status Plant Species*) and are therefore determined to be absent from the site. This result is also supported by M&A's March 2020 BRA, which additionally states that in the recent past, blue gum eucalyptus trees covered most of the project site dating back for several decades; these trees emit allelopathic (growth inhibiting) chemicals from their leaves, acorns and bark that prevent other plants from growing under them.³⁴ Therefore, no impacts on special-status or rare plant species are expected to occur due to project construction or operation.

Special-status Wildlife Species

Swainson's Hawk

Potentially suitable Swainson's hawk nesting trees are located adjacent to the project site. If a Swainson's hawk nest is active near the project site during construction, the proposed project could cause indirect harm to the species through the noise, light and other human-caused disturbances resulting from project construction, which may result in this species abandoning its nests.

No Swainson hawks or nests were observed during the 18 field surveys conducted by FCS and Pinecrest in 2023. Out of an abundance of caution, FCS proposes that the project applicant implement the mitigation measures (MM) BIO-1a and BIO-1b, which require pre-construction surveys and the implementation of avoidance and minimization measures, if needed, to avoid indirect impacts on Swainson's hawk nesting habitat and to establish adequate nest protection zones to conform with CDFW Guidelines.³⁵

Western Burrowing Owl

No western burrowing owls have been observed on the project site during the 18 field surveys conducted by FCS and Pinecrest in 2023. Additionally, no suitable burrows or ground squirrels were observed on-site during the surveys. Therefore, the likelihood of presence on the project site is considered to be low. Since the western burrowing owl is a mobile species that could move onto the project site prior to development, pre-construction surveys are recommended out of an abundance of caution. If burrowing owl are present on-site before grading, the proposed project may result in impacts to the western burrowing owl, considered a potentially significant impact pursuant to CEQA.

³⁴ Monk & Associates (M&A). 2020. Revised Biological Resource Analysis SDG Commerce 217 Distribution Center. March 2, 2020.

³⁵ California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee. Sacramento, California. May 31, 2000.

However, MM BIO-1c is designed to detect, avoid, and passively relocate owls, and therefore, any potential significant impacts on this species would be reduced to less than significant.

Other Protected Nesting Birds (including northern harrier, golden eagle, white-tailed kite and others)

Areas adjacent to the project site provide suitable nesting habitat for a variety of species of nesting birds, including special-status bird species such as northern harrier, golden eagle, white-tailed kite, and others. Disturbed grassland and barren areas provide potential nesting opportunities for ground nesting birds. Construction activities that occur during the avian nesting season (generally February 1 to August 31) could disturb protected nesting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting season could result in direct harm to nesting birds, while noise, light, and other construction-related disturbances may cause nesting birds adjacent to the vegetation removal areas to abandon their nests.

No active raptor nests were observed within the project site during the 2023 field surveys conducted by FCS and Pinecrest; however white-tail kite individuals were observed foraging over the project site. Additionally, a juvenile, red-shouldered hawk was observed perched off-site within a large eucalyptus tree to the north of the SDG Commerce 217 site. Although no active nests have been observed on-site, it cannot be ruled out that avian species may nest within disturbance distance of the project site. With implementation of MM BIO-1d, requiring pre-construction nesting bird surveys and avoidance of direct and indirect impacts on nests, potential project-related impacts on protected bird nests can be reduced to a less than significant level under CEQA.

Roosting Bats (including Pallid Bat)

The project site is adjacent to trees that could provide suitable bat roosting habitat, including for special-status bats such as pallid bat. Potential indirect impacts could occur to roosting bats due to the proximity to disturbance distance during project construction. These activities could potentially subject bats to risk of injury or disturbance, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual bats by displacing them into adjacent territories belonging to other individuals. With implementation of MM BIO-1e, requiring pre-construction roosting bat surveys and avoidance of indirect impacts on active bat roosts, potential project-related impacts on protected roosting bats can be reduced to a less than significant level under CEQA.

Western Pond Turtle

No western pond turtles or nests were observed during the 2023 surveys conducted by FCS and Pinecrest. While the site appears to be unlikely to support western pond turtle, it cannot be ruled out entirely that a vagrant western pond turtle may be present on-site under unlikely circumstances before start of construction and could potentially be impacted by the project. Impacts to western pond turtle from the proposed project are considered potentially significant. MM BIO-1f would reduce this impact to a less than significant level through avoidance and minimization measures outlined below.

Monarch Butterfly

There is a potential for the monarch butterfly to overwinter in the eucalyptus woodland adjacent to the site. Construction activities, including dust, noise, and vibration adjacent to overwintering

colonies could result in loss of overwintering monarch butterflies. Therefore, MM BIO-1g which includes a pre-construction survey and, if found, avoidance in coordination with USFWS and CDFW are recommended to reduce any potential impacts on monarch butterfly to less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a Pre-construction Surveys for Swainson’s Hawk

Prior to ground disturbance that occurs during the nesting season for Swainson’s hawk (generally March 20 to July 20), a qualified Biologist shall conduct Swainson’s hawk nesting surveys within a 0.5-mile radius of the project site to determine whether nests are occupied. Occupancy shall be determined through observation of all accessible areas, including from public roads or other publicly accessible observation areas of Swainson’s hawk activity (e.g., foraging) on and near the project site.

The qualified Biologist shall follow the survey protocol outlined in the California Department of Fish and Wildlife (CDFW) *Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley*, which recommends surveys according to the following survey periods:

- I. **January–March 20:** Conduct one survey total.
- II. **March 20–April 5:** Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and/or 4:00 p.m. to sunset.
- III. **April 5–April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:30 p.m. to sunset.
- IV. **April 21–June 10:** Initiating surveys are not recommended. Monitoring of known nest sites only.
- V. **June 10–July 30:** (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and/or 4:00 p.m. to sunset.

Pre-construction surveys shall be completed for at least the two survey periods immediately prior to a project’s initiation.

MM BIO-1b Swainson’s Hawk Avoidance and Minimization and Construction Monitoring

Following the implementation of MM BIO-1a, if nests are located and determined to be occupied, minimization measures must be implemented, and construction monitoring conducted as follows:

1. Construction activities shall be prohibited within 600 feet of an active and occupied Swainson’s hawk nest, or within 600 feet of nests under construction, to prevent nest abandonment.

2. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern.
3. No tree containing an active Swainson's hawk nest shall be removed.

MM BIO-1c Pre-construction Surveys for Burrowing Owl (includes avoidance and passive relocation if found)

A qualified Biologist shall conduct a habitat assessment for wintering burrowing owl, and surveys if habitat is present. The qualified Biologist shall follow the California Department of Fish and Wildlife (CDFW) 2012 Staff Report on Burrowing Owl Mitigation habitat assessment and survey methodology prior to project activities occurring during the burrowing owl wintering season from September 1 to January 31. The habitat assessment and surveys shall encompass a sufficient buffer zone to detect owls nearby that may be impacted, which shall be a minimum of 1,640 feet unless otherwise approved in writing by the CDFW. Surveys shall include four nonbreeding season surveys spread evenly throughout the nonbreeding season pursuant to the CDFW 2012 Staff Report. Time lapses between surveys or project activities shall trigger subsequent surveys, as determined by a qualified Biologist, including but not limited to a final survey within 24 hours prior to ground disturbance and before construction equipment mobilizes to the project area. The qualified Biologist shall have a minimum of 2 years of experience implementing the CDFW 2012 Staff Report survey methodology resulting in detections.

Detected burrowing owls shall be avoided pursuant to the buffer zone prescribed in the CDFW 2012 Staff Report, unless otherwise approved in writing by CDFW, and any eviction plan shall be subject to CDFW review. Please be advised that CDFW does not consider eviction of burrowing owls (i.e., passive removal of an owl from its burrow or other shelter) as a "take" avoidance, minimization, or mitigation measure; therefore, off-site habitat compensation shall be included in the eviction plan. Habitat compensation acreages shall be approved by CDFW, as the amount depends on-site-specific conditions and must be completed before project construction unless otherwise approved in writing by CDFW. Habitat compensation shall also include placement of a conservation easement and preparation and implementation of a long-term management plan prior to project construction.

MM BIO-1d Protection of Active Bird Nests (includes pre-construction survey and implementation of avoidance buffer, if found).

1. If the proposed project requires vegetation to be removed during the nesting season (February 1 to August 31), pre-construction surveys shall be conducted no more than 7 days prior to the start of ground or vegetation disturbance (including

tree removal) to determine whether or not active nests are present within the project site and buffer area as appropriate.

2. If an active nest is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. (The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area (ESA) fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).
3. The qualified Biologist shall monitor the active nest during construction activities and modify the protection zone accordingly to prevent project-related nest disturbance, until the young have fledged.

MM BIO-1e Roosting Bat Pre-construction Survey and Avoidance

A qualified Biologist with relevant roosting bat experience shall conduct a survey for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) within 250 feet of project construction activities (where accessible).

If the Biologist determines or presumes bats are present, the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Grading shall only commence after the Biologist verifies 7 to 10 days later that the exclusion methods have successfully prevented bats from returning. To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from May 1 through October 1. Exclusion efforts may be restricted during periods of sensitive activity (e.g., during hibernation or while females in maternity colonies are nursing young).

MM BIO-1f Protection of Western Pond Turtles

A qualified Biologist (i.e., a Biologist with at least 2 years of experience conducting surveys for western pond turtle detections) shall submit a wildlife exclusion fencing plan to the California Department of Fish and Wildlife (CDFW) for review and approval prior to starting construction. Exclusion fencing shall be installed along the western perimeter of the project site to prevent the species from traveling from

North Slough onto the project site during construction. A qualified Biologist shall survey the project site and adjacent habitat within 72 hours of the start of project activities to determine whether western pond turtle or their nests are present and guide the installation of the exclusion fence. If western pond turtles are discovered, a qualified Biologist with experience handling and relocating the species shall move the species to the nearest suitable habitat outside of the project area and exclusion fencing. If western pond turtle nests are found, CDFW shall be notified prior to starting project activities, and the nest site plus a 50-foot buffer around the nest site shall be fenced with orange construction fence until eggs hatch and young turtles disperse to the adjacent North Slough. In addition, if nest(s) are located during surveys, moth balls (naphthalene) shall be sprinkled around the vicinity of the nest (no closer than 5 feet) to mask human scent and discourage predators. Grading within the nest site's 50-foot buffer area shall be delayed until the young leave the nest as determined by a qualified Biologist. If the CDFW allows translocation of any nestling pond turtles this shall be completed by a qualified Biologist under the direction of the CDFW.

MM BIO-1g Protection of Overwintering Monarch Butterfly

Activities such as vegetation removal, grading, or initial ground-disturbing activities shall be conducted between November 1 and July 31 (outside of the overwintering season) to the extent feasible. If such activities must be initiated during the overwintering season (August 1 through October 31), a pre-construction overwintering survey shall be conducted by a qualified Biologist no more than 7 days prior to vegetation removal, grading, or initial ground disturbance. The survey shall include the disturbance area and surrounding 250 feet to identify the location and status of any colonies that could potentially be affected either directly or indirectly by project activities. If no colonies are present, then project activities can commence as scheduled. If a colony is present, project construction shall cease immediately to avoid all direct and indirect impacts and report the presence of the colony to the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) and follow all recommendations provided by USFWS and CDFW.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Wetlands and Jurisdictional Features

Impact BIO-2: **The proposed project would not 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.**

Impact Analysis

This impact analysis addresses threshold c).

The proposed project would avoid all impacts on potential jurisdictional wetland features through the implementation of a wetland buffer avoidance area (Exhibit 3.3-4). The wetland buffer avoidance area would ensure that construction activities do not impact the on-site jurisdictional wetland features. Upon operation, the project's stormwater would be directed away from the features. Additionally, the proposed project would be required to comply with applicable laws and regulations related to jurisdictional waters and wetlands (see Section 3.3.4, Regulatory Framework). These generally applicable laws and regulations are designed to avoid any net loss of area and function. With implementation of the wetland buffer avoidance area and the application of laws and regulations, potential indirect or residual impacts would be reduced to less than significant under CEQA.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None required.

Fish and Wildlife Movement Corridors

Impact BIO-3: **The proposed project could 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 wildlife nursery sites.**

Impact Analysis

This impact analysis addresses thresholds d) and j).

The site does not function as a critical wildlife movement corridor, as discussed in Section 3.3.3, *Wildlife Movement Corridors and Nursery Sites*, above. This result is consistent with M&A's March 2020 BRA (Appendix C.2: *BRA for CDG 217 ISMND*). Certain common wildlife may move within or cross the site; however, it does not function to connect valuable habitats together, but rather it currently funnels wildlife east into a pocket of land generally surrounded with dense developments, including State Route (SR) 29 to the east, commercial and industrial areas to the north, and dense residential subdivision to the south, potentially constituting a population sink. Therefore, potential project-related impacts on wildlife movement are less than significant.

No substantial wildlife nursery sites, including breeding or nesting colonies, breeding ponds, or dens are present on-site. However, individual nesting birds and roosting bats have the potential of being present within disturbance distances seasonally. Potential impacts to individual nesting birds and roosting bats are addressed through the implementation of MM BIO-1a through MM BIO-1e (see above for details). As such, impacts to nursery sites would be less than significant.

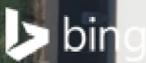
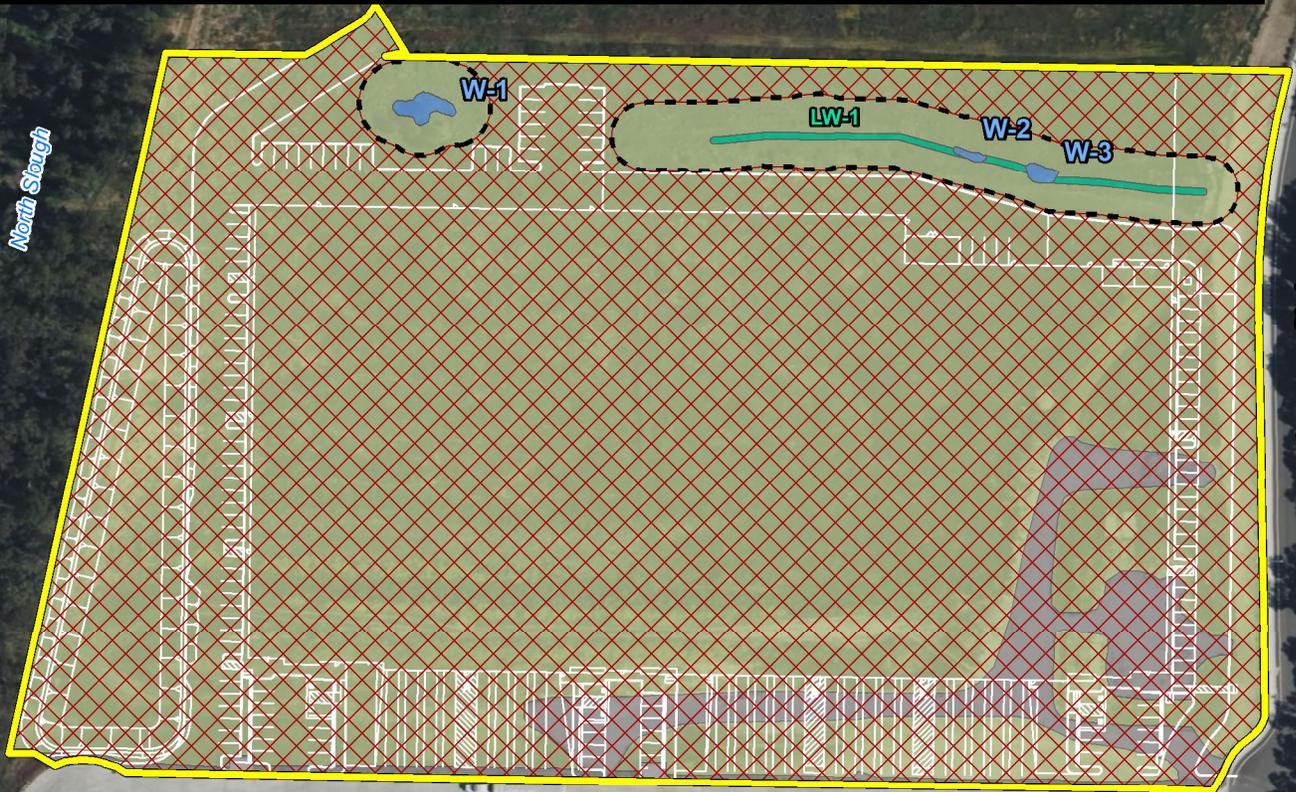
Legend

-  Project Site 10.45 acres
-  25' Wetland Buffer (No Project Impact) 0.65 acre
-  Permanent Impact 9.80 acres

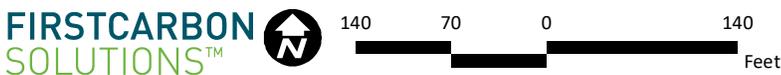
Vegetation Communities and Land Cover Types

-  Avena spp.-Bromus spp. Herbaceous Semi-Natural Stand
-  Developed
-  Seasonal wetland (W)
-  Linear Wetland (LW)

	Project Site	Perm Impact	No Impact
Avena spp.-Bromus spp. Herbaceous Semi-Natural Stand	9.64 acres	9.05 acres	0.59 acre
Developed	0.75 acre	0.75 acre	0.00 acre
Seasonal wetland (W)	0.02 acre	0.00 acre	0.02 acre
Linear Wetland (LW)	0.04 acre	0.00 acre	0.04 acre



Source: Bing Aerial Imagery. Monk & Associates Environmental Consultants, 08/2023.



**Exhibit 3.3-4
Biological Impacts**

THIS PAGE INTENTIONALLY LEFT BLANK

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM BIO-1a through MM BIO-1e.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Local Policies or Ordinances

Impact BIO-4: **The proposed project would not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Impact Analysis

This impact analysis addresses threshold e).

The proposed project would not remove any trees as there are no trees located within the project site. Therefore, the proposed project would not remove any City-protected trees and no conflicts or impacts would occur.

All work for the proposed project would take place consistent with biological requirements of the General Plan and Zoning Ordinance of the City of American Canyon. The project site is designated “Commercial Recreational” by the City of American Canyon General Plan and zoned “Recreation.” The Biological Resources Report provides the detailed assessment of biological resources required by General Plan Policies 8.1.1 and 8.1.4. Studies of sensitive biological resources have been either conducted by FCS and/or Pinecrest as part of the attached Biological Resources Report or were conducted by other consultants and independently reviewed and incorporated into the Biological Resources Report, consistent with General Plan Policy 8.2.1.

Botanical surveys were performed by Dr. Christopher DiVittorio, with secondary identification on voucher and photograph specimens made by Dr. Zoya Akulova during the 2023 flowering season. The proposed project would construct a wetland buffer avoidance area that would ensure that construction activities do not impact the on-site jurisdictional wetland features. Upon operation, the project’s stormwater would be directed away from the features. These wetland buffer areas are consistent with General Plan Policy 8.3.1.a, which requires the development plan to consider the nature of existing biological resources and all reasonable measures to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones; and General Plan Policy 8.4.3, which encourages activities that improve the biological value and integrity of the City’s natural resources through vegetation restoration, control of alien plants and animals, and landscape buffering. As such, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation necessary.

3.3.8 - Cumulative Impacts

The geographic scope of the cumulative biological resources analysis is the project vicinity as the project activity would only affect the surrounding project area. Cumulative projects in the geographic scope of the biological resources analysis consist of developed and undeveloped lands primarily near the edge of existing urban development.

This analysis evaluates whether the impacts of the proposed project, together with the impacts of cumulative development, could result in a cumulatively significant impact with respect to biological resources. This analysis also considers whether incremental contribution of impacts associated with the implementation of the proposed project would be significant. Both conditions must apply for a project's cumulative effects to rise to the level of a significant impact. If there is no impact associated with respect to a particular CEQA threshold, discussion of cumulative impacts is not required. Accordingly, this cumulative discussion is limited to the potential impacts discussed above.

Special-Status Species

Cumulative projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1 are predominantly located in areas within or adjacent to urban development with limited potential to support special-status species. As described in the Regulatory Section herein, numerous laws and regulations are in place to protect biological resource within the cumulative project area, including, but not limited to CESA, federal Endangered Species Act, CWA, and applicable General Plan and Municipal Code requirements. Future projects within the cumulative geographic context would be required to comply with applicable federal, State, and local laws, regulations and policies and all applicable permitting requirements of the regulatory and oversight agencies intended to address potential impacts on biological resources. Standard pre-construction surveys and, if necessary, avoidance procedures would be required for cumulative projects with the potential to impact special-status species. Because cumulative development has limited potential to support special-status species and would be required to comply with the above requirements, cumulative impacts related to special-status species would be less than significant.

The proposed project's incremental contribution to these less than significant cumulative impacts would not be significant with adherence to the mitigation measures related to special-status species identified above (see MM BIO1a through MM BIO-1g) and compliance with other applicable standards and requirements under the comprehensive regulatory framework. Therefore, the proposed project's contribution to cumulative impacts related to special-status species would be less than significant.

Wetland and Jurisdictional Features

The cumulative project area contains undeveloped areas that may support wetland and jurisdictional features. In addition, the Napa River, related tidal lands, and North Slough are located to the south. Any future development that occurs within the cumulative analysis area would have to take into

account the potential impacts to wetlands and jurisdictional features and mitigate as required under applicable laws and regulations. As such, cumulative impacts to wetland and jurisdictional features would be less than significant.

As indicated under Impact BIO-2, the proposed project would avoid all impacts on potential jurisdictional wetland features through the implementation of a wetland buffer avoidance area (Exhibit 3.3.-4). As such, the proposed project would not combine with other reasonably foreseeable projects and would have a less than significant contribution to the related impacts. Therefore, the proposed project's contribution to the less than significant cumulative impact related to wetlands and jurisdictional features would not be cumulatively considerable.

Fish and Wildlife Movement Corridors

The larger geographic scope for cumulative projects contains various areas that may provide movement corridors for fish and wildlife, primarily the Napa River, related tidal lands and North Slough to the south. However, none of the identified cumulative projects include wildlife corridors that connect to the proposed project site. Other areas surrounding the project site consist primarily of urban development or undeveloped land significantly surrounded by urban development. Any future development that occurs within the cumulative analysis area would have to take into account the potential impacts to these corridors and mitigate as required under applicable laws and regulations. The cumulative projects are primarily located in urban or commercially developed areas and therefore are not likely to significantly impact wildlife movement corridors. Therefore, it can be reasonably assumed that there would be no cumulative impacts to fish and wildlife movement corridors.

As discussed under Impact BIO-3, the site does not function as a critical wildlife movement corridor, is not connected to any corridors present on cumulative project sites and does not otherwise connect valuable habitats together; accordingly, there would be no impacts to wildlife movement corridors. Therefore, the proposed project's contribution to cumulative impacts related to fish and wildlife movement would not be cumulatively considerable.

Local Policies and Ordinances

Projects listed in Table 3-1 are all located within the City of American Canyon and therefore would be required to abide by applicable local policies and ordinances, such as the City's Tree Ordinance for subdivisions contained in Municipal Code Section 18.40.110. Consistency with the General Plan and other regulations of the Municipal Code would also be required. Compulsory adherence to these regulations related to biological resources would ensure that impacts would be less than significant in this regard.

As discussed under Impact BIO-4, the proposed project would not remove any City-protected trees and would be consistent with the General Plan and Zoning Ordinance designations. Furthermore, the project is consistent with applicable General Plan policies regarding biological resources including assessment of such resources and wetland avoidance and buffer. Therefore, the proposed project's contribution to the less than significant cumulative impact related to local policies and ordinances would not be cumulatively considerable.

Level of Cumulative Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM BIO-1a through MM BIO-1g.

Level of Cumulative Significance After Mitigation

Less than significant impact with mitigation incorporated.

3.4 - Cultural Resources and Tribal Cultural Resources

3.4.1 - Introduction

This section describes the existing cultural and Tribal Cultural Resources (TCRs) setting and potential effects that may result from project implementation on the site and its surrounding area. The descriptions and analysis in this section are based on information provided by the Native American Heritage Commission (NAHC), a records search conducted at the Northwest Information Center (NWIC), archival research, and a pedestrian survey, as presented in the Phase I Cultural Resource Assessment (Phase I CRA) prepared for the proposed project are included in confidential Appendix D. Recommendations provided in the Phase I CRA pertaining to mitigation of potential impacts are incorporated into this section.

The following public comments pertaining to cultural resources were received in response to the Notice of Preparation (NOP):

- The Draft Environmental Impact Report (Draft EIR) should analyze the proposed project's consistency with Assembly Bill (AB) 52 and Senate Bill (SB) 18.
- The lead agency should consult with applicable California Native American tribes.
- A Cultural Resources Assessment should include applicable record searches, a field survey, and measures for inadvertent discovery of cultural and tribal cultural resources.

3.4.2 - Environmental Setting

Overview

The term “cultural resources” encompasses historic resources, archaeological resources, and burial sites, which are generally defined as follows:

- **Historic Resources:** Historic resources are associated with the recent past. In California, historic resources are typically associated with the Spanish, Mexican, and American periods in the State's history and are generally less than 200 years old. Historic resources often take the form of buildings, structures, and other elements of the built environment.
- **Archaeological Resources:** Archaeology is the study of artifacts and material culture with the aim of understanding human activities and cultures in the past. Archaeological resources may be associated with prehistoric indigenous cultures as well as later historic periods.
- **Tribal Cultural Resources:** TCRs include sites, features, places, or objects that are of cultural value to one or more California Native American Tribes.
- **Burial Sites and Cemeteries:** Burial sites and cemeteries are formal or informal locations where human remains have been interred. Burial sites may be associated with precontact indigenous cultures as well as later historic periods.

More specifically, cultural resources may be understood as resources that have been formally recognized by a lead agency and/or are listed or determined eligible for listing on the California

Register of Historical Resources (CRHR) (Public Resources Code [PRC] § 5024.1, Title 14 California Code of Regulations [CCR] § 4852). However, the fact that a resource is not yet identified as a historical resource or found eligible for the CRHR does not preclude a lead agency from determining that said resource is a historical resource pursuant to Public Resources Code Sections 5020.1(j) or 5024.1. Under the California Environmental Quality Act (CEQA), a substantial adverse change in the significance of a historical resource would constitute a significant effect on the environment.

Cultural Setting

Following is a brief overview of the prehistory, ethnography, and historic background, providing a context in which to understand the background and relevance of sites found in the general project area. This section is not intended to be a comprehensive review of the current academic resources available; rather, it serves as a general overview. Unless otherwise stated, information contained in this section is drawn directly from the Phase I CRA conducted by FirstCarbon Solutions (FCS).

Prehistoric Background

In general, archaeological research in the greater San Francisco Bay Area has focused on coastal areas, where large shellmounds were relatively easily identified on the landscape. This research and its chronological framework, however, is relevant to and has a bearing on our understanding of prehistory in areas north of the San Francisco Bay, including modern American Canyon, Napa County.

Like many California cultural chronologies, the greater San Francisco Bay Area has a complex history. As synthesized by Milliken et al., three major chronologic frameworks exist for the Bay Area: an Archaic-Emergent temporal structure; the Central California Taxonomic System (CCTS) and a “hybrid system” that is utilized using the overarching CCTS scheme, while further demarcating time depth/period changes regionally, as used in the Archaic-Emergent temporal structure. Specifically, regional cultural patterns and phases are further defined within the San Francisco Bay Area by Dating Scheme D, which utilizes dated Olivella shell bead horizons. Milliken et al. used the term “bead horizons” to define the passage of short periods of time by the shifts in the trade of specific bead types throughout the Bay Area. This builds on Fredrickson, who proposed a chronology for the broader San Francisco Bay Area region. Fredrickson’s chronology is based on material patterns and includes the Windmill Pattern (4500-3500 Before Present [BP]), Berkeley Pattern (3500-1500 BP) and the Augustine Pattern (1500-250 BP). The Windmill Pattern is typified by a hunter-gatherer subsistence pattern, which included the exploitation of wild plants, game, and fish. Typical artifacts include clay balls, fishing hooks, fishing spears and ground stone tools. Artifacts from the Berkeley Pattern era reflect an increasing reliance on acorns, as mortars and pestles become more prolific. The Augustine Period was a period of increasing social complexity. Acorns continued to be the dominant food source and settlement patterns reflected an increasing sedentary lifestyle.

The Lower Archaic, 10,000 to 5500 BP, is typified in the Bay Area by a forager and gatherer lifestyle, as evidenced by the prevalence of milling slabs, hand stones, and large, wide-stemmed and leaf-shaped projectile points. The Middle Archaic, 5500 to 2500 BP, saw an increase in the presence of ground stone and cut shell beads, indicating that groups in the Bay Area were transitioning to a more sedentary lifestyle; interregional trade was increasing, and as the beads were found in mortuary contexts, that symbolism was becoming a regional identifier. The Early Upper Archaic, 2500 to 1570

BP, saw a shift away from cut beads to Olivella beads, and along the Bay, a new emphasis on Haliotis ornaments and bone tools, with net sinkers largely disappearing from assemblages. The Late Upper Archaic, 1570 to 950 BP, further defined by the bead phases M1–M4, is another time of transition, as saucer-shaped Olivella beads disappear from the record and Olivella saddle beads became dominant. The appearance of the saddle shaped Olivella beads coincides with the appearance and increase in Meganos complex dorsal extended burials. The Lower Emergent Period, 950 to 450 BP, is characterized by increasing complexity as beads were being produced for collectors as opposed to being produced primarily as mortuary items. Sedentism and increasing social stratification is evidenced by settlement patterns and mortuary practices. The Terminal Late Period saw change in the North Bay, as clamshell disk beads became prevalent, along with the toggle harpoon, hopper mortar, plain corner-notched arrow-sized projectile points, and magnesite tube beads; however, this was not the case in the South Bay. By 1650, only Olivella-lipped and spire-lopped beads were present.

Settlement patterns north of San Francisco Bay have varied over time. The currently accepted understanding of settlement patterns in this area is that a foraging and hunter-gatherer lifestyle centering on lacustrine resources remained dominant in the region until the Lower to Middle Archaic. At this point, there was a shift from foraging lacustrine resources to developing semi-permanent villages near marshes and grasslands, in order to gather those specific resources. This was followed by a shift to foragers residing in residential camps, with more consistent settlement occurring in “collector villages” during the Upper Archaic. By the Emergent Period, collectors were living in semi-permanent villages in oak woodlands, in which residential camps were now located along marshes.

Ethnographic Background

The Patwin

At the time of European contact, the project vicinity was primarily occupied by the Patwin Tribe of California Native Americans. The Patwin occupied the southwest Sacramento Valley from the town of Princeton, north of Colusa, south to San Pablo and Suisun bays, and from the lower hills of the eastern North Coast Ranges to the Sacramento River. Patwin territory extended approximately 40 miles east to west and 90 miles north to south. Based primarily on linguistic variation, the Patwin are the most southern division of the Wintuan population, who are members of the Penutian linguistic stock. Distinction is made between the Hill and River Patwin. Hill Patwin had villages located in valleys along the hills of the Vaca Mountains and Coast Ranges with populations concentrated in Indian, Bear, Capay, Cortina, Long, and Napa valleys. In general, the River Patwin occupied the west banks of the lower Sacramento River below the Feather River as well as the lower reaches of Cache and Putah creeks in the Sacramento Valley. The Hill Patwin villages of Napato and Tulukai lie in close proximity to the project area, and their place names remain part of the regional landscape to this day.

Patwin political organization was centered on the tribelet, which consisted of a primary village with smaller satellite villages governed by a head chief. Tribelets were autonomous and differed from each other with minor cultural variations. The economic and ceremonial activities of each village were administered by a chief whose position was typically passed on patrilineally although some

chiefs were chosen by village elders. The chief administered subsistence ventures, such as hunting and gathering expeditions, and served as the primary resource distributor.

The Patwin subsistence base varied with the seasons and included gathering seeds and plant resources on the plains, netting migratory waterfowl in the tule marshes, and netting salmon and other fish in the rivers and streams. Acorns were a staple in the Patwin diet and were obtained from communally owned hill and valley oak groves. The Patwin stored acorns in granaries as insurance against famine in poor harvest years. Ethnographic reports indicate the Patwin obtained large game such as deer, tule elk, and antelope by using nets or shooting with bows and arrows. Fish resources were of particular importance to the River Patwin and included perch, sturgeon, salmon, sucker, trout, pike, and other riverine species such as mussels and turtles, which were caught with bone fishhooks, nets, weirs, and seines.

The Patwin trade system included various resources that were exchanged with the Wappo, Nomlake, Southeastern Pomo, and Hill Patwin. The River Patwin obtained obsidian from sources to the west and east. Initially, finished shell beads were obtained from coastal tribes, but later, the River Patwin traded for whole shells from the Pacific Coast and produced the beads themselves. Relationships with nearby tribes and other Patwin tribelets were not always friendly. Patwin relations with Napa Valley groups were strained by provocations primarily incited by poaching; subsequent retaliations resulted in organized battles between individuals or groups or surprise attacks on villages.

Patwin dwellings, sweathouses and dance houses were all semi-subterranean, earth-covered structures. Mortuary practices included burials in cemeteries located at one end of the village, in which the possessions of the deceased were buried with them; at some locations, property was burned near the grave. Typically, only people who died or were killed away from the village were cremated. According to a Hill Patwin informant, “the River people [Patwin] set a corpse upright, then pushed the head down, broke the back, wrapped the body in a skin, and put it in the grave.” In addition, long burial ropes constructed of hemp were wrapped around the deceased, and the River Patwin utilized temporary containers made of tule reeds.

The Southern Wappo

The project site is also in close proximity to the ethnographic territory of the Southern Wappo. The Wappo language belongs to a small family of four languages, including Yuki, Coastal Yuki, and Huchnom. It is divided into five dialects distributed across two major territorial divisions. The smaller area included lands along the southern edge of Clear Lake; the larger ranged from just north of Napa, south to Geyserville and Middletown in the north. The Wappo were known to adopt words from other languages spoken in their vicinity, including Spanish names of objects with which they came into contact as a result of missionization. Of the 100 or known Wappo place names, at least one, cho*nóma, (meaning “abandoned camp”), remains in use as the probable Wappo name for the town of Sonoma. Like their Pomo neighbors, the basic sociopolitical unit was the village, which was usually located on a creek or other water source. Villages included one or two sweathouses as well as houses of varying size. One of the last remaining traditional Wappo villages observed in 1870 consisted of 11 grass houses serving 21 families totaling 92 people. Each house was made of grass thatch over a framework of bent poles and had a separate entrance and smoke-hole for each family inhabiting it.

Basic tools consisted of wedges, axes, and fire-drills made from stones, sticks, shells, and plants. Like the Pomo, the Wappo had a tradition of creating intricately woven baskets that were both functional and decorative. This tradition, along with several surviving songs and dances attributed to the Wappo, were primary forms of artistic expression. Imported clamshell beads and magnesite cylinders served as units of exchange and items of personal adornment. Food sources included a variety of plants and creatures, including acorns, buckeye, clover, abalone, clams, turtles, salmon, ducks, rabbits, and deer.

The Wappo had at least seven villages in the Geyserville area alone and estimates of their total population range from 5,000 to 8,000. Village chiefs might be elected or appointed, based on the organization of the individual village. Both men and women could occupy the role of chief, and some villages even had multiple chiefs, each with different spheres of influence, including trade, ceremonial roles, and warfare. The Wappo were generally regarded as a peaceful people, except during the Wappo-Pomo War in the early nineteenth century. The Wappo apparently attacked and killed members of the Alexander Valley Pomo who had carried away some Wappo supplies of acorns. The Pomo sought peace, which was granted immediately; however, the Pomo never returned to their Alexander Valley villages north of Healdsburg. The Wappo also tried to resist Spanish incursions and colonial expansion into their territories, but like the Pomo, their numbers were decimated by smallpox, hostility from the Mexican Army, and later by Euro-American settlements in the 1850s.

Historic Background

The Spanish Period (1769–1821)

Spanish exploration into Suisun Bay and into the Central Valley dates back to the late 1700s. Spanish mission records indicate that by 1800, Patwin inhabitants at Aguastos, the south-central area, and other villages were being taken to Mission Dolores (San Francisco de Asis), and that Mission Sonoma (San Francisco Solano), built in 1823, was baptizing Patwin tribal members until secularization of the missions in 1832-1836. Many Native Americans were not willing to convert. There are numerous accounts of neophytes fleeing the missions, and a series of “Indian Wars” broke out when the Spanish tried to return them to the missions.

The Mexican Period (1821–1848)

With the declaration of Mexican independence in 1821, Spanish control of Alta California ended, although little change actually occurred. Political change did not take place until mission secularization in 1834, when Native Americans were released from missionary control and the mission lands were granted to private individuals. Mission secularization removed the social protection and support on which Native Americans had come to rely. It exposed them to further exploitation by outside interests, often forcing them into a marginal existence as laborers for large ranchos. Following mission secularization, the Mexican population grew as the native population continued to decline. Anglo-American settlers began to arrive in Alta California during this period and often married into Mexican families, becoming Mexican citizens, which made them eligible to receive land grants. In 1846, on the eve of the U.S.-Mexican War (1846 to 1848), the estimated population of Alta California was 8,000 non-natives and 10,000 natives. However, these estimates have been debated. Cook suggests the Native American population was 100,000 in 1850; the U.S. Census of 1880 reports the Native American population as 20,385.

During this period, General Mariano Guadalupe Vallejo assumed authority of Sonoma Mission and established a friendly relationship with the Native Americans who were living there. In particular, Vallejo worked closely with Chief Solano, a Patwin who served as Vallejo's spokesperson when problems with Native American tribes arose. In 1843, Governor Manuel Micheltorena gave General Vallejo the 84,000-acre Soscoe land grant of Rancho Suscolto, which included the present-day Vallejo.

The American Period (1848–Contemporary)

During this period, and prior, Native American populations were declining rapidly because of an influx of Euro-American diseases. In 1832, a party of trappers from the Hudson's Bay Company, led by John Work, traveled down the Sacramento River, unintentionally spreading a malaria epidemic to Native Californians. Four years later, a smallpox epidemic decimated local populations, and it is estimated that up to 75 percent of the native population died.

After the upheaval of the Bear Flag Revolt in 1846, and the result of the Treaty of Guadalupe Hidalgo in 1848, California became a United States territory. In 1848, James W. Marshall discovered gold at Coloma in modern-day El Dorado County, which started the California Gold Rush into the region that forever altered the course of California's history. The arrival of thousands of gold seekers in the territory contributed to the exploration and settlement of the entire State. By late 1848, approximately 4 out of 5 men in California were gold miners.

By 1864, California's Gold Rush had essentially ended. The rich surface and river placers were largely exhausted and the miners either returned to their homelands or stayed to start new lives in California. After the gold rush, people in towns such as Jackson, Placerville, and Sonora turned to other means of commerce, such as ranching, agriculture, and timber production. With the decline of gold mining, agriculture and ranching came to the forefront in the State's economy. California's natural resources and moderate climate proved well suited for cultivation of a variety of fruits, nuts, vegetables, and grains.

Local History Napa County

European settlement in the Napa area began with the 1820 establishment of the Sonoma Mission and General Mariano Vallejo's 1838 reception of a land grant that included the Napa and Sonoma valleys. By 1848, the American population in the area had grown, and farmer Nathan Coombs laid out a town plat for Nappa City (the spelling changed to Napa by the 1870s), which served as the County seat when Napa became one of the original 27 counties of California in 1850.

During the mid-1850s, Napa County began to grow. While gold was being prospected in other areas of the State, Napa County became a center for silver and quicksilver mining. The County's population began to swell as pioneers, prospectors, and entrepreneurs moved in and set up residence. Two of those entrepreneurs were Edward Turner Bale and Samuel Brannan. Bale completed building the Bale Grist Mill a few miles north of Saint Helena in 1846. Brannan purchased land in the northern end of the valley at the foot of Mount Saint Helena and founded Calistoga. He began developing it as a resort town, taking advantage of the area's numerous mineral hot springs. He also founded the Napa Valley Railroad Company in 1864 to bring tourists to Calistoga from the San Francisco

ferryboats that docked in Vallejo. Other settlers turned to agriculture for their livelihood, primarily raising cattle, grain, and fruit crops.

Orchards and wheat gradually displaced cattle ranching as settlers' primary source of income, and the first Downtown Napa winery opened in the 1870s. While settlers initially relied on Native labor, Chinese immigrants became a more important source of labor as the Native populations declined in the later decades of the nineteenth century. Napa had a substantial Chinatown by 1886. In 1875, the State of California built the Napa State Hospital for the Insane at the southern edge of town; the City had competed with others around the State for the privilege of hosting the asylum, which brought considerable economic benefit with it in terms of public funding.

The Phylloxera louse infested Napa Valley and killed thousands of grapevines, seriously threatening the local wine industry. Many farmers replaced their grapevines with fruit trees. As discrimination against Chinese immigration climbed throughout the country in the late nineteenth century, Napa's Chinese population shrank, and farmers began to turn to Italian immigrants as a labor source.

The pattern of economic and population growth established during the war continued through the end of the 1950s. Blue-collar union jobs supported the local economy; by 1960, nearly 2,600 people were employed at Basalt Rock/Kaiser Steel and Napa's smaller manufacturing plants. Residential construction remained strong; between 1950 and 1957, nearly 5,000 dwelling units were constructed in Napa County, most of which were single-family houses in or near the Napa city limits. The downtown area remained the seat of County/City government and the commercial center of Napa during the postwar period through the mid-1960s.

The City's gradual development of a new City Hall, Police Station, and Fire Station at the Downtown Civic Center represented the most significant change to Downtown Napa's built environment during this era. By 1946, the City was discussing creation of a civic center, initially identifying the former Chinatown at First Street and the Napa River as a potential site. In 1948, the City Council began planning the new City Hall and selected the location along School Street between First Street and Second Street. Between 1951 and 1962, City Hall, the Police Station, and Fire Station No. 1 were constructed at their current locations.

In the 1960s, the local economy began a gradual shift away from its industrial roots. Tourism began to replace manufacturing as an engine of the local economy, but tourists passed through the City of Napa en route to wineries rather than arriving as a destination. State Route (SR) 29, which historically passed through the downtown area on Third Street, was rerouted to the west when a portion of SR-29 became a freeway in the late 1960s. This exacerbated downtown Napa's commercial decline, along with competition from malls and strip development. The City Council established a Redevelopment Agency in 1968, which was responsible for the destruction of many of Napa's historic commercial buildings in the early 1970s. Redevelopment efforts failed to re-establish Napa as the commercial heart of Napa County and the downtown area continued to suffer high turnover vacancy rates through the 1990s. This trend was reversed after 2005, when successful flood control measures made investment in the downtown area more attractive. Currently, downtown Napa is a hub of the local hospitality industry, featuring a concentration of hotels, restaurants, and wine tasting rooms.

The City of American Canyon

Located in southern Napa County, the City of American Canyon was incorporated as a city in 1992. The history of the City of American Canyon and its economy, growth, and development has been tied to the larger Napa region as a whole. The California Gold Rush brought many settlers to the region but American Canyon itself was largely devoid of gold deposits. Instead, the area was both rich in limestone and ideally suited for farming. In 1852, Simpson Thompson and his two sons established a large farm consisting of 475 acres of orchards and farmland as well as 300 acres of meadowlands for cattle grazing. In the early 1900s, the discovery of rich deposits of limestone led to the development of quarries that could produce over 2,000 barrels of cement per day. However, the exploitation of usable limestone and clay meant that by the 1930s, mining became economically untenable in the region. The economy of the region pivoted toward agriculture, particularly fruit orchards and the farming of wheat.

However, the City's economy would shift following the Paris Wine Tasting of 1976, better known as the Judgment of Paris. In a blind tasting, a panel of expert sommeliers scored wines from Napa estates such as Heitz Cellars or Stag's Leap higher than estates that produced First Growth Bordeaux wines. Their judgment sent shockwaves around the wine industry and established Napa as a world-class wine-growing region. While the region of Calistoga and St. Helena in Napa has been focused on producing top-tier wines and attracting high-end clientele, their success could not exist without the logistic support of the warehouses and distribution centers that grew up in American Canyon. These centers developed in subsequent years following the 1976 Judgment of Paris and provide the backbone for the distribution of domestic and imported wines both in the Bay Area and overseas today.

3.4.3 - Regulatory Framework

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA), as amended, established the National Register of Historic Places (NRHP), which contains an inventory of the nation's significant prehistoric and historic properties. Under 36 Code of Federal Regulations 60, a property is recommended for possible inclusion on the NRHP if it is at least 50 years old, has integrity, and meets one of the following criteria:

- It is associated with significant events in history, or broad patterns of events.
- It is associated with significant people in the past.
- It embodies the distinctive characteristics of an architectural type, period, or method of construction; or it is the work of a master or possesses high artistic value; or it represents a significant and distinguishable entity whose components may lack individual distinction.
- It has yielded, or may yield, information important in history or prehistory.

Certain types of properties are usually excluded from consideration for listing in the NRHP, but they can be considered if they meet special requirements in addition to meeting the criteria listed above.

Such properties include religious sites, relocated properties, graves and cemeteries, reconstructed properties, commemorative properties, and properties that have achieved significance within the past 50 years.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act (ARPA) amended the Antiquities Act of 1906 (16 United States Code [USC] 431–433) and set a broad policy that archaeological resources are important to the nation and should be protected, and required special permits before the excavation or removal of archaeological resources from public or Indian lands. The purpose of the ARPA was to secure, for the present and future benefit of the American people, the protection of archaeological resources and sites that are on public lands and Indian lands, and to foster increased cooperation and exchange of information between governmental authorities, the professional archaeological community, and private individuals having collections of archaeological resources and data that were obtained before October 31, 1979.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act (AIRFA) established federal policy to protect and preserve the inherent rights of freedom for Native groups to believe, express, and exercise their traditional religions. These rights include, but are not limited to, access to sites, use and possession of sacred objects, and freedom to worship through ceremonies and traditional rites.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act of 1990 sets provisions for the intentional removal and inadvertent discovery of human remains and other cultural items from federal and tribal lands. It clarifies the ownership of human remains and sets forth a process for repatriation of human remains and associated funerary objects and sacred religious objects to the Native American groups claiming to be lineal descendants or culturally affiliated with the remains or objects. It requires any federally-funded institution housing Native American Remains or artifacts to compile an inventory of all cultural items within the museum or with its agency and to provide a summary to any Native American tribe claiming affiliation.

State

CEQA Guidelines Section 15064.5(a)—CEQA Definition of Historical Resources

California Environmental Quality Act (CEQA) Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a “historical resource” as:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
- (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall 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 which 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 a historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources.
- (4) The fact that a resource is not listed in, or determined to be eligible for listing in the California Register of Historical Resources, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or identified in a historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be a historical resource as defined in Public Resources Code Sections 5020.1(j) or 5024.1.

Therefore, under the CEQA Guidelines, even if a resource is not included on any local, State, or federal register, or identified in a qualifying historical resources survey, a lead agency may still determine that any resource is a historical resource for the purposes of CEQA if there is substantial evidence supporting such a determination. A lead agency must consider a resource to be historically significant if it finds that the resource meets the criteria for listing in the CRHR.

Archaeological and historical sites are protected pursuant to a wide variety of State policies and regulations, as enumerated in Public Resources Code Section 5024.1. Cultural resources are recognized as nonrenewable resources and receive additional protection under the Public Resources Code and CEQA.

Public Resources Code 5024.1(c)—Definition of a Historic Resource

CEQA Guidelines Section 15064.5(a), in Title 14 of the California Code of Regulations, defines a "historical resource" as a resource that:

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

CEQA Guidelines Section 15064.5(a)(3)—California Register of Historical Resources Criteria

As defined by CEQA Guidelines, Section 15064.5(a)(3)(A-D), a resource shall be considered historically significant if the resource meets the criteria for listing on the CRHR. The CRHR and many local preservation ordinances have employed the criteria for eligibility to the NRHP as a model (see

criteria described above under the description of the NHPA), since the NHPA provides the highest standard for evaluating the significance of historic resources. A resource that meets NRHP criteria is clearly significant. In addition, a resource that does not meet NRHP standards may still be considered historically significant at a local or State level.

CEQA Guidelines 15064.5(c)—Effects on Archaeological Resources

CEQA Guidelines state that a resource need not be listed on any register to be found historically significant. CEQA Guidelines direct lead agencies to evaluate archaeological sites to determine whether they meet the criteria for listing in the CRHR. If an archaeological site is a historical resource, in that it is listed or eligible for listing in the CRHR, potential adverse impacts to it must be considered. If an archaeological site is considered not to be a historical resource but meets the definition of a “unique archaeological resource” as defined in Public Resources Code Section 21083.2, then it would be treated in accordance with the provisions of that section.

CEQA Guidelines Section 15064.5(d)—Effects on Human Remains

Native American human remains and associated burial items may be significant to descendant communities and/or may be scientifically important for their informational value. They may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons. Human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines § 15064.5(d); PRC § 5097.98). CEQA and other State regulations regarding Native American human remains provide the following procedural requirements to assist in avoiding potential adverse effects on human remains within the contexts of their value to both descendant communities and the scientific community:

- When an initial study identifies the existence or probable likelihood that a project would affect Native American human remains, the lead agency is to contact and work with the appropriate Native American representatives identified through the NAHC to develop an agreement for the treatment and disposal of the human remains and any associated burial items (CEQA Guidelines § 15064.5(d); PRC § 5097.98).
- If human remains are accidentally discovered, the County Coroner must be contacted. If the County Coroner determines that the human remains are Native American, the Coroner must contact the NAHC within 24 hours. The NAHC must identify the Most Likely Descendant (MLD) to provide for the opportunity to make recommendations for the treatment and disposal of the human remains and associated burial items.
- If the MLD fails to make recommendations within 24 hours of notification or the project applicant rejects the recommendations of the MLD, the Native American human remains and associated burial items must be reburied in a location not subject to future disturbance within the project site (PRC § 5097.98).
- If potentially affected human remains or a burial site may have scientific significance, whether or not it has significance to Native Americans or other descendant communities, then under CEQA, the appropriate mitigation of effect may require the recovery of the scientific

information of the remains/burial through identification, evaluation, data recovery, analysis, and interpretation (CEQA Guidelines § 15064.5(c)(2)).

Health and Safety Code Section 7050.5

Section 7050.5 of the Health and Safety code sets forth provisions related to the treatment of human remains. As the code states, “every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor” except under circumstances as provided in Section 5097.99 of the Public Resource Code. The regulations also provide guidelines for the treatment of human remains found in locations other than a dedicated cemetery including responsibilities of the Coroner.

Public Resources Code Section 5097.98

Section 5097.98 provides protocol for the discovery of human remains. It states that “when the commission receives notification of a discovery of Native American human remains from a County Coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify persons believed to be most likely descended from the deceased Native American.” It also sets forth provisions for descendants’ preferences for treatment of the human remains and what should be done if the commission is unable to identify a descendant.

California Public Resources Code Section 5097.91—Native American Heritage Commission

Section 5097.91 of the Public Resources Code established the NAHC, whose duties include the inventory of places of religious or social significance to Native Americans and the identification of known graves and cemeteries of Native Americans on private lands. Under Section 5097.91 of the Public Resources Code, a State policy of noninterference with the free expression or exercise of Native American religion was articulated along with a prohibition of severe or irreparable damage to Native American sanctified cemeteries, places of worship, religious or ceremonial sites or sacred shrines located on public property. Section 5097.98 of the Public Resources Code specifies a protocol to be followed when the NAHC receives notification of a discovery of Native American human remains from a County Coroner. Section 5097.5 defines the unauthorized disturbance or removal of archaeological, historic, or paleontological resources located on public lands as a misdemeanor.

California Senate Bill 18—Protection of Tribal Cultural Places

SB 18 (California Government Code § 65352.3) incorporates the protection of California traditional tribal cultural places into land use planning for cities, counties, and agencies by establishing responsibilities for local governments to contact, refer plans to, and consult with California Native American Tribes as part of the adoption or amendment of any general or specific plan proposed on or after March 1, 2005. SB 18 requires public notice to be sent to tribes listed on the NAHC SB 18 Tribal Consultation list within the geographical areas affected by the proposed changes. Tribes must respond to a local government notice within 90 days (unless a shorter time frame has been agreed upon by the tribe), indicating whether or not they want to consult with the local government. Consultations are for the purpose of preserving or mitigating impacts to places, features, and objects described in Sections 5097.9 and 5097.993 of the Public Resources Code that may be affected by the proposed adoption or amendment to a general or specific plan.

California Assembly Bill 52—Effects on Tribal Cultural Resources

AB 52 was signed into law on September 25, 2014, and provides that any public or private “project with an effect that may cause a substantial adverse change in the significance of a Tribal Cultural Resource (TCR) is a project that may have a significant effect on the environment.” TCRs include “[s]ites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are eligible for inclusion in the CRHR or included in a local register of historical resources.” Under prior law, TCRs were typically addressed under the umbrella of “cultural resources,” as discussed above. AB 52 formally added the category of “tribal cultural resources” to CEQA and extends the consultation and confidentiality requirements to all projects, rather than just projects subject to SB 18 as previously discussed.

The parties must consult in good faith, and consultation is deemed concluded when either: (1) the parties agree to measures to mitigate or avoid a significant effect on a TCR (if such a significant effect exists); or (2) when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed upon during consultation must be recommended for inclusion in the environmental document. AB 52 also identifies mitigation measures that may be considered to avoid significant impacts if there is no agreement on appropriate mitigation. Recommended measures include:

- Preservation in place.
- Protecting the cultural character and integrity of the resource.
- Protecting the traditional use of the resource.
- Protecting the confidentiality of the resource.
- Permanent conservation easements with culturally appropriate management criteria.

California Public Resources Code Section 21074—Effects on Tribal Cultural Resources

AB 52 amended the CEQA statute to identify an additional category of resource to be considered under CEQA, called “tribal cultural resources.” It added Public Resources Code Section 21074, which defines “tribal cultural resources” as follows:

- (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 CRHR.
 - 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.

Local

City of American Canyon

General Plan

To promote the preservation and restoration of the sites, structures and districts that have architectural, historical, archaeological and/or cultural significance to the City of American Canyon.

Objective 8.19 Ensure that the City's historically and archaeologically significant resources are protected in a manner that preserves and/or enhances the resources' inherent historic value.

Policy 8.19.1 Conduct a comprehensive survey of archaeological and cultural resources and historic vegetation that is based on established criteria and encompasses the entire City and its Sphere of Influence.

Policy 8.19.2 Adopt a Preservation Ordinance that will authorize the City to designate appropriate vegetation or archaeological sites deemed to be of historic, archaeological, or cultural significance an American Canyon City Historic Point, Site or District. Such an ordinance shall conform to State and federal criteria for establishing a preservation ordinance.

Policy 8.19.3 Explore various methods for the future preservation of historic vegetation and archaeological and cultural resources. For example, consider establishing " receiver site" and "adopt a building" programs to preserve historic structures that must be removed from their sites. Additionally, consider utilizing the Secretary of the Interior Standards for Historic Rehabilitation and standards and guidelines prescribed by the State Office of Historic Preservation as the architectural and landscape design standards for rehabilitation, alteration, or additions to sites containing historic resources in order to preserve these structures in a manner consistent with the sites' architectural and historic integrity.

3.4.4 - Methodology

Records Searches and Pedestrian Survey to Identify Existing Cultural Resources

The information in this section is based on the Phase I CRA prepared for this project by FCS on March 13, 2023. The Phase I CRA used the following methods to analyze the potential impacts of project implementation:

Northwest Information Center

On November 29, 2022, a records search for the project site and a 0.50-mile radius beyond the project boundaries was conducted at the NWIC located at Sonoma State University in Rohnert Park, California. To identify any historic properties or resources, the current inventories of the NRHP, the CRHR, the California Historic Landmarks list, the California Points of Historical Interest list, and the California Built Environment Resource Directory (BERD) for Napa County were reviewed to determine the existence of previously documented local historical resources.

Results from the NWIC indicate that two resources have been recorded within the 0.5-mile radius (historic resource P-28-000602 and prehistoric resource 483A-001), none of which are located within the project boundaries (Table 3.4-1). In addition, 21 area-specific survey reports are on file within the 0.5-mile radius, one of which (S-000153) linearly transects the project boundary (Table 3.4-2). This indicates that the project site has been partially surveyed for cultural resources.

Table 3.4-1: Cultural Resources within 0.5-mile Radius of the Project Site

Resource No.	Resource Description	Date Recorded
P-28-000602	CA-NAP-727H Fogarty; AH03 Landscaping/orchard; AH05. Wells/cisterns; AH11. Walls/fences; AH15. Standing structures; AH16. Other	2007
483A-001	No name; AP02 Lithic scatter	No year

Source: Northwest Information Center (NWIC) Records Search. November 29, 2022.

Table 3.4-2: Previous Investigations within 0.5-mile Radius of the Project Site

Report No.	Report Title/Project Focus	Author	Date
S-000153	Archaeological Impact Evaluation: Proposed Sewage Pipeline, Napa to American Canyon, Napa County, California	Thomas F. King	1975
S-000153a	A Re-examination of an Area of Archaeological Sensitivity near Green Island Road, Napa County, California	David A. Fredrickson	1975
S-000153b	Archaeological survey and monitoring along the Napa-American Canyon Pipeline right-of-way	Lynn Eisenman	1976
S-001012	A preliminary archaeological reconnaissance of the 73.28-acre Maher property, Napa County, California	Thomas L. Jackson	1976
S-002372	Green Island Industrial Park, Napa County, California	David Chavez	1980
S-008851	Archaeological Reconnaissance of the Zunino Property and the Department of Fish and Game Tract near American Canyon, Napa County, California	Suzanne Baker	1986
S-009213	Historic Overview and National Register of Historic Places Evaluation of Site CA-NAP- 727H, Napa County, California	Laurence H. Shoup and Suzanne Baker	1987
S-012439	Cultural Resources Investigations for the Port of Oakland Phase I Dredging, Cultural Resources Evaluation	Avid Chavez	1990
S-017315	An Archaeological Study of the Meyer Property in American Canyon, Napa County, California, APN 058-04-10 and 058-04-19	Jennifer A. Ferneau	1995
S-017582	Archaeological Reconnaissance, Napa River and Oat Hill Sanitary Landfill Area, Napa County, California	Archaeological Consulting and Research Services	No Date

Report No.	Report Title/Project Focus	Author	Date
S-022041	A Cultural Resource Inventory of the Napa Airport Master Environmental Assessment Area, Napa County, California	Katherine Flynn, William Roop, and Ronald Melander	1983
S-023924	Historic Properties Inventory for the Proposed City of American Canyon South Napa River Tidal Slough and Floodplain Restoration Project	Stacey Jordan and Richard L. Carrico	2001
S-024344	Archaeological Survey of the Cookie Hill Housing Development, Napa County, California	Katherine Flynn	1988
S-029931	Tribotech/SF-06921, 100 Napa Junction Road, American Canyon, California	Scott Billat	2005
S-030746	A Cultural Resources Study for the Hanna Bridge Project, Project #0253605003-32001, City of American Canyon, Napa County, California	Heidi Koenig	2005
S-034252	An Archaeological Survey of the Green Island Assessment and Reimbursement District, Napa County, California	Thomas M. Origer	1988
S-034253	Cultural Resources Inspection of the Hanna Court Project Area, American Canyon, Napa County, California	Miley Paul Holman	2006
S-035015	Cultural Resources Report for the Napa- Sonoma Marshes Wildlife Area Land Management Plan	Joanne Grant	2008
S-036581	A Cultural Resources Survey for the Oat Hill Winery Condominium Project, Napa Junction Road, American Canyon, Napa County, California	Vicki R. Beard	2009
S-043823	Cultural Resources Inventory and Evaluation Report for Napa River Salt Marsh Restoration Project, Napa and Sonoma Counties, California	No Author	2003
S-049803	Cultural Resources Assessment, Green Island Industrial District Roads Project, City of American Canyon, Napa County, California	Kara Brunzell and David Brunzell	2016
S-050025	Archaeological Survey Report for the Napa Junction Elementary School Project, City of American Canyon, Napa County, California	No Author	2018
S-051238	Cultural Resources Study-SDG Commerce 330 Warehouse Project, City of American Canyon, Napa County, California	Solano Archaeological Services	2018
Notes: Report listed in Bold transects the project site. Source: Northwest Information Center (NWIC) Records Search. November 29, 2022.			

Historic Aerials

A review of 16 historical aerial photographs from 1948 to 2020 indicate that, from the earliest aerial in 1948 through 1993, the project site was a wooded, undeveloped field. Between 1993 and 2005, industrial and residential development gradually began to occur north and southeast of the project.

From 2005 to 2020, there was very little development or expansion in the area surrounding the project. The project site itself remains undeveloped.

Native American Heritage Commission

On November 21, 2022, FCS sent a letter to the NAHC in an effort to determine whether any sacred sites are listed on its Sacred Lands File (SLF) for the Area of Potential Effect (APE). A response was received on December 16, 2022, indicating that the SLF search produced a positive result for Native American cultural resources within the project site. The NAHC included a list of 11 tribal representatives available for consultation. To ensure that all Native American knowledge and concerns over potential TCRs that may be affected by implementation of the proposed project are addressed, a letter containing project information and requesting additional information was sent to each tribal representative on January 2, 2023. No responses have been received to date.

Table 3.4-3: Tribal Consultation

Tribal Contact	Date Letter Sent	Response from Tribal Contact
Cachil Dehe Band of Wintun Indians of the Colusa Indian Community Daniel Gomez, Chairman	January 2, 2023 Email.	None
Cortina Rancheria - Kletsel Dehe Band of Wintun Indians Charlie Wright, Chairperson	January 2, 2023 USPS	None
Guidiville Indian Rancheria Donald Duncan, Chairperson	January 2, 2023 Email.	None
Middletown Rancheria of Pomo Indians Jose Simon, Chairperson	January 2, 2023 Email.	None
Mishewal-Wappo Tribe of Alexander Valley Scott Gabaldon, Chairperson	January 2, 2023 Email.	None
Muwekma Ohlone Indian Tribe of the SF Bay Area Charlene Nijmeh, Chairperson	January 2, 2023 Email.	None
Muwekma Ohlone Indian Tribe of the SF Bay Area Monica Arellano, Vice Chairwoman	January 2, 2023 USPS	None
Pinoleville Pomo Nation Leona Willams, Chairperson	January 2, 2023 Email.	None
Yocha Dehe Wintun Nation Anthony Roberts, Chairperson	January 2, 2023 Email.	None
Yocha Dehe Wintun Nation Laverne Bill, Director of Cultural Resources	January 2, 2023 Email.	None
Yocha Dehe Wintun Nation Yvonne Perkins, THPO, Cultural Resources Chairman	January 2, 2023 Email.	None
Source: FirstCarbon Solutions (FCS) 2024		

Cultural Resources Pedestrian Survey

On January 6, 2023, FCS Senior Archaeologist Dr. Dana DePietro, PhD, and FCS Archaeologist and Historian Ti Ngo conducted a pedestrian survey for unrecorded cultural resources in the project site.

The project site is rectangular-shaped and is bounded by Commerce Court to the east, an industrial warehouse to the south, North Slough to the west, and undeveloped land (entitled for development as a wine distribution warehouse) to the north.

The survey began in the southeast corner of the project site and moved west and north, using east–west transects spaced at 15-meter intervals. All areas of the project site were closely inspected for culturally modified soils or other indicators of potential historic or prehistoric resources. Because of a high level of vegetation, visibility of native soils was approximately 5 percent across the project site. Visible soils consisted of dark brown alluvial clay (Munsell 7.5 YR 3/2) with inclusions of granite, quartz, and schist stones ranging from 2-5 centimeters. The soil in the southern boundary of the project site contained a mixture of imported fill from adjacent construction.

Survey conditions were documented using digital photographs and field notes. During the survey, the team examined all areas of the exposed ground surface for prehistoric artifacts (e.g., fire-affected rock, milling tools, flaked stone tools, toolmaking debris, ceramics), soil discoloration and depressions that might indicate the presence of a cultural midden, faunal and human osteological remains, features indicative of the former presence of structures or buildings (e.g., postholes, standing exterior walls, foundations), or historic debris (e.g., glass, metal, ceramics).

No indication of historic or prehistoric archaeological resources were found over the course of the pedestrian survey.

3.4.5 - Buried Site Potential

In addition to the pedestrian survey, the potential for yet identified cultural resources in the vicinity was reviewed against geologic and topographic geographic information system data for the general area and information from other nearby projects. The proposed project was evaluated against a set of criteria identified by a geoarchaeological overview of the Central Valley that was prepared for the California Department of Transportation (Caltrans) Districts 6 and 9.¹ This study mapped the “archaeological sensitivity,” or potential to support the presence of buried prehistoric archaeological deposits, throughout the Central Valley based on geology and environmental parameters including distance to water and landform slope. The methodology used in the study is applicable to other parts of California, and concluded that sites consisting of flat, Holocene-era deposits in close proximity to water resources had a moderate to high probability of containing subsurface archaeological deposits when compared to earlier Pleistocene deposits situated on slopes or further away from drainages, lakes, and rivers.

¹ Meyer, J., D. Craig Young, and Jeffrey S. Rosenthal. 2010. Volume I: A Geoarchaeological Overview and Assessment of Caltrans District 6 and 9, Cultural Resources Inventory of Caltrans District 6/9 Rural Conventional Highways. Submitted to Central California Department of Transportation, District 6.

The project site is flat and situated in close proximity to the Napa River with the Northern Slough along the western portion of the property. According to the geological map of the area by Wagner and Gutierrez, the surface of the project site consists almost entirely of Quaternary alluvial fan deposits, containing Holocene soils.² Applying the criteria set forth in Meyer et al. 2010, all Holocene-era deposits have the potential to contain archaeological deposits, which increases with the ease of the slope and proximity to water resources. This, coupled with the presence of a known precontact archaeological resource 1.2 mile to the north of the project footprint, indicates a moderate potential for unanticipated buried cultural resources to be impacted by project construction.

3.4.6 - Thresholds of Significance

According to Appendix G, Environmental Checklist, of the CEQA Guidelines, cultural resources impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Cause a substantial adverse change in the significance of a historical resource as pursuant to Section 15064.5?
- b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?
- c) Disturb any human remains, including those interred outside of formal cemeteries?
- d) 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)?
- e) 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 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?
- f) 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:
 - i. 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

² Wagner, D.L., and Gutierrez, C.I., 2017, Preliminary geologic map of the Napa and Bodega Bay 30' x 60' quadrangles, California. California Geological Survey, Preliminary Geologic Maps PGM-17-04, Scale 1:100,000.

- ii. 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.

3.4.7 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Historic Resources

Impact CUL-1: **The proposed project could cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5.**

Impact Analysis

Historic resources in this context refer to the built environment, mainly buildings and structures over 45 years in age that may be eligible for inclusion on the CRHR or NRHP. Record search results conducted at the NWIC did not identify any historic resources within the project site, but identified one historic resource (P-28-000602) within a 0.5-mile records search radius. The project site's proximity to the nearby Napa River, the Northern Slough waterway along its western boundary, and the lack of visibility of native soils due to high level of vegetation indicates a moderate potential for unanticipated cultural resources to be found during subsurface construction. FCS considers the potential for the proposed project to have an adverse effect on historic cultural resources to be moderate, creating a potentially significant impact.

Additionally, there is always a possibility that construction-related ground disturbance may uncover previously undiscovered historic cultural resources. As such, FCS recommends Worker Environmental Awareness Program (WEAP) training for archaeological resources for all construction personnel directly involved with project-related ground disturbance. The WEAP training shall be conducted by an Archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for archaeology. This is included as Mitigation Measure (MM) CUL-1a. Furthermore, FCS recommends archaeological monitoring during ground-disturbing activities, as outlined in MM CUL-1b below. Lastly, MM CUL-1c outlines procedures for inadvertent discovery of cultural resources. With incorporation of MM CUL-1a, MM CUL-1b, and MM CUL-1c impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-1a All construction personnel directly involved with project-related ground disturbance shall attend a "tailgate" Worker Environmental Awareness Program (WEAP) training for archaeological resources. The training shall include visual aids, a discussion of applicable laws and statutes relating to archaeological resources, types of resources that may found within the project site, and procedures to be followed in the event such resources are encountered. The training shall be conducted by an Archaeologist

who meets the Secretary of the Interior’s Professional Qualification Standards for archaeology.

MM CUL-1b An Archaeological Monitor reporting to the qualified Archaeologist, shall be present during the clearing, grading, and trenching phases of the proposed project to check for the inadvertent discovery of archaeological resources or human remains. Over the course of the proposed project, should the Archaeologist determine that the probability of inadvertent discovery is low, they may make a recommendation to the lead agency that monitoring be reduced to regular periodic or “spot-check” monitoring, or that monitoring may cease altogether.

MM CUL-1c If buried cultural resources are discovered during construction, operations shall stop in the immediate vicinity of the find and a qualified Archaeologist shall be consulted to determine whether the resource requires further study. The qualified Archaeologist shall make recommendations to the lead agency on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines. Potentially significant cultural resources consist of, but are not limited to, stone, bone, fossils, wood, or shell artifacts or features, including hearths, structural remains, or historic dumpsites. Any previously undiscovered resources found during construction within the Master Plan area should be recorded on appropriate California Department of Parks and Recreation (DPR) forms and evaluated for significance in terms of CEQA Guidelines.

If the resources are determined to be unique historic resources as defined under Section 15064.5 of the CEQA Guidelines, mitigation measures shall be identified by the monitor and recommended to the lead agency. Appropriate mitigation measures for significant resources could include avoidance or capping, incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds.

No further grading shall occur in the area of the discovery until the lead agency approves the measures to protect these resources. Any archaeological artifacts recovered as a result of mitigation shall be donated to a qualified scientific institution approved by the lead agency where they would be afforded long-term preservation to allow future scientific study.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Archaeological Resources

Impact CUL-2: **The proposed project could cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.**

Impact Analysis

The results of the records search from the NWIC identified one prehistoric archaeological resource (483A-001) located within the 0.5-mile records search radius. Additionally, the SLF search conducted by the NAHC came back positive for TCRs within the project site. No additional archaeological resources were encountered during the pedestrian field survey; however, this may have been due to poor soil visibility at the project site. Furthermore, FCS evaluated the potential for buried sites at the project site. The project site is located on relatively flat terrain and is situated in close proximity to wetlands, the Napa River, and the Northern Slough waterway on its western boundary. There is also a known precontact archaeological site 1 mile to the north of the project site. The combination of these factors suggests a moderate potential for unanticipated buried cultural resources to be impacted by project construction. This potentially significant impact would be reduced to a less than significant level through implementation of MM CUL-1a, MM CUL-1b, and MM CUL-1c.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM CUL-1a, MM CUL-1b, and MM CUL-1c.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Human Remains

Impact CUL-3: **The proposed project could disturb human remains, including those interred outside of formal cemeteries.**

Impact Analysis

While no formal cemeteries or areas containing human remains are known to be in the project vicinity, the possibility always exists that construction-related ground disturbance may uncover previously undiscovered human remains. In the unlikely event such a discovery is made, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 must be followed. Implementation of MM CUL-3, which details inadvertent discovery procedures, would reduce potential impacts to previously undiscovered human remains to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-3 In the event of the accidental discovery or recognition of any human remains, CEQA Guidelines Section 15064.5, Health and Safety Code Section 7050.5, and Public Resources Code Sections 5097.94 and Section 5097.98 shall be followed. If during project construction, there is accidental discovery or recognition of any human remains, the following steps shall be taken:

1. There shall be no further excavation or disturbance within 100 feet of the remains until the County Coroner is contacted to determine whether the remains are Native American and if an investigation of the cause of death is required. If the Coroner determines the remains to be Native American, the Coroner shall contact the Native American Heritage Commission (NAHC) within 24 hours, and the NAHC shall identify the person or persons it believes to be the Most Likely Descendant (MLD) of the deceased Native American. The MLD may make recommendations to the landowner or the person responsible for the excavation work within 48 hours, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resource Code Section 5097.98.
2. Where the following conditions occur, the landowner or authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity either in accordance with the recommendations of the MLD or on the project site in a location not subject to further subsurface disturbance:
 - The NAHC is unable to identify an MLD or the MLD failed to make a recommendation within 48 hours after being notified by the commission.
 - The descendant identified fails to make a recommendation.
 - The landowner or authorized representative rejects the recommendation of the descendant, and mediation by the NAHC fails to provide measures acceptable to the landowner.

Additionally, California Public Resources Code Section 15064.5 requires the following relative to Native American Remains:

- When an initial study identifies the existence of, or the probable likelihood of, Native American Remains within a project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in Public Resources Code Section 5097.98. The applicant may develop a plan with respect to their respective individual development proposals for treating or disposing of, with appropriate dignity, the human remains, and any items associated with Native American Burials with the appropriate Native Americans as identified by the NAHC.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Listed or Eligible Tribal Cultural Resources

Impact CUL-4:	The proposed project could 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).
----------------------	---

Impact Analysis

Record search results from the NWIC indicate that there is one prehistoric resource located within a 0.5-mile radius of the project site, and a review of the NAHC SLF was positive for recorded TCRs being located within the project site. On January 2, 2023, FCS sent a letter containing project information to 11 tribal representatives recommended by the NAHC and requesting additional information about TCRs at the project site. No responses have been received to date. However, because the SLF search was positive, impacts are potentially significant. However, implementation of MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3 would reduce potentially significant impacts to TCRs to a less than significant level.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Lead Agency Determined Tribal Cultural Resources

Impact CUL-5: The proposed project could 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 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.

Construction

Record search results from the NWIC indicate that there is one prehistoric resource located within a 0.5-mile radius of the project site, and a review of the NAHC SLF was positive for recorded TCRs being located within the project site. On December 1, 2023, in compliance with AB 52, the City of American Canyon sent a letter containing project information to 11 tribal representatives recommended by the NAHC and requesting additional information about TCRs at the project site (Appendix D). No responses have been received to date. Even so, because the SLF search was positive, impacts are potentially significant. However, implementation of MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3 would reduce potentially significant impacts to TCRs to a less than significant level.

Level of Significance Before Mitigation

Less than significant impact with mitigation incorporated.

Mitigation Measures

MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3. Less than significant impact with mitigation incorporated.

3.4.8 - Cumulative Impacts

The geographic scope of the cumulative cultural resources analysis is a 0.5-mile radius of the project site. Cultural resource impacts tend to be localized because the integrity of any given resource depends on what occurs only in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site (including the off-site construction areas), the area near the project site would be the area most affected by project activities (generally within a 500-foot radius). The results of the cultural resources assessment and tribal consultation indicate that the project will not have a direct impact on any known historic resources, archaeological resources, human remains, or TCRs.

Construction activities associated with development projects in the project vicinity may have the potential to encounter undiscovered cultural resources. These projects would be required to mitigate for impacts through compliance with applicable federal and State laws governing cultural resources. Although there is the possibility that previously undiscovered resources could be encountered by subsurface earthwork activities associated with the cumulative projects, the implementation of construction mitigation measures would ensure that undiscovered cultural resources are not adversely affected by cumulative project-related construction activities, which would prevent the destruction or degradation of potentially significant cultural resources. Although there is the possibility that previously undiscovered cultural resources and TCRs could be encountered by subsurface earthwork activities associated with the cumulative projects, the implementation of construction mitigation measures (MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3) would ensure that undiscovered TCRs are not adversely affected by cumulative project-related construction activities. Given the standard conditions of approval and mitigation measures that cumulative projects would be required to implement, the proposed project, in conjunction with other planned and approved projects, would result in a less than significant cumulative impact related to TCRs.

With the implementation of MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3, the proposed project would not result in a significant cumulative impact to cultural resources in the City of American Canyon or surrounding area.

Level of Cumulative Significance Before Mitigation

Potentially significant impact.

Cumulative Mitigation Measures

Implementation of MM CUL-1a, MM CUL-1b, MM CUL-1c, and MM CUL-3.

Level of Cumulative Significance After Mitigation

Less than significant impact with mitigation incorporated.

THIS PAGE INTENTIONALLY LEFT BLANK

3.5 - Energy

3.5.1 - Introduction

This section describes the existing energy setting in the project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to energy that could result from implementation of the project. Information in this section is based on project-specific energy calculation outputs included in Appendix A. No public comments were received during the Environmental Impact Report (EIR) scoping period related to energy.

3.5.2 - Existing Setting

Energy Basics

Energy is generally transmitted either in the form of electricity, measured in kilowatts (kW)¹ or megawatts (MW),² or natural gas measured in British Thermal Units (BTU) or cubic feet.³ Fuel, such as gasoline or diesel, is measured in gallons or liters.

Electricity

Electricity is used primarily for lighting, appliances, and other uses associated with the project.

Natural Gas

Natural gas is used primarily for heating, water heating, and cooking purpose and is typically associated with commercial and residential uses.

Fuel

Fuel is used primarily for powering off-road equipment, trucks, and passenger vehicles. The typical fuel types used are diesel and gasoline.

Electricity Generation, Distribution, and Use

State of California

The State of California generated approximately 203,257 gigawatt-hours (GWh) of electricity in 2022. Approximately 47.8 percent of the energy generated is sourced from thermal energy sources (i.e., coal, natural gas, oil, waste heat/petroleum), with natural gas as the vast majority (47.5 percent of the total generation). Approximately 52.2 percent of the energy generated is sourced from renewable and non-greenhouse gas (GHG) emission sources (i.e., nuclear, hydropower, biomass, geothermal, solar, and wind).⁴ Solar energy is the largest source of renewable energy, accounting for 19.9 percent of the total generation.

¹ 1 kW = 1,000 watts; A watt is a derived unit of power that measures rate of energy conversion. 1 watt is equivalent to work being done at a rate of 1 joule of energy per second. In electrical terms, 1 watt is the power dissipated by a current of 1 ampere flowing across a resistance of 1 volt.

² 1 MW = 1 million watts

³ A unit for quantity of heat that equals 100,000 British thermal units. A British thermal unit is the quantity of heat required to raise the temperature of 1 pound of liquid water 1 degree Fahrenheit at a constant pressure of 1 atmosphere.

⁴ California Energy Commission (CEC). 2022. 2022 Total System Electric Generation. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation>. Accessed November 13, 2023.

In 2019, California ranked second for total energy consumed, but the State's per capita energy consumption was less than all other states except Rhode Island. In 2021, California was ranked as the fourth-largest electricity producer in the country. The same year, California was the top producer of electricity from solar, geothermal, and biomass energy and was the fourth in conventional hydroelectric power generation.⁵

Electricity and natural gas is distributed through the various electric load-serving entities (LSEs) in California. These entities include investor-owned utilities (IOUs), publicly owned LSEs (including publicly owned utilities [POUs]), rural electric cooperatives, community choice aggregators, and electric service providers.⁶

County of Napa and City of American Canyon

Pacific Gas and Electric Company (PG&E) provides electricity to many of the cities throughout Napa County (County). Local community choice aggregations (CCAs) can also provide electricity services alternatives to the region's traditional utility supplier, PG&E. The local CCA for the City of American Canyon (City) is Marin Clean Energy (MCE). With the passing of Senate Bill (SB) 790 in 2011, residential and commercial customers within a local CCA jurisdiction are automatically enrolled in that CCA's electricity service but retain the ability to opt-out and return to their traditional utility supplier.

According to the California Energy Commission (CEC), Napa County's energy consumption was approximately 1,029 GWh in 2022.⁷ As Napa County's population in 2021 was an estimated 134,300 people,⁸ the County experienced a per capita electricity consumption of an estimated 7,661 kilowatt hour (kWh) per year.

Project Site

The project site is currently undeveloped and does not consume electricity. MCE would procure, and PG&E would deliver, electricity to the proposed project.

Natural Gas Generation, Distribution, and Use

State of California

Natural gas is used for everything from generating electricity to cooking and space heating to alternative transportation fuel. Natural gas generation (in kWh) represented 10.7 percent of electric power generation in 1990 and increased over the 32-year period to represent 47.8 percent of electric power generation in 2022.⁹

⁵ United States Energy Information Administration. 2022. California State Profile. Website: <https://www.eia.gov/state/?sid=CA>. Accessed November 13, 2023.

⁶ California Energy Commission (CEC). 2023. Electric Load-Serving Entities (LSEs) in California Website: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/electric-load-serving-entities-lses>. Accessed November 13, 2023.

⁷ California Energy Commission (CEC). 2023. Electricity Generation by County. Website: <https://ecdms.energy.ca.gov/elecbycounty.aspx>. Accessed November 13, 2023.

⁸ United States Census Bureau. 2023. QuickFacts Napa County, California. Website: <https://www.census.gov/quickfacts/fact/table/napacountycalifornia/PST045222>. Accessed November 13, 2023.

⁹ State of California Energy Commission. 2022. 2022 Total System Electric Generation. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation>. Accessed November 13, 2023.

Natural gas-fired generation has become the dominant source of electricity in California, as it currently fuels approximately 45 percent of electricity consumption.¹⁰ Because natural gas is a dispatchable resource that provides load when the availability of hydroelectric power generation and/or other sources decrease, use varies greatly from year to year. The availability of hydroelectric resources, the emergence of renewable resources for electricity generation, and overall consumer demand are the variables that shape natural gas use in electric generation.

County of Napa and City of American Canyon

PG&E provides natural gas to the Napa County, including the City of American Canyon. In 2021, Napa County's natural gas consumption was approximately 37.7 million U.S. Therms, or approximately 3,769,100 Million Metric British Thermal Units (MMBTU).¹¹ As Napa County's population in 2021 was an estimated 134,300 people,¹² the County experienced a per capita natural gas consumption of an estimated 28.1 MMBtu per year.

Project Site

The project site is currently undeveloped and does not consume natural gas.

Fuel Use

State of California

California is one of the top producers of petroleum in the nation, with drilling operations occurring throughout the State. A network of crude oil pipelines connects production areas to oil refineries in the Los Angeles area, the San Francisco Bay Area, and the Central Valley. California oil refineries also process Alaskan and foreign crude oil received in the ports of Los Angeles, Long Beach, and the San Francisco Bay Area. Crude oil production in California and Alaska is in decline, and California refineries have become increasingly dependent on foreign imports.¹³ Since 2012, foreign suppliers, led by Saudi Arabia, have provided over half of the crude oil refined in California.^{14,15} According to the United States Energy Information Administration (EIA), California's field production of crude oil has steadily declined since the mid-1980s, totaling approximately 122.3 million barrels in 2022.¹⁶

¹⁰ California Energy Commission (CEC). 2023. Supply and Demand of Natural Gas in California. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-natural-gas-market/supply-and-demand-natural-gas-california>. Accessed November 13, 2023.

¹¹ California Energy Commission (CEC). 2020. Electricity Generation by County. Website: <https://ecdms.energy.ca.gov/gasbycounty.aspx>. Accessed December 13, 2023.

¹² California Department of Finance (CDF). 2022. E-4 Population Estimates for Cities, Counties, and the State, 2021-2022 with 2020 Census Benchmark. Website: <https://dof.ca.gov/forecasting/Demographics/estimates/e-4-population-estimates-for-cities-counties-and-the-state-2021-2022-with-2020-census-benchmark/>. Accessed December 13, 2023.

¹³ California Energy Commission (CEC). 2023. Oil Supply Sources to California Refineries. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries>. Accessed November 13, 2023.

¹⁴ California Energy Commission (CEC). 2021. Foreign Sources of Crude Oil Imports to California 2020. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/foreign-sources-crude-oil-imports>. Accessed November 13, 2023.

¹⁵ California Energy Commission (CEC). 2023. Oil Supply Sources to California Refineries. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/oil-supply-sources-california-refineries>. Accessed November 13, 2023.

¹⁶ United States Energy Information Administration (EIA). 2022. California Field Production of Crude Oil. Website: <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=p&s=mcrfpc2&f=a>. Accessed November 13, 2023.

According to the EIA, transportation accounted for approximately 34 percent of California’s total energy demand, amounting to approximately 2,355.5 trillion BTU in 2020.¹⁷ California’s transportation sector, including rail and aviation, consumed roughly 433 million barrels of petroleum fuels in 2020.¹⁸ The CEC produces the California Annual Retail Fuel Outlet Report, which is a compilation of gasoline and diesel fuel sales data from across the State available at the county level. According to the CEC, California’s 2022 fuel sales totaled 11,495 million gallons of gasoline and 1,846 million gallons of diesel.¹⁹ Napa County fuel sales totaled an estimated 49 million gallons of gasoline and an estimated 7 million gallons of diesel in 2022.²⁰

Alternative Fuels

A variety of alternative fuels are used to reduce petroleum-based fuel demand. The use of these fuels is encouraged through various Statewide regulations and plans, such as the Low Carbon Fuel Standard (LCFS) and SB 32. Conventional gasoline and diesel may be replaced, depending on the vehicle's capability, with transportation fuels including hydrogen, biodiesel, and electricity. Currently, public hydrogen refueling stations exist in California; however, none are in the City.^{21,22}

3.5.3 - Regulatory Framework

Federal

Energy Policy and Conservation Act

Enacted in 1975, the Energy Policy and Conservation Act legislation established fuel economy standards for new light-duty vehicles (autos, pickups, vans, and sport-utility vehicles). The law placed responsibility on the National Highway Traffic and Safety Administration (NHTSA), a part of the United States Department of Transportation (USDOT), for establishing and regularly updating vehicle standards. The United States Environmental Protection Agency (EPA) administers the Corporate Average Fuel Economy (CAFE) program, which determines vehicle manufacturers’ compliance with existing fuel economy standards.

Since the inception of the program, the average fuel economy for new light-duty vehicles steadily increased from 13.1 miles per gallon (mpg) for the 1975 model year to 30.7 mpg for the 2014 model year and may increase to 54.5 mpg by 2025. On August 2, 2018, the NHTSA and EPA, operating under the direction of the Trump Administration, proposed the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule. This rule addresses emissions and fuel economy standards for motor vehicles and is separated into two parts as described below.

¹⁷ United States Energy Information Administration (EIA). 2022. Table F33: Total Energy Consumption, Price, and Expenditure Estimates, 2020. Website: https://www.eia.gov/state/seds/sep_fuel/html/pdf/fuel_te.pdf. Accessed November 13, 2023.

¹⁸ United States Energy Information Administration (EIA). 2022. Table F16: Total Petroleum Consumption Estimates, 2020. Website: https://www.eia.gov/state/seds/sep_fuel/html/fuel_use_pa.html. Accessed November 13, 2023.

¹⁹ California Energy Commission (CEC). 2023. California Retail Fuel Outlet Annual Reporting (CEC-A15) Results. Website: <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>. Accessed November 13, 2023.

²⁰ Ibid.

²¹ United State Department of Energy (DOE). Alternative Fuels Data Center. 2023. Alternative Fueling Station Counts by State. Website: <https://afdc.energy.gov/stations/states>. Accessed November 13, 2023.

²² United State Department of Energy (DOE). Alternative Fuels Data Center. 2023. Alternative Fueling Station Locator [Interactive Database]. Website: <https://afdc.energy.gov/stations/#/find/nearest?location=American%20Canyon,%20CA>. Accessed December 13, 2023.

Part One, “One National Program” (84 Federal Register 51310) revokes a waiver granted by the 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 the EPA for the explicit purpose of greenhouse gas (GHG) emission reduction and, indirectly, criteria air pollutants and ozone precursor emission reduction. This revocation became effective on November 26, 2019, potentially restricting the ability of the California Air Resources Board (ARB) to enforce more stringent GHG emission standards for new vehicles and set zero-emission vehicle mandates in California.

Part Two addresses CAFE standards for passenger cars and light trucks for model years 2021 to 2026. This rulemaking proposes new CAFE standards for model years 2022 through 2026 and would amend existing CAFE standards for model year 2021. The proposal would retain the model year 2020 standards (specifically, the footprint target curves for passenger cars and light trucks) through model year 2026. The proposal addressing CAFE standards was jointly developed by the NHTSA and EPA, with the EPA simultaneously proposing tailpipe carbon dioxide standards for the same vehicles covered by the same model years. The EPA and NHTSA published final rules to amend and establish national carbon dioxide and fuel economy standards on April 30, 2020 (Part Two of the SAFE Vehicles Rule) (85 Federal Register 24174).

On April 22, 2021, the Biden Administration formally proposed to roll back portions of the SAFE Vehicles Rule, thereby restoring California’s right to enforce more stringent fuel efficiency standards.²³ Most recently, on December 21, 2021, the NHTSA finalized rules to repeal the SAFE I Rule. The final rule concludes the SAFE I Vehicles Rule overstepped the agency’s legal authority and established overly broad prohibitions that did not account for a variety of important state and local interests. The final rule ensures the SAFE I Vehicles Rule will no longer form an improper barrier to states exploring creative solutions to address their local communities’ environmental and public health challenges.²⁴

Energy Independence and Security Act

The Energy Independence and Security Act of 2007 was designed to improve vehicle fuel economy and help reduce nationwide dependence on foreign oil. It expands the production of renewable fuels, reducing dependence on oil and confronting global climate change. Specifically, it 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, and reduces U.S. demand for oil by setting a national fuel economy standard of 35 mpg by 2020. The Act also set energy efficiency standards for lighting (specifically light bulbs) and appliances. The project would be required to install photosensors and energy-efficient lighting fixtures with the requirements of 42 United States Code Section 17001, *et seq.*

²³ National Highway Traffic Safety Administration (NHTSA). 2022. Corporate Average Fuel Economy. Website: <https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy>. Accessed November 23, 2023.

²⁴ Ibid.

U.S. Executive Order 13693 (Energy Independence and Security Act Expansion)

In March 2015, Executive Order 13693 Planning for Federal Sustainability in the Next Decade was signed into action. The goal of this Executive Order is to expand on the Energy Independence and Security Act.

Energy Star Program

In 1992, the EPA introduced Energy Star® as a voluntary labeling program designed to identify and promote energy-efficient products to reduce GHG emissions. The program applies to major household appliances, lighting, computers, and building components such as windows, doors, roofs, and heating and cooling systems. Under this program, appliances that meet specification for maximum energy use established under the program are certified to display the Energy Star® label. In 1996, the EPA joined with the United State Department of Energy to expand the program, which now also includes qualifying commercial and industrial buildings as well as homes.

State

California Assembly Bill 1493: Pavley Regulations and Fuel Efficiency Standards

California Assembly Bill (AB) 1493, enacted on July 22, 2002, required the ARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the by the United States District Court for the District of Columbia in 2011.²⁵ The standards were to be phased in during the 2009 through 2016 model years.²⁶

The second phase of the implementation for the Pavley Bill was incorporated into amendments to the Low Emission Vehicle (LEV) Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car Program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation is anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars and deliver increasing numbers of zero-emission technologies, such as full battery electric cars, newly emerging plug-in hybrid electric vehicles (EVs), and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.²⁷

Advanced Clean Cars II was adopted in November 2022. The Advanced Clean Cars II regulations will rapidly scale down light-duty passenger car, pickup truck, and SUV emissions starting with the 2026 model year through 2035. The regulations are two-pronged. First, they amend the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles and rely on currently available advanced vehicle technologies, including battery-electric, hydrogen fuel cell electric, and

²⁵ California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: <http://www.arb.ca.gov/cc/ccms/ccms.htm>. Accessed June 30, 2023.

²⁶ California Air Resources Board (ARB). Advanced Clean Cars Summary. Website: https://ww2.arb.ca.gov/sites/default/files/2019-12/acc%20summary-final_ac.pdf. Accessed June 30, 2023.

²⁷ California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures. Website: https://calcarbondash.org/cc/scopingplan/sp_measures_implementation_timeline.pdf. Accessed June 30, 2023.

plug-in hybrid electric vehicles, to meet air quality and climate change emissions standards. These amendments support Governor Newsom’s 2020 Executive Order N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the Low-emission Vehicle Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

In October 2023, ARB launched a new effort to consider potential amendments to the Advanced Clean Cars II regulations, including updates to the tailpipe greenhouse gas emission standard and limited revisions to the Low-emission Vehicle and Zero-emission Vehicle regulations.

These regulations rapidly scale down emissions of light-duty passenger cars, pickup trucks, and SUVs and require an increased number of zero-emission vehicles to meet air quality and climate change emissions goals.

California Senate Bill 1078: Renewable Electricity Standards

First established in 2002 under SB 1078, California Renewables Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent by 2020 and 50 percent by 2030.²⁸ In 2018, SB 100 further increased California’s RPS and required retail sellers and local publicly owned electric utilities to procure eligible renewable electricity for 44 percent of retail sales by the end of 2024, 52 percent by the end of 2027, and 60 percent by the end of 2030; and that ARB should plan for 100 percent eligible renewable energy resources and zero-carbon resources by the end of 2045. The California Public Utilities Commission (CPUC) and the CEC jointly implement the RPS program. The CPUC’s responsibilities include: (1) determining annual procurement targets and enforcing compliance; (2) reviewing and approving each investor-owned utility’s renewable energy procurement plan; (3) reviewing contracts for RPS-eligible energy; and (4) establishing the standard terms and conditions used in contracts for eligible renewable energy.

Senate Bills 350, 100, and 1020

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires the amount of electricity generated and sold to retail customers per year from eligible renewable energy resources to be increased to 50 percent by December 31, 2030. This act also requires doubling of the energy efficiency in existing buildings by 2030.

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State’s RPS Program (last updated by SB 350). SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 44 percent by 2024, 60 percent by 2030, and 100 percent by 2045.

Senate Bill 1020 (SB 1020), signed into law on September 16, 2022, requires renewable energy and zero-carbon resources to supply 90 percent of all retail electricity sales by 2035, 95 percent by 2040, and 100 percent by 2045. All State agencies’ facilities must be served by 100 percent renewable and

²⁸ California Public Utilities Commission (CPUC). Renewables Portfolio Standard (RPS) Program. Website: <https://www.cpuc.ca.gov/rps/>. Accessed November 27, 2023.

zero-carbon resources by 2030. SB 1020 also requires the CPUC, CEC, and ARB to issue a joint progress report outlining the reliability of the electrical grid with a focus on summer reliability and challenges and gaps. Additionally, SB 1020 requires the CPUC to define energy affordability and use energy affordability metrics to develop protections, incentives, discounts, or new programs for residential customers facing hardships due to energy or gas bills.

California Code of Regulations Title 24

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

California Code of Regulations Title 24 Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings), was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The 2019 Building Energy Efficiency Standards went into effect on January 1, 2020. The 2022 Building Energy Efficiency Standards became effective on January 1, 2023.²⁹

Part 11 (California Green Building Standards Code)

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The Code is updated on a regular basis, with the most recent update consisting of the 2022 California Green Building Code Standards that became effective January 1, 2023.³⁰ Local jurisdictions are permitted to adopt more stringent requirements, as State Law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition ordinances, and defers to them as the ruling guidance provided they provide a minimum 50-percent diversion requirement. The Code also provides exemptions for areas not served by construction and demolition recycling infrastructure. The California Building Code (CBC) provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

California Public Utilities Code

The CPUC regulates privately owned telecommunication, electric, natural gas, water, railroad, rail transit, and passenger transportation companies. It is the responsibility of the CPUC to (1) assure California utility customers safe, reliable utility service at reasonable rates; (2) protect utility customers from fraud; and (3) promote a healthy California economy. The Public Utilities Code, adopted by the legislature, defines the jurisdiction of the CPUC.

²⁹ California Energy Commission. 2023. Building Energy Efficiency Standards. Website: <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency>. Accessed December 18, 2023.

³⁰ Ibid.

Local

City of American Canyon

City of American Canyon General Plan

The City of American Canyon adopted its General Plan in 1994, which contains objectives and policies that help address energy use at the local level and improve energy efficiency and conservation:

Objective 8.22 Minimize transportation-related energy consumption.

Policy 8.22.1 Encourage the development of mixed use, pedestrian friendly employment/residential centers that help minimize vehicle trips in American Canyon and contribute to a reduction in energy consumption.

Policy 8.22.2 Encourage the clustering of residential structures.

Policy 8.22.3 Require that Development Plans provide for linkages between bicycle and pedestrian circulation systems and transit and employment centers, in accordance with established areawide plans.

Policy 8.22.4 Maintain a system of traffic signals and controls that minimizes waiting time and vehicle speed changes through routes.

Policy 8.22.5 Require that Development Plans provide for High Occupancy Vehicles (HOV) and public transportation, where feasible, through the provision of appropriate transit areas and park-and-ride locations along public transportation routes.

Objective 8.23 Reduce Energy consumption in buildings.

Policy 8.23.1 Require that developers employ energy-efficient subdivision and site planning methods as well as building design. Measures to be considered include building orientation and shading, landscaping, building reflectance, use of active and passive solar heating and hot water system, etc. In establishing these energy related design requirements, the City shall balance energy-efficient design with good planning principles.

Policy 8.23.2 Require that new City buildings be energy efficient.

Objective 8.24 Increase public awareness of energy conservation needs and means in order to encourage informed choices about energy conservation by the general public.

Policy 8.24.1 Cooperate with local utilities to provide energy conservation information to the public.

Policy 8.24.2 Develop public and/or public-private energy conservation educational programs for City employees and the public.

- Objective 8.25** Increase the energy efficiency of City operations to save energy, reduce municipal costs, and provide an example to the private sector.
- Policy 8.25.1** Introduce concepts of energy efficiency and lifecycle costing to City planning and operating decisions and to the design of all major City facilities.
- Policy 8.25.2** Work with other agencies and utility companies to develop safe, economical and renewable energy resources.
- Policy 8.25.3** Consider participating in energy conservation demonstration projects and promoting the use of treatment technologies that provide for the reuse of waste and water treatment by products, such as sludge and methane gas.

3.5.4 - Methodology

The approach to analyzing energy impacts is based on Public Resources Code Section 21100(b)(3), which states an EIR shall include “mitigation measures proposed to minimize significant effects on the environment, including, but not limited to, measures to reduce the wasteful, inefficient, and unnecessary consumption of energy.” Guidance for implementing this section is provided in California Environmental Quality Act (CEQA) Guidelines Appendix F (Energy Conservation). CEQA Guidelines Section 15126.2(b) further explains, “This [energy] analysis may be included in related analyses of air quality, GHG emissions, transportation or utilities in the discretion of the lead agency.” Consistent with that approach, additional discussion of the physical environmental impacts associated with production of energy is also included in the other resource chapters of this EIR, including but not limited to Section 3.2, Air Quality; Section 3.7, Greenhouse Gas Emissions; Section 3.13, Transportation; and Section 3.14, Utilities and Service Systems.

Energy consumption is analyzed herein in terms of construction and operational energy. Construction energy demand accounts for anticipated energy consumption during construction of development facilitated by the proposed project, such as fuel consumed by construction equipment and construction workers’ vehicles traveling to and from the construction site. Operational energy demand accounts for the anticipated energy consumption during operation of the development facilitated by the project, such as fuel consumed by cars and trucks and electricity consumed for building power needs, including but not limited to lighting, water conveyance, and air conditioning.

3.5.5 - Thresholds of Significance

The lead agency utilizes the criteria in the CEQA Guidelines Appendix G Environmental Checklist to determine whether impacts related to energy are significant environmental effects. Would the project:

- a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?
- b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Significance Criteria

Impact ENER-1: Wasteful, Inefficient, or Unnecessary Energy Consumption

The methodology employed under Impact ENER-1, which focuses on determining whether the proposed project would result in the wasteful, inefficient, or unnecessary consumption of energy resources, follows the guidance provided in Appendix F of the CEQA Guidelines as well as the analytical precedent set by *League to Save Lake Tahoe Mountain etc. v. County of Placer* (2022) (75 Cal.App.5th 63, 164-168).

According to Appendix F of the CEQA Guidelines, the goal of conserving energy is translated to include decreasing overall per capita energy consumption; decreasing reliance on fossil fuels such as coal, natural gas, and oil; and increasing reliance on renewable energy sources. In *League to Save Lake Tahoe Mountain etc. v. County of Placer*, the Appellate Court concluded that the analysis of wasteful, inefficient, and unnecessary energy consumption was not adequate because it did not consider whether additional renewable energy features can be added to the project.

The proposed project would be considered to result in a potentially significant impact if it would result in wasteful, inefficient, or unnecessary consumption of energy resources. Considering the guidance provided by Appendix F of the CEQA Guidelines and the Appellate Court decision in *League to Save Lake Tahoe Mountain etc. v. County of Placer*, the proposed project would be considered to result in wasteful, inefficient, or unnecessary consumption of energy resources if it would conflict with the following energy conservation goals:

- Decreasing overall per capita energy consumption;
- Decreasing reliance on fossil fuels such as coal, natural gas, or oil; and
- Increasing reliance on renewable energy sources.

Impact ENER-2: Renewable Energy and Energy Efficiency Plan Consistency

This impact discussion focuses on project consistency with a local plan or policy adopted for the purpose of improving energy efficiency or reliance on renewable energy sources. Impact ENER-2 focuses on project consistency with relevant policies intended to improve energy efficiency and encourage the use of renewable energy sources. As such, the proposed project would be determined to conflict with the applicable energy efficiency or renewable energy plan if it would not adhere to applicable energy consumption related measures included in the City's General Plan.

3.5.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Energy Use

Impact ENER-1:	The proposed project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.
-----------------------	--

Impact Analysis

A discussion of the proposed project’s anticipated energy usage is presented below. Energy use consumed by the proposed project was estimated and includes electricity and fuel consumption for project construction and operation. Energy calculations are included as part of Appendix B.

Construction Impacts

For purposes of this analysis, the project construction schedule was assumed to begin in September 2024 and conclude in August 2025. If the construction schedule moves to later years, construction emissions would likely decrease because of improvements in technology and more stringent regulatory requirements as older, less efficient equipment is replaced by newer and cleaner equipment. The proposed project would require site preparation, grading, building construction, architectural coating, and paving. The construction phase would require energy for the manufacture and transportation of building materials, preparation of the site (e.g., grading), and the actual construction of the building. Petroleum-based fuels such as diesel fuel and gasoline would be the primary sources of energy for these tasks.

The types of on-site equipment used during construction of the proposed project could include gasoline- and diesel-powered construction and transportation equipment, including trucks, graders, tractors, and cranes. Construction equipment is estimated to consume a total of approximately 32,838 gallons of diesel fuel over the entire construction duration (Appendix B).

Fuel use associated with construction vehicle trips generated by the proposed project was also estimated; trips include construction worker trips, haul truck trips for material transport, and vendor trips for construction material deliveries. Fuel use from these vehicles traveling to the project site was based on (1) the projected number of trips the proposed project would generate during construction, (2) average trip distances by trip type, and (3) fuel efficiencies estimated in the ARB EMFAC mobile source emission model. The specific parameters used to estimate fuel usage are included in Appendix B. In total, the proposed project is estimated to generate 453,615 VMT and consume 29,325 gallons of combined gasoline and diesel for vehicle travel during construction. In total, project construction is expected to consume 62,162 gallons of combined gasoline and diesel from on-site equipment and construction vehicle trip fuel use.

The overall construction schedule and process is already designed to be efficient in order to avoid excess monetary costs. For example, equipment and fuel are not typically used wastefully due to the added expense associated with renting the equipment, maintaining it, and fueling it. Therefore, the opportunities for future efficiency gains during construction are limited. Therefore, it is anticipated that the construction phase of the proposed project would not result in wasteful, inefficient, and unnecessary consumption of energy. Construction-related energy impacts would be less than significant.

Operational Impacts

The proposed project would consume energy as part of building operations and transportation activities. Project energy consumption is summarized in Table 3.5-1.

Table 3.5-1: Estimated Annual Project Energy Consumption in 2025

Energy Consumption Activity	Annual Consumption
Electricity Consumption	659,500 kWh
Building Natural Gas Consumption	0 kBTU
Operational Fuel Consumption-Natural Gas	13,980 gallons
Operational Fuel Consumption-Gasoline	42,129 gallons
Operational Fuel Consumption–Diesel	249,798 gallons
Operational Fuel Consumption–Electricity	35,233 kWh
Notes: kBTU = kilo-British Thermal Unit kWh = kilowatt-hour VMT = Vehicle Miles Traveled Source: Appendix B.	

Operation of the proposed warehouse would consume an estimated 659,500 kWh of electricity on an annual basis. Natural gas would not be utilized as a building fuel. The proposed project’s building would be designed and constructed in accordance with the latest adopted energy efficiency standards, which are based on the State’s Building Energy Efficiency Standards. These are widely regarded as the most advanced building energy efficiency standards and compliance would ensure that building energy consumption would not be wasteful, inefficient, or unnecessary. The proposed project would also install solar on the building roof top and would produce an estimated 235,000 kWh per year. Furthermore, the proposed building would be insulated and refrigerated at approximately 58°F (degrees Fahrenheit), making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized. Furthermore, the proposed project would use electric forklifts.

Project-related vehicle trips would consume an estimated 291,927 gallons of gasoline and diesel annually and would involve activities and travel routes typical of a warehouse-type project. The fossil fuels consumed by the project annually would decrease and shift to electricity consumption as the on-road passenger vehicle and heavy-duty truck fleets shift from gasoline and diesel to zero-emission electric vehicles per compliance with State regulations. Thus, transportation fuel consumption would not be wasteful, inefficient, or unnecessary. Impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Energy Efficiency and Renewable Energy Standards Consistency

Impact ENER-2: **The proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency.**

Impact Analysis

The proposed project would be served with electricity provided by PG&E. In 2021, PG&E obtained 47.7 percent of its electricity from renewable energy sources.³¹ PG&E also offers a 50 percent and 100 percent solar choice that source 70.9 and 93.9 percent of its power mix from eligible renewable energy sources respectively, as well as a Green Saver option that sources 89.9 percent of its power mix from eligible renewable energy sources.³² The utility would be required to meet the future objective of 60 percent of electricity from renewable energy sources by 2030. The proposed warehouse building would be designed in accordance with Title 24, California’s Energy Efficiency Standards for Nonresidential Buildings. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), and indoor and outdoor lighting. The incorporation of the Title 24 standards into the design of the proposed project would ensure that the proposed project would not result in the use of energy in a wasteful manner. In addition, the proposed project would install solar on the building roof top and would produce an estimated 235,000 kWh per year. Furthermore, the proposed building would be insulated and refrigerated at approximately 58°F, making it suitable for storage of wine and related products. The amount of refrigeration necessary would be reduced through the use of intake louvers and fans, which would allow cool night air to be utilized.

The proposed project would comply with existing State energy standards and with energy conservation policies contained in the General Plan. As such, the proposed project would not conflict with State or local renewable or energy efficiency objectives. Impacts would be less than significant.

The proposed project’s compliance with Title 24 standards and other applicable regulations, as well as the use of solar panels on the building roof and use of cool night air via intake louvers and fans would ensure that the proposed project would not conflict with any of the General Plan energy conservation policies related to the proposed project’s building, mechanical systems, or indoor and outdoor lighting. Therefore, impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

³¹ California Energy Commission (CEC). 2023. Annual Power Content Labels for 2021. Website: <https://www.energy.ca.gov/programs-and-topics/programs/power-source-disclosure/power-content-label/annual-power-content-2>. Accessed November 14, 2023.

³² Ibid.

3.5.7 - Cumulative Impacts

Cumulative impacts occur when the incremental effects of a project are significant when combined with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. The geographic scope of the cumulative energy analysis is the portion of PG&E's service area that covers the City. Cumulative projects considered as part of this cumulative analysis include the proposed project, other cumulative projects identified in Section 4 Cumulative Effects of this EIR, and other past, present, and reasonably foreseeable future projects within the PG&E service area that covers the City.

Concerning electricity and natural gas, cumulative projects would be required to comply with applicable provisions of Title 24 Building Energy Efficiency Standards and CALGreen. Specifically, the buildings and other improvements that would be constructed as part of the various cumulative projects would be required to be designed in accordance with Title 24, California's Energy Efficiency Standards for Residential and Nonresidential Buildings as applicable. These standards include minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., HVAC and water heating systems), and indoor and outdoor lighting. Future cumulative development would also be required to meet even more stringent energy efficiency requirements through local and Statewide policy, such as Title 24, Part 6, which would require, for example, that newly constructed residential homes include on-site photovoltaic solar systems, with some exceptions. Furthermore, PG&E—which supplies electricity to the project site and vicinity—would be required by SB 100 to incrementally increase the proportion of renewable electricity generation supplying its in-state retail sales until it reaches 100 percent carbon-free electricity generation by 2045. Electricity would also be consumed during construction of the cumulative projects from the use of construction trailers and any electrically driven equipment, vehicles, or tools. Electricity consumed during construction of the cumulative projects would also be subject to the renewable electricity generation requirements established by SB 100, as PG&E would be the anticipated electricity supplier for the cumulative project areas. The incorporation of these regulations into the design of the cumulative projects would ensure that they would not result in the inefficient, unnecessary, or wasteful consumption of electricity or natural gas, and thus they would not have a significant cumulative impact.

Similarly, the proposed project's energy use would be limited to that which is necessary for the construction and operation of the proposed project. As discussed above, the proposed project would be required to comply with applicable Statewide and local policies and standards pertaining to energy efficiency and can reasonably be assumed to pursue greater energy efficiencies, to the extent commercially practicable in its operation, in the interest of reducing operating costs. In addition, the proposed project be built as all-electric and would not utilize natural gas during construction or operations. As such, the proposed project's incremental contribution to the less than significant cumulative impact would not be considerable with respect to energy consumption in the form of electricity and natural gas. Cumulative projects would be required to comply with California Code of Regulations Title 13, Sections 2449(d)(3) and 2485, that limit idling from both on-road and off-road diesel-powered equipment and are enforced by the ARB. Additionally, various federal and State regulations, including the LCFS, Pavley Clean Car Standards, and LEV Program, would serve to reduce the transportation fuel demand of cumulative projects.

Compliance with the aforementioned regulations by the cumulative projects would ensure that they would not result in the inefficient, unnecessary, or wasteful consumption of fuel and their cumulative impact would be less than significant. As discussed in more detail above, the proposed project would consume vehicle fuel during both construction and operation. As previously discussed, the proposed project would also be required to use fuels which conform to various federal and State regulations, such as the LCFS, Pavley Clean Car Standards, and LEV Program. In addition, the proposed project would consume fuels in an amount necessary to construct and operate the proposed project and would not consume excessive amounts of fuel beyond what is necessary in the interest of avoiding unnecessary construction or operation costs. Therefore, the proposed project's incremental contribution to the less than significant cumulative impact would not be considerable with respect to the wasteful or inefficient use of energy.

Considering the information provided above, the proposed project would not have a cumulatively considerable impact on energy consumption and would not conflict with any renewable energy plans. Cumulative impacts would be less than significant.

Level of Significance

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.6 - Geology, Soils, and Seismicity

3.6.1 - Introduction

This section describes the existing geology, soils, and seismicity setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information from the California Geological Survey, information provided by the Geotechnical Engineering Investigation prepared by Krazan and Associates, Inc., dated July 2023 (Krazan). The report is provided in Appendix E.

No public comments pertaining to geology, soils, and seismicity were received in response to the Notice of Preparation (NOP).

3.6.2 - Environmental Setting

Regional Geology

The site is located in the southern portion of the Napa Valley, which is characterized as a relatively large northwest-trending alluvial valley within the Northern California Coast Range geomorphic province. The valley is at the southernmost end of the Mayacamas Mountains. South of the City of Napa, the hills on the western side of the valley terminate at the marshes bordering the northern end of San Pablo Bay; the hills on the northeast continue to near Sulphur Springs Mountain near the City of Vallejo. The bedrock ridges on each side of the Napa Valley trend northwest, parallel to the general north-northwest structural trend of the North Coast Ranges. Pre-Quaternary bedrock is generally restricted to the foothills, but locally there are low knolls or hills of Tertiary-age bedrock in the central and western parts of the valley. Quaternary alluvial fan deposits shed from the hills on the east, and fluvial deposits associated with the Napa River and its tributary valleys comprise the youngest deposits within the Napa Valley.¹

Within the region, the San Andreas Fault system distributes shearing across a complex assemblage of primarily right-lateral, strike-slip, parallel, and sub-parallel faults that include the Hayward and Calaveras Faults and others (see the “Faulting” section of this report). The mountainous topography west of Napa Valley resulted from the latest Pliocene and Quaternary uplift associated with the younger structures.

Local Geology

Geologic mapping indicates that the near-surface deposits at and in the vicinity of the project site are late Pleistocene to Holocene-age fan deposits composed of sand, gravel, silt, and clay that are moderately to poorly sorted and moderately to poorly bedded.^{2,3} The project site is on Quaternary alluvial fan (Qf) deposits. The Qf deposits are described as gently sloping, fan-shaped, relatively undissected alluvial surfaces.

¹ Cornerstone Earth Group. 2017. Geotechnical Investigation.

² Krazan and Associates, Inc. (Krazan). 2023. Geotechnical Engineering Investigation, Proposed SDG Commerce 220, LLC, Distribution Center, 1055 Commerce Court, American Canyon, California. July 25, 2023.

³ Bezore, S.P., C.E. Randolph-Loar, and R.C. Witter (Bezore et al.). 2002. Geologic map of the Cuttings Wharf 7.5-minute quadrangle, Napa and Solano counties, California: A digital database. Preliminary Geologic Maps PGM-02-01. California Geological Survey. Map. Scale 1:24,000.

Seismicity

The term *seismicity* describes the effects of seismic waves that are radiated from an earthquake as it ruptures. While most of the energy released during an earthquake results in permanent ground displacement, as much as 10 percent may dissipate immediately in the form of seismic waves.

In 2015, the 2014 Working Group on California Earthquake Probabilities (WGCEP)⁴ presented the Third Uniform California Earthquake Rupture Forecast (UCERF3). According to this report, the San Francisco Bay Area has an estimated 72 percent chance of experiencing an earthquake of magnitude (M) 6.7 or higher over the next 30 years (from when the study was conducted in 2014).⁵ The UCERF3 also provides estimates for the West Napa Fault (1.9 percent), Hayward-Rodgers Creek (13.3 percent), and Green Valley Fault (4.4 percent), which are in proximity to the project site.⁶

To understand the implications of seismic events, a discussion of faulting and seismic hazards follows.

Faulting

Faults form in rocks when stresses overcome the internal strength of the rock, resulting in a fracture. Large faults develop in response to large, regional stresses operating over a long time, such as those stresses caused by the relative displacement between tectonic plates. According to the elastic rebound theory, these stresses cause strain to build up in the earth's crust until enough strain has built up to exceed the strength along a fault and cause a brittle failure. The slip between the two stuck plates or coherent blocks generates an earthquake. Following an earthquake, strain will build once again until the occurrence of another earthquake. The magnitude of slip is related to the maximum allowable strain that can be built up along a particular fault segment. The greatest build up in strain that is due to the largest relative motion between tectonic plates or fault blocks over the longest period of time will generally produce the largest earthquakes. The distribution of these earthquakes is a study of much interest for both hazard prediction and analysis of active deformation of the earth's crust. Deformation is a complex process, and strain caused by tectonic forces is not only accommodated through faulting but also by folding, uplift, and subsidence, which can be gradual or in direct response to earthquakes.

Faults are mapped to determine earthquake hazards since they occur where earthquakes tend to recur. A historic plane of weakness is more likely to fail under stress and strain than a previously unbroken block of crust. Faults are, therefore, a prime indicator of past seismic activity, and faults with recent activity are presumed to be the best candidates for future earthquakes. However, since slip is not always accommodated by faults that intersect the surface along traces, and since the orientation of stresses and strain in the crust can shift, predicting the location of future earthquakes

⁴ Also referred to as WGCEP 2014, this is a working group composed of seismologists from the United States Geological Survey (USGS), California Geological Survey (CGS), Southern California Earthquake Center (SCEC), and California Earthquake Authority (CEA).

⁵ Field, E. H., Glenn P. Biasi, Peter Bird, Timothy E. Dawson, Karen R. Felzer, David D. Jackson, Kaj M. Johnson, Thomas H. Jordan, Christopher Madden, Andrew J. Michael, Kevin R. Milner, Morgan T. Page, Tom Parsons, Peter M. Powers, Bruce E. Shaw, Wayne R. Thatcher, Ray J. Weldon II, and Yuehua Zeng (Field et al.). 2015. Long-Term Time-Dependent Probabilities for the Third Uniform California Earthquake Rupture Forecast (UCERF3). *Bulletin of the Seismological Society of America*, Vol. 105. April 2015.

⁶ Ibid.

is complicated. Earthquakes sometimes occur in areas with previously undetected faults or along faults previously thought inactive.

The West Napa, Green Valley, Hayward-Rogers Creek, Mount Diablo Thrust, Calaveras, and San Andreas faults are the closest in proximity to the project site.⁷ Predominate faults and their characteristics are summarized in Table 3.6-1.

Table 3.6-1: Fault Summary

Fault	Type	Relationship to Project Site		Maximum Credible Earthquake (magnitude)
		Direction	Distance (miles)	
West Napa	Normal-Oblique	West	0.8	6.50
Green Valley	Right-Lateral Strike-Slip	East	8.0	6.50
Hayward-Rogers Creek	Right-Lateral Strike-Slip	West	11.0	7.00

Sources: Cornerstone Earth Group. 2017.
Krazan & Associates Inc. 2021. Geotechnical Engineering Investigation Proposed SDG Commerce 224 Distribution Center 1055 Commerce Court American Canyon, California. January 18.

West Napa Fault

The West Napa Fault begins under San Pablo Bay and travels north through American Canyon and up the west side of the Napa Valley to the vicinity of Saint Helena. The West Napa Fault is designated an Alquist-Priolo Special Study Area. On August 24, 2014, a magnitude 6.0 earthquake (known as the South Napa Earthquake) occurred on the West Napa Fault. Prior to the 2014 South Napa Earthquake, the last major seismic event on the West Napa Fault was a magnitude 5.2 temblor whose epicenter was near Yountville in September 2000⁸.

Exhibit 3.6-1 depicts the location of the West Napa Earthquake Fault Zones in relation to the project site. As shown in the exhibit, the project site is not within the West Napa Fault Zone.

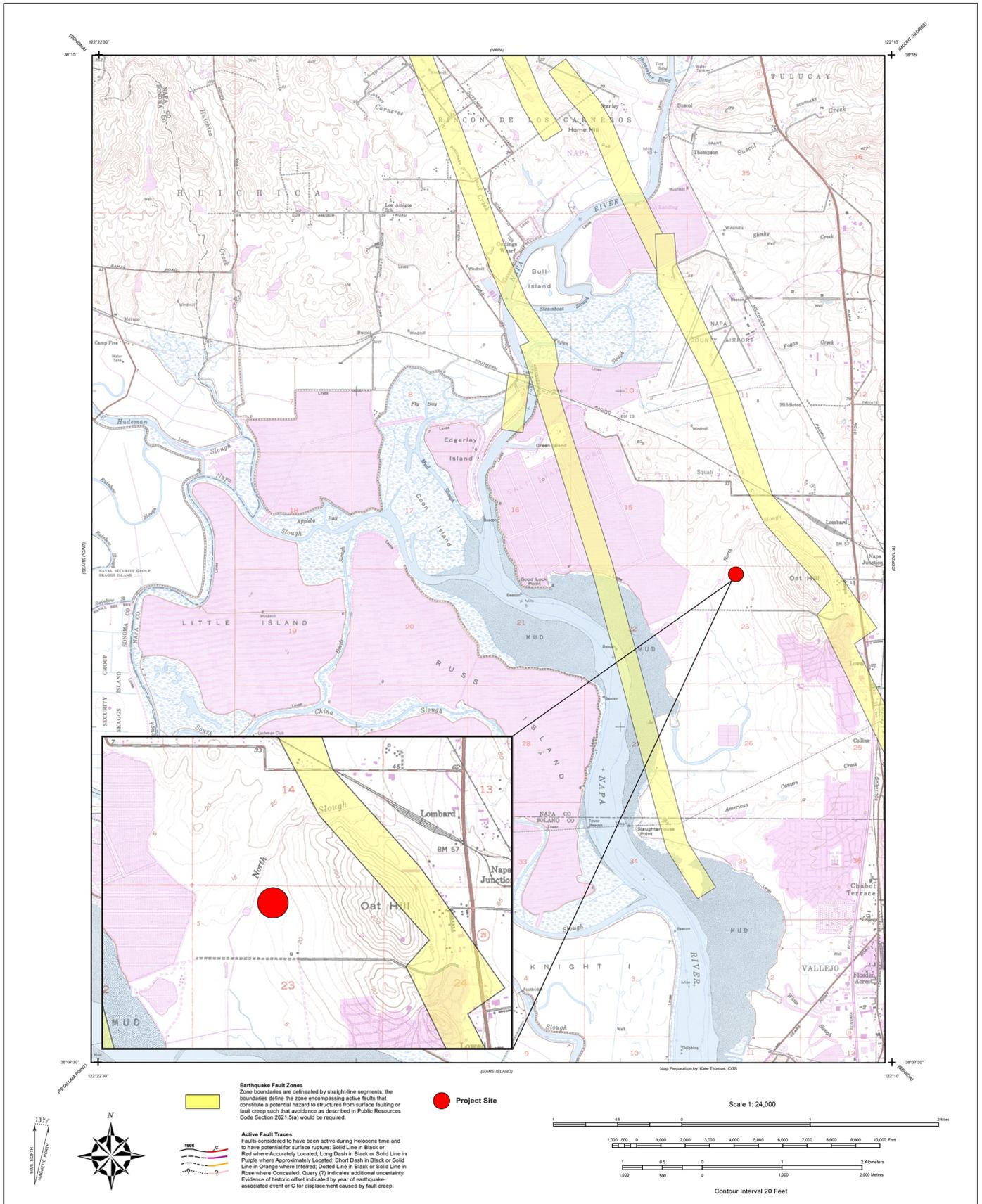
Seismic Hazards

Seismic hazards pose a substantial danger to property and human safety and are present because of the risk of naturally occurring geologic events and processes impacting human development. Therefore, the hazard is influenced as much by the conditions of human development as by the frequency and distribution of major geologic events. Seismic hazards present in California include ground rupture along faults, strong seismic shaking, liquefaction, ground failure, landsliding, and slope failure.

⁷ Krazan. 2021. Geotechnical Engineering Investigation Proposed SDG Commerce 224 Distribution Center 1055 Commerce Court American Canyon, California. January 18.

⁸ United States Geological Survey (USGS). 2014. M6.0-6km NW of American Canyon.

THIS PAGE INTENTIONALLY LEFT BLANK



Source: California Conservation. California Geological Survey. 01/11/2018.



THIS PAGE INTENTIONALLY LEFT BLANK

Fault Rupture

Fault rupture is a seismic hazard that affects structures sited above an active fault. The hazard from fault rupture is the movement of the ground surface along a fault during an earthquake. Typically, this movement takes place during the short time of an earthquake, but it also can occur slowly over many years in a process known as creep. Most structures and underground utilities cannot accommodate the surface displacements of several inches to several feet commonly associated with fault rupture or creep.

Following the August 24, 2014, seismic event on the West Napa Fault, fault rupture was observed on two Napa County Airport taxiways and various roadways in Napa County, including State Route (SR) 121 and Old Sonoma Road.

Ground Shaking

The severity of ground shaking depends on several variables, such as earthquake magnitude, epicenter distance, local geology, thickness, seismic wave-propagation properties of unconsolidated materials, groundwater conditions, and topographic setting. Ground shaking hazards are most pronounced in areas near faults or with unconsolidated alluvium.

Based on observations of damage from recent earthquakes in California (e.g., San Fernando 1971, Whittier-Narrows 1987, Landers 1992, Northridge 1994), ground shaking is responsible for 70 to 100 percent of all earthquake damage. The most common type of damage from ground shaking is structural damage to buildings, which can range from cosmetic stucco cracks to total collapse. The overall level of structural damage from a nearby large earthquake would likely be moderate to heavy, depending on the characteristics of the earthquake, the type of ground, and the condition of the building. Besides damage to buildings, strong ground shaking can cause severe damage from falling objects or broken utility lines. Fire and explosions are also hazards associated with strong ground shaking.

During the 2014 South Napa Earthquake, the United States Geological Survey (USGS) instrument readings at monitoring sites in Napa and Vallejo reported peak ground acceleration values ranging from 19.8 to 40.7 percent of gravity, which corresponds to “strong” and “very strong” ground shaking. Following the earthquake, more than 200 persons sought treatment at local hospitals, more than 150 buildings were “red tagged,”⁹ and numerous utility lines experienced ruptures or leaks that disrupted service.

Ground Failure

Ground failure includes liquefaction, the liquefaction-induced phenomena of lateral spreading, and lurching.

Liquefaction is a process by which sediments below the water table temporarily lose strength during an earthquake and behave as a viscous liquid rather than a solid. Liquefaction is restricted to certain geologic and hydrologic environments, primarily recently deposited sand and silt in areas with high groundwater levels. The process of liquefaction involves seismic waves passing through saturated

⁹ A red tagged building is considered uninhabitable without further assessment or repair under the California Building Standards Code.

granular layers, distorting the granular structure, and causing the particles to collapse. This causes the granular layer to behave temporarily as a viscous liquid, resulting in liquefaction.

Liquefaction can cause the soil beneath a structure to lose strength, which may result in the loss of foundation-bearing capacity. This loss of strength commonly causes the structure to settle or tip. Loss of bearing strength can also cause light buildings with basements, buried tanks, and foundation piles to rise buoyantly through the liquefied soil.

Lateral spreading is lateral ground movement, with some vertical component, caused by liquefaction. In effect, the soil rides on top of the liquefied layer. Lateral spreading can occur on relatively flat sites with slopes less than 2 percent, under certain circumstances, and can cause ground cracking and settlement.

Lurching is the movement of the ground surface toward an open face when the soil liquefies. An open face could be a graded slope, stream bank, canal face, gully, or other similar feature.

Landslides and Slope Failure

Landslides and other forms of slope failure form in response to the long-term geologic cycle of uplift, mass wasting, and disturbance of slopes. Mass wasting refers to a variety of erosional processes from gradual downhill soil creep to mudslides, debris flows, landslides, and rock fall—processes that are commonly triggered by intense precipitation, which varies according to climactic shifts.

Often, various forms of mass wasting are grouped together as landslides, which are generally used to describe the downhill movement of rock and soil.

Geologists classify landslides into several different types that reflect differences in the type of material and type of movement. The four most common types of landslides are translational, rotational, earth flow, and rock fall. Debris flows are another common type of landslide similar to earth flows, except that the soil and rock particles are coarser. Mudslide is a term that appears in non-technical literature to describe a variety of shallow, rapidly moving earth flows.

Surface Profile/Geomorphology

The project site predominantly consists of vacant land. Surface soils have a loose consistency and contain a moderate amount of grass and weeds. The site gently slopes from east to west.

Soil Borings and Subsurface Profile

Subsurface soil conditions were explored by Krazan & Associates by drilling 24 borings at the project site to depths ranging from approximately 10 to 50 feet below the existing grade. In addition, three bulk subgrade samples were obtained for testing.¹⁰

In general, surface soils at the project site consist of approximately 6 to 12 inches of soft silty clay or sandy clay or very loose silty sand. These soils are disturbed, have low strength characteristics, and

¹⁰ Krazan. 2023. Geotechnical Engineering Investigation, Proposed SDG Commerce 220, LLC, Distribution Center, 1055 Commerce Court, American Canyon, California. July 25, 2023

are highly compressible when saturated. Within portions of the site, there is approximately 6 to 12 inches of fill materials. Beneath the loose surface soils and fill material, there is approximately 17.5 feet of stiff to hard sandy clay, silty clay, and medium dense/very stiff clayey sand/sandy clay. These soils are moderately strong and slightly to moderately compressible. The clayey soils have a moderate to high potential for expansion. Below 18.5 feet, there are layers of predominately stiff to very stiff sandy clay and silty clay, and medium dense silty sand/sandy silt were encountered. This soil contained varying amounts of gravel. They are moderately strong and slightly compressible.¹¹

Paleontological Resources

The project site is on Quaternary alluvial fan deposits. The area within a 0.5-mile radius of the project site contains other Holocene deposits, Pleistocene alluvial fan deposits, the Pliocene Huichica Formation, and Cretaceous granitic rocks. Pleistocene alluvial fan deposits have the potential to be fossiliferous; however, the University of California Museum of Paleontology (UCMP) database lists no vertebrate or plant fossils in any of the forementioned geologic units in Napa County. The nearest Pleistocene vertebrate locality is approximately 10 miles southeast of American Canyon, in Solano County.

3.6.3 - Regulatory Framework

Federal

National Earthquake Hazards Reduction Program

The National Earthquake Hazards Reduction Program (NEHRP) was established by the United States Congress when it passed the Earthquake Hazards Reduction Act of 1977, Public Law 95–124. In establishing the NEHRP, Congress recognized that earthquake-related losses could be reduced through improved design and construction methods and practices, land use controls and redevelopment, prediction techniques and early warning systems, coordinated emergency preparedness plans, and public education and involvement programs. The four basic goals remain unchanged:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation.
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems.
- Improve earthquake hazards identification and risk assessment methods and their use.
- Improve the understanding of earthquakes and their effects.

Several key federal agencies contribute to earthquake mitigation efforts. There are four primary NEHRP agencies:

- National Institute of Standards and Technology of the Department of Commerce
- National Science Foundation
- USGS of the Department of the Interior

¹¹ Krazan. 2023. Geotechnical Engineering Investigation, Proposed SDG Commerce 220, LLC, Distribution Center, 1055 Commerce Court, American Canyon, California. July 25, 2023.

- Federal Emergency Management Agency (FEMA) of the Department of Homeland Security

Implementation of NEHRP priorities is accomplished primarily through original research, publications, and recommendations to assist and guide State, regional, and local agencies in the development of plans and policies to promote safety and emergency planning.

National Pollutant Discharge Elimination System

The National Pollutant Discharge Elimination System (NPDES) permit program, authorized by Section 402(p) of the federal Clean Water Act, controls water pollution by regulating point sources, such as construction sites and industrial operations that discharge pollutants into waters of the United States. A Storm Water Pollution Prevention Plan (SWPPP) is required to control discharges from a project site, including soil erosion, to protect waterways. A SWPPP describes the measures or practices to control discharges during both the construction and operational phases of the project. A SWPPP identifies project design features and structural and nonstructural Best Management Practices (BMPs) that will be used to control, prevent, remove, or reduce stormwater pollution from the site, including sediment from erosion.

State

California Building Standards Code

The 2022 California Building Code (2022 CBC) is another name for the body of regulations known as the California Code of Regulations, Title 24, Part 2, which is a portion of the California Building Standards Code. The 2022 CBC incorporates by reference the International Building Code requirements with necessary California amendments. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards.

Compliance with the 2022 CBC requires (with very limited exceptions) that structures for human occupancy be designed and constructed to resist the effects of earthquake motions. The Seismic Design Category for a structure is determined in accordance with either California Building Code Section 1613—Earthquake Loads or the American Society of Civil Engineers Standard No. 7-05, Minimum Design Loads for Buildings and Other Structures. In brief, based on the engineering properties and soil-type of soils at a proposed site, the site is assigned a Site Class ranging from A to F. The Site Class is then combined with Spectral Response (ground acceleration induced by earthquake) information for the location to arrive at a Seismic Design Category ranging from A to D, of which D represents the most severe conditions. The classification of a specific site and related calculations must be determined by a qualified Geotechnical Engineer and are site specific.

Finally, the 2022 CBC requires that a geotechnical investigation be prepared for all new buildings that are 4,000 square feet or larger, as well as for smaller buildings if they meet certain criteria. The geotechnical investigation must be prepared by a California registered Geotechnical Engineer and address the classification and investigation of the soil, including requirements for geotechnical designs necessary to meet standards for reducing exposure to geological hazards.

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code [PRC] Sections 2621 to 2630) was passed in 1972 to provide a Statewide mechanism for reducing the hazard of surface fault rupture to structures used for human occupancy. The main purpose of the Act is to prevent the siting of buildings used for human occupancy across the traces of active faults. It should be noted that the Act addresses the potential hazard of surface fault rupture and is not directed toward other earthquake hazards, such as seismically induced ground shaking or landslides.

The law requires the State Geologist to identify regulatory zones (known as Earthquake Fault Zones or Alquist-Priolo Zones) around the surface traces of active faults and to depict these zones on topographic base maps, typically at a scale of 1 inch to 2,000 feet. Earthquake Fault Zones vary in width, although they are often 0.75 mile wide. Once published, the maps are distributed to the affected cities, counties, and State agencies for their use in planning and controlling new or renewed construction. With the exception of single-family wood frame and steel-frame dwellings that are not part of a larger development (i.e., four units or more), local agencies are required to regulate development within the mapped zones. In general, construction within 50 feet of an active fault zone is prohibited.

Seismic Hazards Mapping Act

The Seismic Hazards Mapping Act (PRC §§ 2690–2699.6), which was passed in 1990, addresses earthquake hazards other than surface fault rupture. These hazards include strong ground shaking, earthquake-induced landslides, liquefaction, or other ground failures. Much like the Alquist-Priolo Earthquake Fault Zoning Act discussed above, these seismic hazard zones are mapped by the State Geologist to assist local government in the land use planning process. The Act states, “it is necessary to identify and map seismic hazard zones in order for cities and counties to adequately prepare the safety element of their general plans and to encourage land use management policies and regulations to reduce and mitigate those hazards to protect public health and safety.” The Act also states, “cities and counties shall require, prior to the approval of a project located in a seismic hazard zone, a geotechnical report defining and delineating any seismic hazard.”

Local

City of American Canyon

General Plan

The City of American Canyon (City) General Plan sets forth the following guiding and implementing policies relevant to geology, soils, and seismicity:

- Goal 9** Reduce the potential level of death, injury, property damage, economic and social dislocation (i.e., business closures and homelessness due to structural damage) and disruption of vital services that could result from earthquake damage.
- Goal 9C** Ensure that seismic, geologic, and soils hazards that might affect areas designated for human use or habitation are properly mitigated or avoided entirely prior to development.

- Objective 9.1** Protect life, ensure public safety, substantially reduce the damage to and ensure the orderly evacuation of building occupants following a seismic event.
- Policy 9.1.1** Promote the collection of relevant data on fault location and the history of fault displacement as a basis for future refinement of fault zone policies and development standards. Particular attention should be paid to the West Napa Fault that is generally depicted in Figure 9-1 and should be evaluated in conjunction with proposed development. Based on predevelopment studies, limitations on new development shall be imposed if necessary in the identified fault areas.
- Policy 9.1.2** Implement mandatory development restrictions and investigation requirements (by the State, under the Alquist-Priolo Act, or by the City) on that portion of the West Napa Fault Zone located within American Canyon and its Planning Area.
- Policy 9.1.3** Require that any building intended to have occupancy be located at least 50 feet from either side of an active or potentially active fault.
- Objective 9.2** Protect health and life safety, and reduce the level of potential property damage from the adverse effects of strong seismic ground shaking by implementing effective, state-of-the-art standards for seismic design of structures in the City.
- Policy 9.2.1** Require that development be designed in accordance with seismic requirements of the Uniform Building Code.
- Objective 9.3** Protect life and essential lifelines (e.g., gas, electricity, water), reduce the risk of property damage due to liquefaction, and promote the collection of more complete information on liquefaction susceptibility throughout the Planning Area.
- Policy 9.3.1** Avoid development in areas with known liquefaction risk. If these areas cannot be avoided, require a qualified geologist, hydrologist, or civil engineer to determine the liquefaction potential at proposed development sites.
- Policy 9.3.2** Require the submittal of liquefaction mitigation plans for proposed developments located in areas determined to have a high level of liquefaction risk.
- Objective 9.4** Protect life, ensure safety, and substantially reduce the potential level of property damage from landslides, mudflows, slope failures and soil hazards. Promote the collection and utilization of more complete information on slope instability potential throughout the City and Planning Area.
- Policy 9.4.5** Review proposals for new development and expansion of existing development in areas that are susceptible to collapsible or expansive soils and require adequate mitigation of these hazards.

Municipal Code

American Canyon Municipal Code, Chapter 16.02 adopts the California Building Code; as such, all new construction within the city limits is required to adhere to its seismic safety standards. The City of American Canyon Community Development Department is responsible for the administration and enforcement of the Building Code.

3.6.4 - Methodology

This analysis section is based on the Geotechnical Engineering Investigation prepared by Krazan and Associates in July 2023 (Appendix E). FirstCarbon Solutions (FCS) also obtained information about faults and seismic hazards from sources including the USGS, the United States Department of Agriculture, and the City of American Canyon General Plan. FCS also conducted a records search of the UCMP database in June 2023.

3.6.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether impacts to geology and soils are significant environmental effects. Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:
 - i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.
 - ii. Strong seismic ground shaking?
 - iii. Seismic-related ground failure, including liquefaction?
 - iv. Landslides?
- b) Result in substantial soil erosion or the loss of topsoil?
- c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
- d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?
- e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?
- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

3.6.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Seismic Hazards

Impact GEO-1: The proposed project may expose people or structures to potential substantial adverse effects associated with seismic hazards.

Impact Analysis

This impact evaluates potential exposure to seismic hazards, including fault rupture, strong ground shaking, ground failure and liquefaction, and landslides, and addresses whether the project could exacerbate any such hazards. Each issue is discussed separately.

Fault Rupture

There are no active earthquake faults within the project site; refer to Exhibit 3.6-1. For these reasons, the proposed project would not be subject to fault rupture during a seismic event nor would it exacerbate exposure to fault rupture hazards. Impacts in this regard would be less than significant.

Strong Ground Shaking

The project site is located in a seismically active region of California and is susceptible to strong ground shaking during a seismic event, which constitutes a potentially significant impact. The Geotechnical Engineering Investigation prepared by Krazan & Associates proposes several recommendations that address seismic ground shaking hazards, including seismic provisions from Section 1613.2.2 of the 2019 CBC. These recommendations are included as Mitigation Measure (MM) GEO-1 and updated to 2022 CBC as necessary. The implementation of this mitigation measure would ensure that the proposed project is not exposed to strong ground shaking hazards. Impacts would be less than significant.

Ground Failure and Liquefaction

The Geotechnical Engineering Investigation evaluated the potential for soil liquefaction during a seismic event using the LIQUEFYPRO computer program (Version 5.9d) developed by CivilTech Software. Conservative estimates for earthquake magnitude, peak horizontal ground surface acceleration, and groundwater depth were used as inputs. It was determined that soils below a depth of 10 feet have a slight to very low potential for liquefaction under seismic shaking due to predominately medium dense/stiff to very stiff sandy and clayey soils. The analysis also indicates that the total and differential seismic induced settlement is not anticipated to exceed 1 and 2/3 inch, respectively. This level of risk for liquefaction and settlement are not considered significant, and no mitigation is required.

Landslides

The project site contains relatively flat relief. There are no slopes near the project site that may be susceptible to landsliding during a seismic event, which precludes the possibility of the proposed project being susceptible to landsliding. Thus, the proposed project would not exacerbate exposure to such hazards. Impacts would be less than significant.

Level of Significance Before Mitigation

Potentially significant impact (ground shaking).

Mitigation Measures

MM GEO-1 Prior to the issuance of the building permit, recommendations from the Geotechnical Engineering Investigation prepared by Krazan & Associates [Draft EIR Appendix E] shall be incorporated into all project plans and applicable construction-related permits and submitted to the City of American Canyon for review and approval.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Erosion

Impact GEO-2: The proposed project may result in substantial soil erosion or the loss of topsoil.

Impact Analysis

The proposed project would involve grading, building construction, paving, and utility installation activities that may cause erosion and sedimentation. This includes construction activities associated with the proposed project. Left unabated, the accumulation of sediment in downstream waterways could result in the blockage of flows, potentially causing increased localized ponding or flooding. As such, MM HYD-1 in Section 3.9, Hydrology and Water Quality, requires the implementation of stormwater quality control measures during construction activities to prevent pollutants from entering downstream waterways. Standard stormwater pollution prevention measures would include implementing structural and nonstructural control measures within and around disturbed areas to prevent soil and pollutants from leaving the project site. With implementation of MM HYD-1, impacts would be less than significant.

Upon project completion, the majority of the site would consist of impermeable surfaces, thereby reducing the risk of erosion on-site. Implementation of the project's Stormwater Control Plan (Appendix F) would ensure that erosion would not occur on-site during operation by implementing Low Impact Development design concepts, including stormwater control measures such as the proposed on-site retention basin.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM HYD-1.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Unstable Geologic Location

Impact GEO-3: The proposed project would not be located on a geologic unit or soil that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Impact Analysis

The stability of the underlying geologic units and soils are functions of their constituents. For example, soils with high organic or fill content would generally be considered unsuitable to support urban development. Likewise, soils that are composed of well-compacted alluvium would generally be considered suitable to support urban development. As further explained in Impact GEO-1, the project site is not located in an area with significant risks of landslide or liquefaction. The site is underlain by Quaternary alluvial fan deposits and is not susceptible to subsidence or collapse. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Expansive Soil

Impact GEO-4: The proposed project may create substantial risks to life or property as a result of expansive soil conditions on the project site.

Impact Analysis

Beneath 6 to 12 inches of the loose surface soils and fill materials, approximately 17 feet of stiff to hard sandy clay, silty clay, and medium dense/very stiff clayey sand/sandy clay were encountered during the soil borings conducted by Krazan & Associates. Field and laboratory tests suggest that these soils are moderately strong and slightly to moderately compressible. The clayey soils had a moderate to high potential for expansion. The Geotechnical Engineering Investigation proposes several recommendations that address expansive soils, including either recompaction of surface soils with non-expansive engineered fill or lime treatment. These recommendations are required by MM GEO-1. Impacts would be less than significant with mitigation incorporated.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure GEO-1.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Paleontological Resources

Impact GEO-5: **The proposed project may directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**

Impact Analysis

As described above, the project site is located on Quaternary alluvial fan deposits. Pleistocene alluvial fan deposits have the potential to be fossiliferous. However, the UCMP database lists no vertebrate or plant fossils in any of the forementioned geologic units in Napa County. The nearest Pleistocene vertebrate locality is approximately 10 miles southeast of American Canyon, in Solano County. As such, the potential for the proposed project to uncover vertebrate or plant fossils is low. Although it is extremely unlikely, it is always possible for unknown paleontological resources to be discovered during ground-disturbing activities. MM GEO-5 outlines procedures in case of an inadvertent discovery. Impacts would be less than significant with this mitigation incorporated.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM GEO-5 Although extremely unlikely, should any significant paleontological resources (e.g., bones, teeth, well-preserved plant elements) be unearthed by the construction crew, their activities shall be diverted at least 15 feet from the find until a professional Paleontologist has assessed it and, if deemed significant, salvaged in a timely manner. Collected fossils shall be deposited in an appropriate repository, such as the University of California Museum of Paleontology (UCMP), where they shall be properly curated and made available for future research.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

3.6.7 - Cumulative Impacts

The geographic scope of the cumulative geology, soils, and seismicity analysis is the project vicinity. Adverse effects associated with geologic, soil, and seismic hazards tend to be site specific, because each project site has its own geologic and soils conditions, and each project has its own design characteristics, localized within the area near the project site most affected by project activities (generally within a 0.5-mile radius).

Past, present, and future development projects in the project vicinity have the potential to exacerbate exposure to seismic hazards. The project site may be subject to strong ground shaking during an earthquake; thus, MM GEO-1 requires the project applicant to implement all recommendations of the Geotechnical Engineering Investigation, including all California Building Standards Code applicable requirements into project plans. Other nearby past, present, and reasonably foreseeable development projects may exacerbate exposure to similar potential seismic hazards and have been and would be required to comply with the relevant State and local laws designed to mitigate seismic hazards and mitigation measures imposed under CEQA. Therefore, the

proposed project in conjunction with other cumulative development would not expose people or structures to substantial adverse effects, including the risk of loss, injury, or death in the event of a major earthquake; fault rupture; ground shaking; seismic-related ground failure; landslide; or liquefaction.

Regarding soil erosion, development activities could lead to increased erosion rates on-site soils, which could cause unstable ground surfaces and increased sedimentation in nearby streams and drainage channels. MM HYD-1 requires implementation of standard stormwater pollution prevention measures to ensure earthwork activities do not result in substantial erosion off-site. This mitigation, in turn, would have to comply with the NPDES stormwater permitting program, which regulates water quality originating from construction sites. The NPDES program, which governs projects Statewide (and nationwide), requires the preparation and implementation of SWPPPs for construction activities that disturb more than 1 acre and the implementation of BMPs that ensure the reduction of pollutants during stormwater discharges, as well as compliance with all applicable water quality requirements. The proposed project would be required to comply with these regulations, as have and would other nearby past, present, and reasonably foreseeable development projects. Therefore, the proposed project in conjunction with other nearby cumulative development would not have a cumulatively significant impact associated with erosion.

The project site contains native soils that have expansive characteristics, which may exacerbate exposure of project structures to expansive soil hazards. MM GEO-1 requires the project applicant to implement all recommendations of the Geotechnical Engineering Investigation and incorporate them into project plans. Other nearby past, present, and reasonably foreseeable development projects could be exposed to expansive soil hazards and, therefore, have been and would be required to implement similar mitigation measures based on State and local regulations and CEQA requirements. As such, the proposed project, in conjunction with other nearby past, present, and reasonably foreseeable projects, would not have a cumulatively significant impact associated with expansive soils.

Paleontological resource impacts tend to be localized because the integrity of any given resource depends on what occurs in the immediate vicinity around that resource, such as disruption of soils; therefore, in addition to the project site itself, the area near the project site would be the area most affected by project activities (generally within a 0.5-mile radius). While the likelihood of an unknown paleontological resources to be discovered on-site is low, MM GEO-5 requires assessment and, if deemed appropriate, salvage of any discovered paleontological resources thereby reducing impacts to less than significant. Similarly, construction activities associated with cumulative development projects in the project vicinity may have the potential to encounter undiscovered paleontological resources. These cumulative projects listed in Table 3-1 would be required to mitigate for impacts through compliance with applicable federal and State laws governing paleontological resources.

Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable planned and approved projects in the vicinity, would not have a cumulatively significant impact related to geology, soils, and seismicity.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implement Mitigation Measure GEO-1, MM HYD-1, and MM GEO-5.

Level of Cumulative Significance After Mitigation

Less than significant impact with mitigation incorporated.

THIS PAGE INTENTIONALLY LEFT BLANK

3.7 - Greenhouse Gas Emissions

3.7.1 - Introduction

This section describes the existing greenhouse gas (GHG) emissions setting and potential effects from project implementation on the project site and its surrounding area. Descriptions and analysis in this section are based on project-specific information and modeling results utilizing California Emissions Estimator Model (CalEEMod) Version 2022.1. The Greenhouse Gas Analysis is included in this Draft Environmental Impact Report (Draft EIR) as Appendix A. Public comments were received during the EIR scoping period concerning the increase in GHG emissions due to the proposed industrial use.

3.7.2 - Environmental Setting

Greenhouse Gases and Global Emission Sources

Gases that trap heat in the atmosphere are referred to as GHGs. The effect is analogous to the way a greenhouse retains heat. Prominent GHGs that naturally occur in the Earth's atmosphere are water vapor, carbon dioxide (CO₂), methane (CH₄), oxides of nitrogen (NO_x), and ozone. Anthropogenic (human-caused) GHG emissions include releases of these GHGs plus release of human-made gases with high global warming potential (GWP) (ozone-depleting substances such as chlorofluorocarbons [CFCs]¹ and aerosols, hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], and sulfur hexafluoride [SF₆]). The GWP is the potential of a gas or aerosol to trap heat in the atmosphere. The GWP of a gas is essentially a measurement of the radiative forcing of a GHG compared with the reference gas, CO₂.

Individual GHG compounds have varying potential for contributing to global warming. For example, CH₄ is 25 times as potent as CO₂, while SF₆ is 22,200 times more potent than CO₂ on a molecule-per-molecule basis. To simplify reporting and analysis, methods have been set forth to describe emissions of GHGs in terms of a single gas. The most commonly accepted method for comparing GHG emissions is the GWP methodology defined in the Intergovernmental Panel on Climate Change (IPCC) reference documents.² The IPCC defines the GWP of various GHG emissions on a normalized scale that recasts all GHG emissions in terms of carbon dioxide equivalents (CO₂e), which compares the gas in question to that of the same mass of CO₂ (by definition, CO₂ has a GWP of 1). The GWP of a GHG is a measure of how much a given mass of a GHG is estimated to contribute to global warming. Thus, to describe how much global warming a given type and amount of GHG may cause, the CO₂e is used. A CO₂e is the mass emissions of an individual GHG multiplied by its GWP. As such, a high GWP represents high absorption of infrared radiation and a long atmospheric lifetime compared to CO₂. One must also select a time horizon to convert GHG emissions to equivalent CO₂ emissions to account for chemical reactivity and lifetime differences among various GHG species. The standard time horizon for climate change analysis is 100 years. Generally, GHG emissions are quantified in terms of metric tons (MT) of CO₂e (MT CO₂e) emitted per year.

¹ CFCs destroy stratospheric ozone. The Montreal Protocol on Substances that Deplete the Ozone Layer prohibited CFCs production in 1987.

² United Nations Intergovernmental Panel on Climate Change (IPCC). 2007. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the IPCC. Geneva, Switzerland.

Units commonly used to describe the concentration of GHGs in the atmosphere are parts per million (ppm), parts per billion (ppb), and parts per trillion (ppt), referring to the number of molecules of the GHG in a sampling of 1 million, 1 billion, or 1 trillion molecules of air. Collectively, HFCs, PFCs, and SF₆ are referred to as high GWP gases. CO₂ is by far the largest component of worldwide CO₂e emissions, followed by CH₄, nitrous oxide (N₂O), and high GWP gases, in order of decreasing contribution to CO₂e.

The primary human processes that release GHGs include the burning of fossil fuels for transportation, heating, and electricity generation; agricultural practices that release CH₄, such as livestock grazing and crop residue decomposition; and industrial processes that release smaller amounts of high GWP gases. Deforestation and land cover conversion have also been identified as contributing to global warming by reducing the Earth's capacity to remove CO₂ from the air and altering the Earth's albedo or surface reflectance, thus allowing more solar radiation to be absorbed. Specifically, CO₂ emissions associated with fossil fuel combustion are the primary contributors to human-induced climate change. CO₂, CH₄, and N₂O emissions associated with human activities are the next largest contributors to climate change.

Global Climate Change Issue

Climate change is a global problem because GHGs are global pollutants, unlike criteria air pollutants and hazardous air pollutants (also called toxic air contaminants), which are pollutants of regional and local concern. Pollutants with localized air quality effects have relatively short atmospheric lifetimes, approximately 1 day; by contrast, GHGs have long atmospheric lifetimes, several years to several thousand years. GHGs persist in the atmosphere for a long enough time to be dispersed around the globe.

Although the exact lifetime of any particular GHG molecule depends on multiple variables and cannot be pinpointed, more CO₂ is currently emitted into the atmosphere than is sequestered. CO₂ sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through photosynthesis and dissolution, respectively. These are two of the most common processes of CO₂ sequestration. Of the total annual human-caused CO₂ emissions, approximately 54 percent is sequestered through ocean uptake, Northern Hemisphere forest regrowth, and other terrestrial sinks within a year, whereas the remaining 46 percent of human-caused CO₂ emissions is stored in the atmosphere.³

Similarly, effects of GHGs are borne globally, as opposed to the localized air quality effects of criteria air pollutants and hazardous air pollutants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known and cannot be quantified, and no single project would be expected to measurably contribute to a noticeable incremental change in the global average temperature, or to global or local climates or microclimate.

Emissions of GHGs have the potential to adversely affect the environment because such emissions contribute, on a cumulative basis, to global climate change. A cumulative discussion and analysis of project impacts on global climate change is presented in this Draft EIR because, although it is unlikely that a single project will contribute significantly to climate change, cumulative emissions from many projects affect global GHG concentrations and the climate system.

³ Seinfeld, J. H. and S.N. Pandis. 1998. Atmospheric Chemistry and Physics from Air Pollution to Climate Change. John Wiley & Sons.

Although the international, national, State, and regional communities are beginning to address GHGs and the potential effects of climate change, worldwide GHG emissions will likely continue to rise over the next decades.

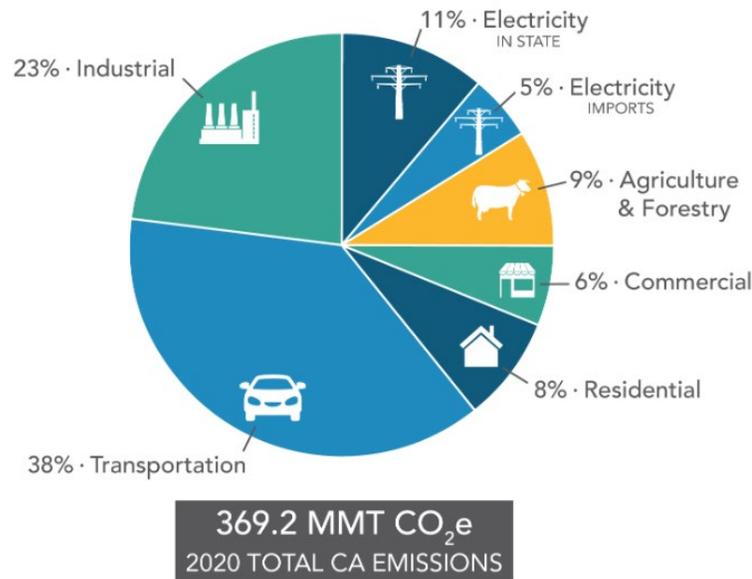
Climate and Topography

Climate is the accumulation of daily and seasonal weather events over a long period of time, whereas weather is defined as the condition of the atmosphere at any particular time and place. For a detailed discussion of existing regional and project site climate and topography, see Section 3.2, Air Quality.

Existing GHG Emissions

California GHG Inventory

As the second largest emitter of GHG emissions in the U.S. and the 12th to 16th largest GHG emissions emitter in the world, California contributes a large quantity (369.3 MMT CO₂e in 2020) of GHG emissions to the atmosphere.⁴ Emissions of CO₂ are byproducts of fossil fuel combustion and are attributable in large part to human activities associated with transportation, industry/manufacturing, electricity and natural gas consumption, and agriculture. In California, the transportation sector is the largest emitter at 38 percent of GHG emissions, followed by industry/manufacturing at 23 percent of GHG emissions (Figure 3.7-1).⁵



Source: California Air Resources Board (ARB). 2022. California Greenhouse Gas Emission Inventory—2020 Edition. Website: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed November 24, 2023.

Figure 3.7-1: 2010 California Greenhouse Gas Emissions by Sector

⁴ California Air Resources Board (ARB). 2022. California Greenhouse Gas Emission Inventory – 2020 Edition. Website: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed November 24, 2023.

⁵ Ibid.

City of American Canyon

Based on the City of American Canyon's 2012 Energy Efficiency Climate Action Plan (EECAP), the City generated approximately 120,201 MT of CO₂e in 2010.⁶ On-road transportation was the major source accounting for 39.9 percent of the total, largely due to passenger vehicles, but also commercial trips and buses. Commercial/industrial energy was the second largest source of emissions at 27 percent. Residential energy usage represented 18 percent, and solid waste and wastewater represented 7 percent each. Off-road transportation accounted for 2 percent. Agriculture accounted for less than 1 percent of emissions.

Climate Change Trends and Effects

CO₂ accounts for more than 75 percent of all anthropogenic GHG emissions, the atmospheric residence time of CO₂ is decades to centuries, and global atmospheric concentrations of CO₂ continue to increase at a faster rate than ever previously recorded. Thus, the warming impacts of CO₂ will persist for hundreds of years after mitigation is implemented to reduce GHG concentrations.

Substantially higher temperatures, more extreme wildfires, and rising sea levels are just some of the direct effects experienced in California.^{7,8} As reported by the California Natural Resources Agency in 2009, despite annual variations in weather patterns, California has seen a trend of increased average temperatures, more extreme hot days, fewer cold nights, longer growing seasons, less winter snow, and earlier snowmelt and rainwater runoff. Statewide average temperatures increased by about 1.7°F (degrees Fahrenheit) from 1895 to 2011, and a larger proportion of total precipitation is falling as rain instead of snow.⁹ Sea level rose by as much as 7 inches along the California coast over the last century, leading to increased erosion and adding pressure to the State's infrastructure, water supplies, and natural resources.

These observed trends in California's climate are projected to continue in the future. Research indicates that California will experience overall hotter and drier conditions with a continued reduction in winter snow (with concurrent increases in winter rains), as well as increased average temperatures and accelerating sea level rise. The frequency, intensity, and duration of extreme weather events such as heat waves, wildfires, droughts, and floods will also change.¹⁰ In addition, increased air pollution and spread of insects potentially carrying infectious diseases will also occur as the climate-associated temperature and associated species clines shift in latitude.

⁶ City of American Canyon. 2012. Energy Efficiency Climate Action Plan. Website:

<https://www.cityofamericancanyon.org/home/showpublisheddocument/5024>. Accessed November 22, 2023.

⁷ California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008. Website:

http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf. Accessed November 22, 2023.

⁸ California Energy Commission (CEC). 2012. Our Changing Climate 2012: Vulnerability & Adaptation to the Increasing Risks from Climate Change in California. Website: <http://www.energy.ca.gov/2012publications/CEC-500-2012-007/CEC-500-2012-007.pdf>. Accessed November 22, 2023.

⁹ California Energy Commission (CEC). 2006. Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004. Draft Final Report. CEC-600-2006-013-D. Website: <http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-D.PDF>. Accessed November 22, 2023.

¹⁰ California Natural Resources Agency (CNRA). 2009. 2009 California Climate Adaptation Strategy: A Report to the Governor of the State of California in Response to Executive Order S-13-2008. Website: http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf. Accessed November 22, 2023.

The following is a summary of climate change factors and predicted trends specific to California.

In California, climate change may result in consequences such as the following.^{11,12}

- **A reduction in the quality and supply of water from the Sierra snowpack.** If heat-trapping emissions continue unabated, more precipitation will fall as rain instead of snow, and the snow that does fall will melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90 percent. This can lead to challenges in securing adequate water supplies. It can also lead to a potential reduction in hydropower.
- **Increased risk of large wildfires.** If rain increases as temperatures rise, wildfires in the grasslands and chaparral ecosystems of Southern California are estimated to increase by approximately 30 percent toward the end of the twenty-first century because more winter rain will stimulate the growth of more plant “fuel” available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more Northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- **Reductions in the quality and quantity of certain agricultural products.** The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- **Exacerbation of air quality problems.** If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today’s conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- **A rise in sea levels resulting in the displacement of coastal businesses and residences.** During the past century, sea levels along California’s coast have risen about 7 inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats.
- **An increase temperature and extreme weather events.** Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- **A decrease in the health and productivity of California’s forests.** Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.

¹¹ California Climate Change Center (CCCC). 2006. Our Changing Climate, Assessing the Risks to California: A Summary Report from the California Climate Change Center. July 2006. CEC-500-2006-077. Website: http://www.scc.ca.gov/webmaster/ftp/pdf/climate_change/assessing_risks.pdf. Accessed January 11, 2024.

¹² Moser et al. 2009. Moser, Susie, Guido Franco, Sarah Pittiglio, Wendy Chou, Dan Cayan. 2009. The Future Is Now: An Update on Climate Change Science Impacts and Response Options for California. California Energy Commission, PIER Energy-Related Environmental Research Program. CEC-500-2008-071. Website: <http://www.energy.ca.gov/2008publications/CEC-500-2008-071/CEC-500-2008-071.PDF>. Accessed January 11, 2024

3.7.3 - Regulatory Framework

Regulations relevant to the analysis are discussed below.

Federal

Safer Affordable Fuel-Efficient Vehicles Rule

On September 27, 2019, the United States Environmental Protection Agency (EPA) and the National Highway Traffic Safety Administration (NHTSA) published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program. The SAFE Rule Part One revokes California's authority to set its own GHG emissions standards and to adopt its own Zero-Emission Vehicle (ZEV) mandates. On April 30, 2020, the EPA and the NHTSA published Part Two of the SAFE Vehicles Rule, which revised corporate average fuel economy and CO₂ emissions standards for passenger cars and trucks of model years 2021-2026, such that the standards increase by approximately 1.5 percent each year through model year 2026, as compared to the approximately 5 percent annual increase required under the 2012 standards.¹³

State

Assembly Bill 1493 Pavley Regulations and Fuel Efficiency Standards

California Assembly Bill (AB) 1493, enacted on July 22, 2002, required the California Air Resources Board (ARB) to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light-duty trucks. Implementation of the regulation was delayed by lawsuits filed by automakers and by the EPA's denial of an implementation waiver. The EPA subsequently granted the requested waiver in 2009, which was upheld by the United States District Court for the District of Columbia in 2011.¹⁴ The standards were to be phased in during the 2009 through 2016 model years.¹⁵

The second phase of the implementation for the Pavley Bill was incorporated into Amendments to the Low Emission Vehicle (LEV) Program referred to as LEV III or the Advanced Clean Cars program. The Advanced Clean Car Program combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. The regulation is anticipated to reduce GHGs from new cars by 34 percent from 2016 levels by 2025. The new rules will reduce pollutants from gasoline and diesel-powered cars, and deliver increasing numbers of zero-emission technologies, such as full battery electric vehicles (EVs), newly emerging plug-in hybrid EVs and hydrogen fuel cell cars. The regulations will also ensure adequate fueling infrastructure is available for the increasing numbers of hydrogen fuel cell vehicles planned for deployment in California.¹⁶

¹³ National Highway Traffic Safety Administration (NHTSA). 2020. The Safer Affordable Fuel-Efficient 'SAFE' Vehicles Rule. March. Website: [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](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 January 11, 2024.

¹⁴ California Air Resources Board (ARB). 2013. Clean Car Standards—Pavley, Assembly Bill 1493. Website: <http://www.arb.ca.gov/cc/ccms/ccms.htm>. Accessed January 11, 2024.

¹⁵ California Air Resources Board (ARB). Advanced Clean Cars Summary. Website: https://ww2.arb.ca.gov/sites/default/files/2019-12/acc%20summary-final_ac.pdf. Accessed January 11, 2024.

¹⁶ California Air Resources Board (ARB). 2011. Status of Scoping Plan Recommended Measures. Website: https://calcarbondash.org/cc/scopingplan/sp_measures_implementation_timeline.pdf. Accessed January 11, 2024.

Advanced Clean Cars II was adopted in November 2022. The Advanced Clean Cars II regulations will rapidly scale down light-duty passenger car, pickup truck and SUV emissions starting with the 2026 model year through 2035. The regulations are two-pronged. First, they amend the ZEV Regulation to require an increasing number of ZEVs, and rely on currently available advanced vehicle technologies, including battery electric, hydrogen fuel cell electric and plug-in hybrid EVs, to meet air quality and climate change emissions standards. These amendments support Governor Newsom’s 2020 Executive Order N-79-20 that requires all new passenger vehicles sold in California to be zero emissions by 2035. Second, the LEV Regulations were amended to include increasingly stringent standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

In October 2023, staff launched a new effort to consider potential amendments to the Advanced Clean Cars II regulations, including updates to the tailpipe GHG emission standard and limited revisions to the LEV and ZEV regulations.

These regulations rapidly scale down emissions of light-duty passenger cars, pickup trucks and SUVs and require an increased number of ZEVs to meet air quality and climate change emissions goals.

Assembly Bill 32

The California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. “Greenhouse gases” as defined under AB 32 include CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs.

The ARB is the State agency charged with monitoring and regulating sources of GHGs. The ARB approved the 1990 GHG emissions level of 427 MMT CO₂e on December 6, 2007.¹⁷ Therefore, to meet the State’s target, emissions generated in California in 2020 are required to be equal to or less than 427 MMT CO₂e. Emissions in 2020 in a Business as Usual (BAU) scenario were estimated to be 596 MMT CO₂e, which do not account for reductions from AB 32 regulations.¹⁸ At that rate, a 28 percent reduction was required to achieve the 427 MMT CO₂e 1990 inventory. In October 2010, ARB prepared an updated 2020 forecast to account for the effects of the 2008 recession and slower forecasted growth. Under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels.¹⁹ On July 11, 2018, the ARB announced that the State has meet its target of reducing GHG emissions to 1990 levels.²⁰

¹⁷ California Air Resources Board (ARB). 2007. Staff Report. California 1990 Greenhouse Gas Level and 2020 Emissions Limit. November 16, 2007. Website: https://www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf. Accessed January 11, 2024.

¹⁸ California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: https://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed January 11, 2024.

¹⁹ California Air Resources Board (ARB). GHG 2020 Business-as-Usual Emissions Projection. 2014 Edition BAU Emissions Projection. Website: <https://ww2.arb.ca.gov/ghg-bau>. Accessed January 11, 2024.

²⁰ California Air Resources Board. 2018. Climate Pollutants Fall Below 1990 Levels for First Time. Website: <https://ww2.arb.ca.gov/news/climate-pollutants-fall-below-1990-levels-first-time>. Accessed January 11, 2024.

California Air Resources Board Scoping Plan

The ARB Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State’s emissions to 1990 levels by the year 2020 to comply with AB 32.²¹ The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target included energy efficiency programs, renewable energy expansion, Cap-and-Trade, establishing targets for transportation-related GHGs, and the high GWP fee program.

The ARB approved the First Update to the Scoping Plan on May 22, 2014. The First Update builds upon the Initial Scoping Plan with new strategies and recommendations.

Senate Bill 375—the Sustainable Communities and Climate Protection Act of 2008

Senate Bill (SB) 375 was signed into law on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which emits over 40 percent of the total GHG emissions in California. SB 375 states, “Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32.” SB 375 does the following: (1) requires Metropolitan Planning Organizations (MPOs) to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Senate Bill 32 and the 2017 Climate Change Scoping Plan Update

The Governor signed SB 32 in September 2016, giving the ARB the statutory responsibility to include the 2030 target previously contained in Executive Order B-30-15 in the 2017 Scoping Plan Update. SB 32 states that “In adopting rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions authorized by this division, the State [air resources] board shall ensure that Statewide greenhouse gas emissions are reduced to at least 40 percent below the Statewide greenhouse gas emissions limit no later than December 31, 2030.” The 2017 Climate Change Scoping Plan Update addressing the SB 32 targets was adopted on December 14, 2017.

2022 ARB Scoping Plan

The 2022 Scoping Plan²² establishes a scenario by which the State may achieve carbon neutrality by 2045 or earlier, and it outlines a technologically feasible, cost-effective, and equity-focused path for achieving this climate target. The 2022 Scoping Plan addresses the latest climate-related legislation and direction from current Governor Gavin Newsom, who, by his signing of AB 1279, required the State to reduce Statewide anthropogenic GHG emissions to at least 85 percent below 1990 levels by 2045 and to maintain net negative GHG emissions thereafter. The 2022 Scoping Plan relies on the

²¹ California Air Resources Board (ARB). 2008. (includes edits made in 2009) Climate Change Scoping Plan, a framework for change. Website: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed January 11, 2024.

²² California Air Resources Board (ARB). 2022 Scoping Plan. Website: <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>. Accessed January 11, 2024.

aggressive reduction of fossil fuels in all Statewide sectors and accelerating existing carbon reduction programs. Aspects of the 2022 Scoping Plan’s scenario include:

- Rapidly moving to zero-emission transportation by electrifying cars, buses, trains, and trucks.
- Phasing out the use of fossil gas used for heating homes and buildings.
- Clamping down on chemicals, refrigerants, and other high GWP gases.
- Providing communities with sustainable options for walking, biking, and public transit to reduce reliance on cars.
- Continuing to develop solar arrays, wind turbine capacity, and other resources that provide clean, renewable energy.
- Scale up options such as renewable hydrogen and biomethane for end uses that are hard to electrify.

ARB estimates that successfully achieving the outcomes called for by the 2022 Scoping Plan will reduce demand for liquid petroleum by 94 percent and total fossil fuel by 86 percent in 2045, relative to 2022. The 2022 Scoping Plan also emphasizes the role of natural and working lands and carbon capturing technologies to address residual emissions and achieve net negative emissions.

Senate Bill 350: Clean Energy and Pollution Reduction Act

As enacted in 2015, this law establishes clean energy, clean air, and GHG emissions reduction goals, as well as increasing California’s renewable electricity procurement goals from 33 percent to 50 percent by 2030. The bill further requires the State to double the energy efficiency in existing buildings by 2030.²³

Senate Bill 100: Renewable Portfolio Standard Program

On September 10, 2018, former Governor Newsom signed SB 100, requiring California electricity utility providers to supply all in-state end users with electricity sourced from renewable or carbon-free sources by 2045. Specifically, SB 100 accelerates previously established renewable goals and requires that the program achieve 100 percent of electricity sourced from carbon-free sources by the end of 2045, with interim milestones of 50 percent by the end of 2026 and 60 percent by 2030.

Executive Orders Related to GHG Emissions

California’s Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the State and guide the actions of State agencies.

Executive Order S-3-05

Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.

²³ California Legislative Information (California Leginfo). 2015. Senate Bill 350 Clean Energy and Pollution Reduction Act of 2015. Website: https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350. Accessed January 11, 2024.

- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an Executive Order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07—Low Carbon Fuel Standard

The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a Statewide goal shall be established to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020. In particular, the Executive Order established a Low Carbon Fuel Standard (LCFS) and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission (CEC), ARB, University of California, and other agencies to develop and propose protocols for measuring the “lifecycle carbon intensity” of transportation fuels. The ARB adopted the LCFS on April 23, 2009.

The LCFS was subject to legal challenge in 2011. Ultimately, on August 8, 2013, the Fifth District Court of Appeal (California) ruled that the ARB failed to comply with the California Environmental Quality Act (CEQA) and the Administrative Procedure Act when adopting regulations for LCFS. In a partially published opinion, the Court of Appeal directed that Resolution 09-31 and two Executive Orders of the ARB approving LCFS regulations promulgated to reduce GHG emissions be set aside. However, the Court tailored its remedy to protect the public interest by allowing the LCFS regulations to remain operative while ARB complies with the procedural requirements it failed to satisfy.

To address the Court ruling, the ARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the 2010 LCFS as well as new provisions designed to foster investments in the production of the low carbon fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The Final Rulemaking Package adopting the regulation was filed with the Office of Administrative Law (OAL) on October 2, 2015. The OAL approved the regulation on November 16, 2015. In 2018, the Board approved amendments to the regulation, which included strengthening and smoothing the carbon intensity benchmarks through 2030 in-line with California’s 2030 GHG emission reduction target enacted through SB 32, adding new crediting opportunities to promote ZEV adoption, alternative jet fuel, carbon capture and sequestration, and advanced technologies to achieve deep decarbonization in the transportation sector.²⁴

Executive Order B-30-15

On April 29, 2015, former Governor Edmund G. Brown Jr. issued an Executive Order 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 ahead of the United Nations Climate Change Conference in Paris late 2015. The Executive Order sets

²⁴ California Air Resource Board (ARB). 2023. LCFS Regulation. Website: <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-regulation>. Accessed January 11, 2024.

a new interim Statewide GHG emission reduction target to reduce GHG emissions to 40 percent below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80 percent below 1990 levels by 2050 and directs the ARB to update the Climate Change Scoping Plan to express the 2030 target in terms of MT CO₂e. The Executive Order also requires the State's climate adaptation plan to be updated every 3 years and for the State to continue its climate change research program, among other provisions.

Executive Order N-79-20

Executive Order N-79-20 directs the State to require that, by 2035, all new cars and passenger trucks sold in California be ZEVs.

ARB Advanced Clean Truck and Advanced Clean Fleet Regulations

The Advanced Clean Truck Regulation and recently approved Advanced Clean Fleets (ACF) regulation are part of a holistic approach to accelerate a large-scale transition of zero-emission medium and heavy-duty vehicles. Together, these regulations will transition California's truck fleet to ZEV by 2045. The regulation has a manufacturer sales requirement; by 2035, zero-emission truck/chassis sales would need to be 55 percent of Class 2b–3 truck sales, 75 percent of class 4–8 straight truck sales, and 40 percent of truck tractor sales. The rule also has a company and fleet requirement that gathers information about shipments and shuttle services. This information will help identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

ARB Advanced Clean Cars II Rule

Adopted by the ARB in August 2022, the Advanced Clean Cars II regulation supports the implementation of Executive Order N-79-20 and requires that by 2035, all new passenger cars, trucks, and SUVs sold in California will be zero emissions.²⁵

Small Off-Road Engine Regulations

Small Off-Road Engine (SORE) Regulations will require that most newly manufactured SORE, such as those found in leaf blowers, lawn mowers, and other equipment, be zero-emission starting in 2024. Despite their small size, these engines are highly polluting. The volume of smog-forming emissions from this type of equipment has surpassed emissions from light-duty passenger cars and is projected to be nearly twice those of passenger cars by 2031. Portable generators, including those in recreational vehicles, would be required to meet more stringent standards in 2024 and meet zero-emission standards starting in 2028.²⁶ Engines that use diesel fuel and engines that are used in stationary equipment, including standby generators, are not subject to the SORE regulations.

Large Spark Ignition Regulation

The Large Spark Ignition Fleet Rule and Amendments, commonly referred to as the "Forklift Rule" applies to forklifts, sweeper/scrubbers, industrial tow tractors, and airport ground support equipment. It applies to fleets (four or more vehicles) and includes off-road gasoline, propane,

²⁵ California Air Resource Board (ARB). Proposed Advanced Clean Cars II Regulations. Website: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>. Accessed January 11, 2024.

²⁶ California Air Resources Board (ARB). 2021. Website: <https://ww2.arb.ca.gov/news/carb-approves-updated-regulations-requiring-most-new-small-road-engines-be-zero-emission-2024>. Accessed January 11, 2024.

liquefied petroleum gas (LPG), compressed natural gas, and electric forklifts ≥ 25 horsepower (hp).²⁷ The regulation sets fleet average emission level requirements that decreases each year to encourage the use of EV and low-emissions engines.

The ARB is currently working on drafting a zero-emission forklift measure to drive greater deployment of zero-emission forklifts within fleets throughout the State. The intent of this proposed rule is to phase out any propane forklifts 13 years or older beginning in 2026 for use in California. The new change would also mean facilities would not be able to purchase new propane forklifts beginning in 2026. The measure is currently in rulemaking and scheduled for Board consideration in September 2023.²⁸

California Regulations and Building Standards Codes

California has a long history of adopting regulations to improve energy efficiency in new and remodeled buildings. These regulations have kept California’s energy consumption relatively flat even with rapid population growth.

California Code of Regulations Title 13: Motor Vehicles

California Code of Regulations, Title 13: Division 3, Chapter 10, Article 1, Section 2485: Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling.²⁹ This measure seeks to reduce public exposure to diesel particulate matter (DPM) and other air contaminants by establishing idling restrictions, emission standards, and other requirements for heavy-duty diesel engines and alternative idle-reduction technologies to limit the idling of diesel-fueled commercial motor vehicles. Any person that owns, operates, or causes to operate any diesel-fueled commercial motor vehicle must not allow a vehicle to idle for more than 5 consecutive minutes at any location or operate a diesel-fueled auxiliary power system for greater than 5 minutes at any location when within 100 feet of a restricted area.

California Code of Regulations, Title 13: Division 3, Chapter 9, Article 4.8, Section 2449: General Requirements for In-Use Off-Road Diesel-Fueled Fleets. This measure regulates NO_x, DPM, and other criteria pollutant emissions from in-use, off-road diesel-fueled vehicles. This measure also requires each fleet to meet fleet average requirements or demonstrate that it has met “Best Available Control Technology” requirements. Additionally, this measure requires medium and large fleets to have a written idling policy that is made available to operators of the vehicles informing them that idling is limited to 5 consecutive minutes or less.

Title 20 Appliance Efficiency Regulations

California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally

²⁷ California Air Resources Board (ARB). 2023. Large Spark-Ignition Fleet Regulation Overview. Website: <https://ww2.arb.ca.gov/sites/default/files/offroadzone/landing/lfi.html>. Accessed January 11, 2024.

²⁸ California Air Resources Board (ARB). 2023. Website: <https://ww2.arb.ca.gov/our-work/programs/zero-emission-forklifts>. Accessed January 11, 2024.

²⁹ California Air Resource Board (ARB). Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. Website: <https://ww2.arb.ca.gov/our-work/programs/atcm-to-limit-vehicle-idling>. Accessed January 11, 2024.

regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

Title 24 Energy Efficiency Standards

California Code of Regulations Title 24 Part 6: California’s Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California’s energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases GHG emissions. The current version of Title 24 adopted by the CEC was effective on January 1, 2020. CEC recently approved the latest 2022 Energy Code, which became effective on January 1, 2023.³⁰ All newly constructed buildings shall have a solar photovoltaic (PV) system installed, including high-rise multifamily housing, offices, retail, warehouse, and hotel uses.

Title 24 California Green Building Standards Code

California Code of Regulations Title 24 Part 11 code is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went into effect on January 1, 2011. The code is updated on a regular basis, with the current version consisting of the 2022 California Green Building Code Standards Code (CALGreen) that became effective January 1, 2023.³¹ Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. California Building Standards Code (CBC) provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

CALGreen standards distinguish between residential and nonresidential occupancy. Recent additions to the code are requirements related to EV charging infrastructure, water conservation and recycling, and changes made to avoid conflicts with California energy efficiency standards under Title 24, Part 6. Local jurisdictions are permitted to adopt more stringent requirements, as State law provides methods for local enhancements. State building code provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

The latest update, 2022 California Green Building Standards Code went into effect on January 1, 2023. The revised code significantly increases the Mandatory Measures for EV charging requirements for both new residential and commercial buildings.

New nonresidential buildings must follow a regulatory schedule that specifies the minimum number of EV Capable, EV Ready and EV Equipped Spaces. The 2022 update requires the addition of required EV service equipment (EVSE) spaces. EVSE means “installed charging receptacles or permanently

³⁰ California Energy Commission (CEC). 2022 Building Energy Efficiency Standards. Website: <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency>. Accessed January 11, 2024.

³¹ California Energy Commission (CEC). 2021. CEC Approves 2022 CALGreen Building Standards Code. Website: <http://calenergycommission.blogspot.com/2021/10/cec-approves-2022-calgreen-building.html>. Accessed January 11, 2024.

installed chargers.” These are the number of charging receptacles/stations that are required to be fully installed.

CALGreen 2022 update includes mandatory nonresidential measures for site development EV charging under Section 5.106.5.3 Electric Vehicle (EV) Charging. To comply with CALGreen EV charging requirements, the proposed project would be required to meet the following standards:

- The transformer, main service equipment and subpanels shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
- The construction documents shall indicate one or more location(s) convenient to the planned off-street loading space(s) reserved for medium- and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s).
- Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium- and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipment for medium- and heavy-duty vehicles.
- Load to the future location of the charging for medium- and heavy-duty ZEVs. For warehouses with greater than 256,000 square feet, 400 KVA of additional capacity required for raceway, busway, transformer and panel.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881 Water Conservation Act. The bill required local agencies to adopt a local Landscape Ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SBX-7-7) 2020 mandate are expected under the Ordinance. Former Governor Brown’s Drought Executive Order of April 1, 2015 (Executive Order B-29-15) directed the California Department of Water Resources (DWR) to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, which became effective on December 15, 2015. New development projects that include landscaped areas of 500 square feet or more are subject to the Ordinance. The update requires:

- More efficient irrigation systems.
- Incentives for graywater usage.
- Improvements in on-site stormwater capture.
- Limits on the portion of landscapes that can be planted with high water use plants.
- Reporting requirements for local agencies.

Senate Bill 97 and the CEQA Guidelines Revisions

Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. SB 97 states “(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG

emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a).”

The 2010 CEQA Amendments first guided public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The 2010 CEQA Amendments fit within the existing CEQA framework by amending existing CEQA Guidelines to reference climate change. The 2010 CEQA Amendments also revised Appendix F of the CEQA Guidelines, which focuses on energy conservation, and the sample environmental checklist in Appendix G was amended to include GHG questions.

- The most recent 2018 CEQA Amendments expanded upon the previous guidance by specifying that:
 - The lead agency should focus its analysis on the reasonably foreseeable incremental contribution of the project’s emissions to the effects of climate change. A project’s incremental contribution may be cumulatively considerable even if it appears relatively small compared to Statewide, national, or global emissions. The agency’s analysis should consider a timeframe that is appropriate for the project. The agency’s analysis also must reasonably reflect evolving scientific knowledge and State regulatory schemes.
 - In determining the significance of impacts, the lead agency may consider a project’s consistency with the State’s long-term climate goals or strategies, provided that substantial evidence supports the agency’s analysis of how those goals or strategies address the project’s incremental contribution to climate change and its conclusion that the project’s incremental contribution is not cumulatively considerable.

A lead agency may use a model or methodology to estimate GHG emissions resulting from a project. The lead agency has the discretion to select the model or methodology it considers most appropriate to enable decision-makers to intelligently take into account the proposed project’s incremental contribution to climate change. The lead agency must support its selection of a model or methodology with substantial evidence. The lead agency should explain the limitations of a particular model or methodology selected for use.

California Supreme Court GHG Ruling

In a November 30, 2015 ruling, the California Supreme Court in *Center for Biological Diversity v. California Department of Fish and Wildlife* on the Newhall Ranch project concluded that whether the project was consistent with meeting Statewide emission reduction goals is a legally permissible criterion of significance, but the significance finding for the project was not supported by a reasoned explanation based on substantial evidence. The Court offered potential solutions on pages 25-27 of the ruling to address this issue, as summarized below:

Specifically, the Court advised that:

- **Substantiation of Project Reductions from BAU.** A lead agency may use a BAU comparison based on the Scoping Plan’s methodology if it also substantiates the reduction a particular project must achieve to comply with Statewide goals (page 25).
- **Compliance with Regulatory Programs or Performance Based Standards.** A lead agency “might assess consistency with AB 32’s goal in whole or part by looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities” (page 26).
- **Compliance with GHG Reduction Plans or Climate Action Plans.** A lead agency may utilize “geographically specific GHG emission reduction plans” such as Climate Action Plans (CAPs) or GHG emission reduction plans to provide a basis for the tiering or streamlining of project-level CEQA analysis (page 26).
- **Compliance with Local Air District Thresholds.** A lead agency may rely on “existing numerical thresholds of significance for greenhouse gas emissions” adopted by, for example, local air districts (page 27).

3.7.4 - Bay Area Air Quality Management District

Plan Bay Area 2050: Strategy for a Sustainable Region

On October 21, 2021, the Association of Bay Area Governments (ABAG) and the Metropolitan Transportation Commission (MTC) adopted Plan Bay Area 2050, an integrated transportation and land use strategy through 2050 that updates the nine-county region’s long-range plan to meet the requirements of SB 375. Working in collaboration with cities and counties, the Plan Bay Area 2050 advances initiatives to expand housing and transportation choices, create healthier communities, and build a stronger regional economy. Plan Bay Area 2050 remains on track to meet a 20 percent per capita reduction of GHG emissions by 2035 from 2005 conditions.³²

Bay Area Air Quality Management District 2050 Climate Resolution Goals

In 2013, the Bay Area Air Quality Management District (BAAQMD) Board of Directors approved a Resolution (No. 2013-11) adopting a GHG goal and a commitment to developing a regional climate protection strategy that commits to the following:

- Setting a goal for the Bay Area region to reduce GHG emissions to 80 percent below 1990 levels by 2050.
- Developing a Regional Climate Protection Strategy to make progress toward the 2050 goal and to complement existing climate action efforts at the State, regional, and local levels.
- Preparing a work program to guide the BAAQMD climate protection activities in the near term.

Bay Area Air Quality Management District 2017 Clean Air Plan

The BAAQMD adopted the 2017 Clean Air Plan on April 19, 2017, to comply with State air quality planning requirements set forth in the California Health and Safety Code. The 2017 Clean Air Plan

³² Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG). 2021. Plan Bay Area 2050. October 21.

includes a wide range of control measures designed to decrease emissions of the air pollutants that are most harmful to Bay Area residents, such as particulate matter, ozone, and toxic air contaminants (TACs), to reduce emissions of CH₄ and other “super-greenhouse gases” that are potent climate pollutants in the near term; and to decrease emissions of carbon dioxide by reducing fossil fuel combustion.

The proposed control strategy for the 2017 Clean Air Plan consists of 85 specific control measures targeting a variety of local, regional, and global pollutants. The control measures have been developed for stationary sources, transportation, energy, buildings, agriculture, natural and working lands, waste management, water, and Super GHG pollutants. Implementation of some of the control measures could involve retrofitting, replacing, or installing new air pollution control equipment, changes in product formulations, or construction of infrastructure that have the potential to create air quality impacts.

The BAAQMD CEQA Guidelines set forth criteria for determining consistency with the 2017 Clean Air Plan. In general, a project is considered consistent if the project (1) supports the primary goals of the 2017 Clean Air Plan, (2) includes control measures, and (3) does not interfere with implementation of the 2017 Clean Air Plan measures.

Bay Area Air Quality Management District CEQA Air Quality Guidelines

The purpose of the BAAQMD’s 2022 CEQA Air Quality Guidelines is to assist lead agencies in evaluating air quality and GHG impacts of projects and plans proposed in the Air Basin. The most recent version of the CEQA Air Quality Guidelines was revised April 2023 and includes revisions made to address the Supreme Court’s opinion (*California Building Industry Association v. Bay Area Air Quality Management District*, December 2015).³³ The BAAQMD’s 2022 CEQA Air Quality Guidelines contain instructions on how to evaluate, measure, and mitigate air quality impacts generated from land development construction and operation activities. They focus on criteria air pollutant, GHG, TAC, and odor emissions generated from plans or projects and are intended to help lead agencies navigate through the CEQA process. The 2022 CEQA Air Quality Guidelines are presented as advisory recommendations based on substantial evidence to assist local agencies.

The BAAQMD’s 2022 CEQA Air Quality Guidelines provide recommended significance thresholds for GHGs for land use development projects and plans. The new thresholds state that if a project would contribute its “fair share” of what will be required to achieve California’s long-term climate goal of carbon neutrality by 2045, then a reviewing agency can find that the impact will not be significant because the project will help to solve the problem of global climate change. The thresholds for new land use projects require projects to meet either of one of two enumerated Criteria “A” or “B” detailed in Table 3.7-1. If a land use development project cannot demonstrate consistency with

³³ In March 2012, the Alameda County Superior Court ordered BAAQMD to set aside use of the significance thresholds within the BAAQMD 2010 CEQA Guidelines and cease dissemination until they complete an assessment of the environmental effects of the thresholds in accordance with CEQA. The Court found that the thresholds, themselves, constitute a “project” for which environmental review is required. In August 2013, the First District Court of Appeal reversed the Alameda County Superior Court’s decision. The Court held that adoption of the thresholds was not a “project” subject to CEQA because environmental changes that might result from their adoption were too speculative to be considered “reasonably foreseeable” under CEQA. In December 2015, the California Supreme Court reversed the Court of Appeal’s decision and remanded the matter back to the appellate court to reconsider the case in light of the Supreme Court’s opinion.

Criterion A or Criterion B, then that project would result in a potentially significant impact related to the generation of direct and indirect GHG emissions.

Table 3.7-1: BAAQMD Thresholds of Significance for Greenhouse Gases

Thresholds for Land Use Projects (Must Include A or B)	
A. Projects must include, at a minimum, the following project design elements:	
1.	Buildings <ol style="list-style-type: none"> a. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development). b. The project will not result in any wasteful, inefficient, or unnecessary energy usage as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.
2.	Transportation <ol style="list-style-type: none"> a. Achieve a reduction in project-generated Vehicle Miles Traveled (VMT) below the regional average consistent with the current version of the California Climate Change Scoping Plan (currently 15 percent) or meet a locally adopted Senate Bill 743 VMT target, reflecting the recommendations provided in the Governor’s Office of Planning and Research’s Technical Advisory on Evaluating Transportation Impacts in CEQA: <ol style="list-style-type: none"> i. Residential projects: 15 percent below the existing VMT per capita ii. Office projects: 15 percent below the existing VMT per employee iii. Retail projects: no net increase in existing VMT b. Achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2.
B. Projects must be consistent with a local GHG reduction strategy that meets the criteria under State CEQA Guidelines Section 15183.5(b).	
Source: Bay Area Air Quality Management District (BAAQMD). 2022. CEQA Guidelines. April 20.	

Project consistency with Criteria A is based on incorporating project design criteria based on key attributes consistent with the 2022 Scoping Plan and states long-term carbon neutrality goals. Projects incorporating these elements would be contributing their “fair share” of what will be required to achieve California’s long-term climate goal of carbon neutrality by 2045. These include criteria for building energy design (elimination of natural gas) as well as criteria related to reduction in transportation emissions via Vehicle Miles Traveled (VMT) reductions and installation of EV charging infrastructure.

Project consistency with Criterion B involves demonstrating compliance with a local “qualified” GHG plan. CEQA Guidelines Section 15183.5(b) allows projects and plans to be analyzed through a streamlined or tiered approach utilizing an adopted Greenhouse Gas Reduction Plan. A “qualified” reduction strategy capable of being utilized for a streamlined or tiered analysis under CEQA must meet the following requirements:

- Quantify GHG emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;

- Establish a level, based on substantial evidence, below which the contribution to GHG emissions from activities covered by the plan would not be cumulatively considerable;
- Identify and analyze the GHG emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- Establish a mechanism to monitor the plan’s progress toward achieving the level and to require amendments if the plan is not achieving specified levels; and
- Be adopted in a public process following environmental review.

As discussed below under Local Regulations, and Approach to Analysis, the City of American Canyon has adopted its own GHG threshold standards for industrial uses, which will be used to evaluate the proposed project’s GHG impact significance.

Local

City of American Canyon Energy Efficiency Climate Action Plan

The proposed project is within the jurisdiction of the City of American Canyon, which has adopted an Energy Efficiency Climate Action Plan (EECAP) as discussed above in the Regulatory Framework section. The EECAP outlines a course of action to reduce community-wide GHG emissions generated within the City of American Canyon. The EECAP includes two measures to reduce energy-related emissions from new nonresidential projects: (1) Participation in PG&E’s Savings by Design program for nonresidential construction programs and (2) incorporation of energy efficiency improvements beyond Title 24 for new nonresidential construction. The City would impose the requirements of these measures as applicable through the project Conditions of Approval. The EECAP establishes emission reduction goals to reduce GHG emissions in the City by 15 percent below the 2020 business-as-usual emissions level, consistent with AB 32. Because the EECAP was prepared based on the 2020 GHG targets, which are now superseded by the 2030 GHG targets established in SB 32, the EECAP would not apply for streamlining.

City of American Canyon General Plan

The City of American Canyon adopted its General Plan in 1994, which contains objectives and policies that help address climate change and reduce the community’s GHG emissions at the local level and improve energy efficiency and conservation. Under Resolution 2021-60, the General Plan was updated September 7, 2021, to include additional climate change and adaptation policies. The following objectives and policies from the City’s General Plan are relevant to GHG emissions and energy conservation:

Objective 1.37 Consider initiatives to reduce direct and indirect greenhouse gas (GHG) emissions from transportation sources, and from new, renovated, and existing development in the City.

Policy 1.37.6 Reduce vehicle engine idling in American Canyon by educating the broader community (i.e.: businesses, commuters, residents) on the greenhouse gas impacts caused by engine idling, and implementing feasible commercial vehicle regulations.

Goal 8F Reduce consumption of nonrenewable energy sources and support the development and utilization of new energy sources.

Objective 8.22 Minimize transportation-related energy consumption.

Policy 8.22.1 Encourage the development of mixed use, pedestrian friendly employment/residential centers that help minimize vehicle trips in American Canyon and contribute to a reduction in energy consumption.

Policy 8.22.2 Encourage the clustering of residential structures.

Policy 8.22.3 Require that Development Plans provide for linkages between bicycle and pedestrian circulation systems and transit and employment centers, in accordance with established areawide plans.

Policy 8.22.4 Maintain a system of traffic signals and controls that minimizes waiting time and vehicle speed changes through routes.

Policy 8.22.5 Require that Development Plans provide for High-Occupancy Vehicles (HOV) and public transportation, where feasible, through the provision of appropriate transit areas and park-and-ride locations along public transportation routes.

Objective 8.23 Reduce Energy consumption in buildings.

Policy 8.23.1 Require that developers employ energy efficient subdivision and site planning methods as well as building design. Measures to be considered include building orientation and shading, landscaping, building reflectance, use of active and passive solar heating and hot water system, etc. In establishing these energy-related design requirements, the City shall balance energy efficient design with good planning principles.

Policy 8.23.2 Require that new City buildings be energy efficient.

Objective 8.24 Increase public awareness of energy conservation needs and means in order to encourage informed choices about energy conservation by the general public.

Policy 8.24.1 Cooperate with local utilities to provide energy conservation information to the public.

Policy 8.24.2 Develop public and/or public-private energy conservation educational programs for City employees and the public.

Objective 8.25 Increase the energy efficiency of City operations to save energy, reduce municipal costs, and provide an example to the private sector.

Policy 8.25.1 Introduce concepts of energy efficiency and lifecycle costing to City planning and operating decisions and to the design of all major City facilities.

Policy 8.25.2 Work with other agencies and utility companies to develop safe, economical and renewable energy resources.

Policy 8.25.3 Consider participating in energy conservation demonstration projects and promoting the use of treatment technologies that provide for the reuse of waste and water treatment by products, such as sludge and methane gas.

In addition to the above General Plan policies related to GHG emissions and energy consumption, the City adopted a Climate Emergency Proclamation on November 16, 2021.

City of American Canyon Municipal Code

19.01.061, Industrial Use Greenhouse Gas Standards (Ordinance No. 2024-014)

A. Every Industrial Use Land Use Proposal for which the City of American Canyon is the Lead Agency shall use the following threshold to evaluate the significance of greenhouse gas (GHG) impact under the California Environmental Quality Act (CEQA):

- 1) **TIER 1.** Determine if CEQA categorical exemptions are applicable. If not, move to Tier 2.
- 2) **Tier 2.** Consider whether the proposed project is consistent with a locally adopted GHG reduction plan that has gone through public hearing and CEQA review, that has an approved inventory, includes monitoring, etc. If not, move to Tier 3.
- 3) **Tier 3.** Consider whether the project includes, at a minimum, the following project design elements:

i. Buildings

1. The project will not include natural gas appliances or natural gas plumbing (in both residential and nonresidential development).
2. The project will not result in any wasteful, inefficient, or unnecessary energy use as determined by the analysis required under CEQA Section 21100(b)(3) and Section 15126.2(b) of the State CEQA Guidelines.

ii. Transportation

1. The project will achieve a reduction in project-generated vehicle miles traveled ("VMT") below the regional average consistent with

the current version of the California Climate Change Scoping Plan (currently 15 percent).

2. The project will achieve compliance with off-street electric vehicle requirements in the most recently adopted version of CALGreen Tier 2. If the project does not include the above project design elements, the Project has a significant GHG impact. If it does include the above project design elements, move to Tier 4.
- 4) **Tier 4.** Consider whether the project generates GHG emissions in excess of the South Coast Air Quality Management District's 10,000 MT CO₂e per year screening threshold for industrial uses and stationary projects. If so, the project has a significant GHG impact.

Chapter 19.09, Industrial Commerce Centers Sustainability Standards (Ordinance No. 2024-013)

Chapter 19.09 of the Municipal Code is applicable to all warehousing, logistics and distribution facilities throughout the City for which an NOP is issued after March 1, 2024 under the implementing Guidelines of the CEQA. The NOP for the proposed project was issued on October 27, 2023. As such, the proposed project is not subject to Chapter 19.09 of the Municipal Code (Ordinance No. 2024-013). However, for informational purposes, the extent to which the project complies is addressed in Section 3.7.7.

A warehousing, logistics or distribution facility means facilities used for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials and excludes bulk storage of materials, which are flammable, explosive, or create hazardous or commonly recognized offensive conditions) before their distribution to retail locations or other warehouses. The facilities are generally greater than 200,000 square feet in size, with a land coverage ratio of approximately 50 to 80 percent, and a dock-high loading door ratio of approximately 1:5,000-8,000 square feet. They are characterized by dock high loading doors, could be on opposing sides of the building (cross dock facility); significant movement and storage of products, materials, or equipment; truck activities frequently outside of the peak hour of the adjacent street system; and freeway access, including:

- Freight yards/forwarding terminals;
- Warehousing distribution/high cube distribution centers;
- Moving agencies;
- Parcel delivery terminals;
- Railroad freight stations;
- Shipping/receiving yards; and
- Truck terminals.

The following sections shall supersede any existing requirements in the Municipal Code and Specific Plans:

1. On-site motorized operational equipment, including but not limited to forklifts, yard trucks, and pallet jacks, shall be ZE (zero emission). This includes electrical hook ups to

- the power grid, rather than diesel-fueled generators, for contractors' electric construction tools, such as saws, drills and compressors.
2. All outdoor cargo handling equipment (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and landscaping equipment) shall be zero-emission vehicles. Each building shall include the necessary charging stations or other necessary infrastructure for zero-emission cargo handling equipment.
 3. Prior to issuance of a business license, the City shall ensure rooftop solar panels are installed and can be operated in such a manner that they will supply 100% of the power needed to operate all non-refrigerated portions of the facility including the parking areas.
 4. Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide chilled, cooled, or freezer warehouse space, a conduit shall be installed during construction of the building shell from the electrical room to 100% of the loading dock doors that have potential to serve the refrigerated space. When tenant improvement building permits are issued for any refrigerated warehouse space, electric plug-in units shall be installed at every dock door servicing the refrigerated space to allow transport refrigeration units (TRUs) to plug in. Truck operators with TRUs shall be required to utilize electric plug-in units when at loading docks.
 5. All generators, and all diesel-fueled off-road construction equipment greater than 75 horsepower, will be zero-emissions or equipped with CARB Tier IV-compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. After either (1) the completion of grading or, (2) the completion of an electrical hookup at the site, whichever is first, require all generators and all diesel-fueled off-road construction equipment, to be zero-emissions or equipped with CARB Tier IV-compliant engines (as set forth in Section 2423 of Title 13 of the California Code of Regulations, and Part 89 of Title 40 of the Code of Federal Regulations) or better by including this requirement in applicable bid documents, purchase orders, and contracts with successful contractors. An exemption from these requirements may be granted by the City in the event that the applicant documents that equipment with the required tier is not reasonably available and corresponding reductions in criteria air pollutant emissions are achieved from other construction equipment.
 6. Prior to certificate of occupancy, install conduit and infrastructure for Level 2 (or faster) electric vehicle charging stations on-site for employees for the percentage of employee parking spaces commensurate with Title 24 requirements in effect at the time of building permit issuance plus additional charging stations equal to 5% of the total employee parking spaces in the building permit, whichever is greater. By 2030 install Level 2 (or faster) electric vehicle charging stations for 25% of the employee parking spaces required.
 7. Install HVAC and/or HEPA air filtration systems in all warehouse facilities.

3.7.5 - Thresholds of Significance

The lead agency utilizes the criteria in CEQA Guidelines Appendix G Environmental Checklist to determine whether GHG emission impacts are significant environmental effects. Would the project:

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

3.7.6 - Approach to Analysis

In developing its 2022 GHG significance thresholds, BAAQMD analyzed what new land use development projects will require to achieve California’s long-term climate goal of carbon neutrality by 2045, thereby better representing what design elements new land use development projects need to incorporate to sufficiently contribute to achieving the State’s goal. BAAQMD established thresholds recommendations for residential and commercial projects, but did not recommend a threshold for industrial land uses. Unlike residential and commercial projects, industrial land uses’ GHG emissions primarily come from mobile sources like truck emissions.

The South Coast Air Quality Management District (SCAQMD) has developed a threshold of significance for industrial land uses that is supported by substantial evidence and captures the significant sources of GHG impacts.

The City adopted its own GHG thresholds for industrial projects, which combines BAAQMD’s baseline threshold with the SCAQMD’s threshold will capture the presently known GHG emissions from industrial land uses. The City’s GHG thresholds are shown above under Local Regulations and have been used for this analysis. Accordingly, the analysis below addresses both Impact GHG-1 and Impact GHG-2.

3.7.7 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the project and provides mitigation measures where necessary.

Greenhouse Gas Emissions and Conflict with Plan, Policy, or Regulation that Reduces Emissions

Impact GHG-1:	The proposed project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
and	
Impact GHG-2:	The proposed project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

Impact Analysis

Both construction and operational activities have the potential to generate GHG emissions. The proposed project would generate GHG emissions during temporary (short-term) construction activities such as site grading, operation of construction equipment, operation of on-site heavy-duty construction vehicles, hauling of materials to and from the project site, asphalt paving, and construction worker vehicle trips. On-site construction activities would vary depending on the level of construction activity.

Long-term, operational GHG emissions would result from project-generated vehicular traffic, operation of any landscaping equipment, off-site generation of electrical power over the life of the proposed project, the energy required to convey water to and wastewater from the project site, the emissions associated with the hauling and disposal of solid waste from the project site, and any fugitive refrigerants from air conditioning or refrigerators.

Global climate change is not confined to a particular project area and is generally accepted as the consequence of global industrialization over the last 200 years. A typical project, even a very large one, does not generate enough GHG emissions on its own to influence global climate change significantly; hence, the issue of global climate change is, by definition, a cumulative environmental impact. Therefore, this section measures the proposed project’s incremental contribution to the cumulative environmental impact. The following is a discussion of the proposed project’s contribution to GHG emissions during both the construction and operation phases. The proposed project’s GHG emissions are quantified for informational purposes only.

Construction

At the time of this analysis, the construction of the proposed project was anticipated to begin in the third quarter 2024 and be completed 11 months later. The proposed project’s construction emissions are presented in Table 3.7-2. As vehicle and equipment fuel efficiencies and emission control standards continue to incrementally improve with each year, project construction emissions are likely to decrease nominally from what is shown in Table 3.7-2 should the construction schedule move to later years. Therefore, the construction GHG emissions contained in Table 3.7-2 represent a conservative assessment of project construction emissions. CalEEMod outputs which detail the GHG emissions during each construction phase are shown in Appendix B.

Table 3.7-2: Proposed Project Construction GHG Emissions

Construction Year	Total MT CO ₂ e per year (approx.)
2024	252
2025	352
Entire Construction Duration (2024-2025)	
Total	604
Amortized over 30 years	20
Notes: Because of rounding, total MT CO ₂ e may be marginally different from CalEEMod output.	

Construction Year	Total MT CO ₂ e per year (approx.)
MT CO ₂ e = metric tons of carbon dioxide equivalents Source: Appendix B	

As shown above, the proposed project would generate approximately 604 MT CO₂e during construction.

Operation

Operational or long-term emissions occur over the life of the project. Project operations were modeled for the 2025 operational year, immediately following the completion of construction. Sources for operational emissions are summarized below and are described in more detail in Section 3.2. Sources for operational GHG emissions include:

- **Motor Vehicles:** These emissions refer to GHG emissions contained in the exhaust from the cars and trucks that would travel to and from the project site.
- **Area Sources:** These emissions refer to those produced during activities such as landscape maintenance.
- **Electricity:** These emissions refer to those generated by off-site power plants to supply electricity required for the proposed project.
- **Electricity generated by on-site solar improvements:** This is the estimated electricity that would be generated by the project's solar infrastructure. This is calculated manually (i.e., outside of CalEEMod) to account for the energy generated on-site that would offset some electricity needs from off-site power plants.
- **Water Transport:** These emissions refer to those generated by the electricity required to transport and treat the water to be used on the project site.
- **Waste:** These emissions refer to the GHG emissions produced by decomposing waste generated by the proposed project.

Table 3.7-3 presents the estimated annual GHG emissions from the proposed project's operational activities. As shown in Table 3.7-3, the proposed project would generate approximately 3,112 MT CO₂e per year after the inclusion of 20 MT CO₂e per year from project construction. CalEEMod outputs which detail the GHG emissions during operation and calculations for solar energy generated by the proposed project, are shown in Appendix B.

Table 3.7-3: Operational Greenhouse Gas Emissions

GHG Emissions Source	GHG Emissions (MT CO ₂ e per year)
Mobile—Trucks	3003
Area	5
Energy—Electricity	29

GHG Emissions Source	GHG Emissions (MT CO ₂ e per year)
Energy—On-site Solar ¹	(10)
Water/Waste	65
Amortized Construction Emissions	20
Total Annual Project Emissions	3,112
Notes: MT CO ₂ e = metric tons carbon dioxide equivalent ¹ These emissions are calculated manually (i.e., not reflected in CalEEMod) to estimate the amount of electricity that would be generated by the proposed solar improvements. Totals were summed using unrounded numbers and may not appear to sum exactly due to rounding. Source: Appendix B.	

For informational purposes, Table 3.7-4 is provided to illustrate the proposed project’s downward trend of GHG emissions as the State advances regulations on 1) reducing GHG emissions from truck fleet and landscaping equipment and 2) increasing renewable energy use. Relevant regulations that would achieve future GHG emissions include but not limited to:

- SB 100, requiring California electricity utility providers to supply all in-state end users with electricity sourced from renewable or carbon-free sources by 2045; and
- Executive Order N-79-20 which requires transition to ZEV short-haul/drayage trucks, heavy-duty long-haul trucks, and off-road equipment.

Calculations detailing the reduction in project operational GHG emissions as a result of compliance with the aforementioned regulations are shown in Appendix B.

Table 3.7-4: Operational Greenhouse Gas Emission Beyond Buildout Year (Compliance with Applicable Regulations)

Construction Year	2025	2030	2045
Mobile	3,003	2,343	364
Area (Landscape Equipment)	5	0	0
Energy—Electricity	19	19	0
Water/Waste	65	65	65
Construction (Amortized)	20	20	20
Total Annual (in Metric Ton)	3,112	2,447	449
The exact truck fleet that would be used by the proposed project is unknown. However, if the project’s truck fleet meets the “priority fleet” designation under the Advanced Clean Fleet (ACF) rule, ¹ the project’s truck fleet would be subject to additional regulations that would result in further mobile source GHG reductions:			
Total Annual if project fleet is considered “priority” under ACF	3,003	2,056	128
Notes: ACF = Advanced Clean Fleet			

Construction Year	2025	2030	2045
¹ The ACF regulation applies to fleets performing drayage operations, those owned by State, local, and federal government agencies, and high priority fleets. High priority fleets are entities that own, operate, or direct at least one vehicle in California, and that have either \$50 million or more in gross annual revenues, or that own, operate, or have common ownership or control of a total of 50 or more vehicles (excluding light-duty package delivery vehicles). The regulation affects medium- and heavy-duty on-road vehicles with a gross vehicle weight rating greater than 8,500 pounds, off-road yard tractors, and light-duty mail and package delivery vehicles.			

Project Impact

As previously discussed, the City adopted its own GHG thresholds for industrial projects (Ordinance No. 2024-013), including the proposed project. As shown above in Local Regulations, the GHG thresholds consist of four tiers that the project can be evaluated against to determine its GHG impact significance.

The proposed project is evaluated against each of the four tiers:

Tier 1—CEQA exemption: The proposed project is not exempt from CEQA, therefore this tier does not apply.

Tier 2—Qualified GHG reduction plan: The EECAP was prepared based on the 2020 GHG targets, which are now superseded by the 2030 GHG targets established in SB 32. Therefore, the EECAP would not apply for streamlining.

Tier 3—Project design elements: The proposed buildings would be all-electric design which satisfies the first design element that prohibits natural gas appliances or plumbing. As demonstrated in Section 3.5, Energy, the proposed project would not result in any wasteful, inefficient, or unnecessary energy usage; therefore, the proposed project is consistent with the second design element. However, as discussed in Section 3.13, the proposed project would have a significant and unavoidable VMT impact. As such, this tier does not apply to the proposed project.

Tier 4—Screening threshold: The last tier relates to project emissions in exceedance of SCAQMD’s 10,000 MT CO₂e per year screening threshold for industrial uses and stationary projects. As shown in Table 3.7-3 and Table 3.7-4, the proposed project’s construction and operation GHG emissions would be far below the 10,000 MT CO₂e per year screening threshold. Therefore, the proposed project is consistent with this tier and would not have a significant GHG impact.

Furthermore, although the proposed project is not required to implement the industrial sustainability measures that were recently adopted by the City, which only applies to projects for which a Notice of Preparation is issued after March 1, 2024 (Ordinance No. 2024-013), the proposed project includes similar design features such as the use of zero-emission forklifts and solar panels. The proposed solar panels would be installed on the project’s building roof top, which would produce an estimated 235,000 kilowatt-hour (kWh) per year.

In summary, the proposed project would satisfy Tier 4 of the City’s GHG standards. Therefore, impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None required.

Level of Significance After Mitigation

Less than significant impact.

3.7.8 - Cumulative Impacts

The geographic scope of the cumulative GHG emissions analysis is the San Francisco Bay Area Air Basin (SFBAAB), which covers all or portions of the counties of Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Sonoma, and Solano. In a larger sense, however, the relevant geographic area is the entire Earth, as explained by the California Supreme Court. “[B]ecause of the global scale of climate change, any one project’s contribution is unlikely to be significant by itself.” (*Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal.4th 204, 219.) “With respect to climate change, an individual project’s emissions would most likely not have any appreciable impact on the global problem by themselves, but they would contribute to the significant cumulative impact caused by greenhouse gas emissions from other sources around the globe. The question therefore becomes whether the proposed project’s incremental addition of greenhouse gases is “cumulatively considerable” in light of the global problem, and thus significant.” (*Id.*, quoting Crockett, *Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California’s Search for Regulatory Certainty in an Uncertain World* (July 2011) *Golden Gate U. Env’tl. L.J.* 203, 207–208).)

The proposed project would emit new GHG emissions, as would other past, present, and reasonably foreseeable projects within the Air Basin. The BAAQMD provides guidance for evaluating whether a project would contribute its “fair share” of what will be required to achieve California’s long-term climate goal of carbon neutrality by 2045, in which case a reviewing agency can find that the impact will not be significant because the project will help to solve the problem of global climate change. The analysis showed that the proposed project would have a less than significant GHG impact and as such, would result in a less than significant cumulative impact as well. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable future development in the Air Basin and around the world, would not result in a significant cumulative GHG emissions impact. The proposed project’s contribution would not be cumulatively considerable and thus less than significant.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

None required.

Level of Cumulative Significance After Mitigation

Less than significant impact.

3.8 - Hazards and Hazardous Materials

3.8.1 - Introduction

This section describes the existing hazards and hazardous materials setting and the potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on a Phase I Environmental Site Assessment (ESA) prepared by Cameron-Cole, LLC on April 27, 2023, included in this Draft Environmental Impact Report (Draft EIR) as Appendix G.

No public comments pertaining to hazards and hazardous materials were received in response to the Notice of Preparation (NOP).

3.8.2 - Environmental Setting

Hazardous Materials

Hazardous materials, as defined by the California Code of Regulations, are substances with certain physical properties that could pose a substantial present or future hazard to human health or the environment when improperly handled, disposed of, or otherwise managed. Hazardous materials are grouped into the following four categories, based on their properties:

- Toxic: Causes human health effects
- Ignitable: Has the ability to burn
- Corrosive: Causes severe burns or damage to materials
- Reactive: Causes explosions or generates toxic gases

Hazardous waste is any hazardous material that is discarded, abandoned, or slated to be recycled. The criteria that define a material as hazardous also define a waste as hazardous. If improperly handled, hazardous materials and hazardous waste can result in public health hazards if released into the soil or groundwater or through airborne releases in vapors, fumes, or dust. Soil and groundwater having concentrations of hazardous constituents higher than specific regulatory levels must be handled and disposed of as hazardous waste when excavated or pumped from an aquifer. The California Code of Regulations, Title 22, Sections 66261.20-24 contains technical descriptions of toxic characteristics that could cause soil or groundwater to be classified as hazardous waste.

Common Hazardous Materials

Asbestos

Asbestos is the name given to a number of naturally occurring, fibrous silicate minerals mined for their useful properties, such as thermal insulation, chemical and thermal stability, and high tensile strength. Asbestos is commonly used for acoustic insulation, thermal insulation, fireproofing, and in other building materials. Asbestos is made up of microscopic bundles of fibers that may become airborne when asbestos-containing materials are damaged or disturbed. When these fibers get into the air, they may be inhaled into the lungs, where they can cause significant health problems. The California Occupational Health and Safety Administration (Cal/OSHA) defines asbestos-containing construction materials as any material that contains more than 0.1 percent asbestos by weight.

There are no structures on the project site; thus, there is no basis to assume presence of asbestos-containing materials.

Lead

Lead is a highly toxic metal that was used until the late 1970s in a number of products, most notably in paint. Lead may cause a range of health effects, from behavioral problems and learning disabilities to seizures and death. Primary sources of lead exposure are deteriorating lead-based paint, lead-contaminated dust, and lead-contaminated soil. Both the United States Environmental Protection Agency (EPA) and the California Department of Health Services define lead paint as containing a minimum of 0.5 percent by weight. Lead-containing waste materials with a concentration greater than 0.1 percent are considered hazardous waste by California law.

There are no structures on the project site; thus, there is no basis to assume presence of lead-based paint.

Polychlorinated Biphenyls

Polychlorinated biphenyls (PCBs) are mixtures of synthetic chemicals with similar chemical structures. PCBs can range from oily liquids to waxy solids. Because of their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications, including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other applications. Electrical transformers are one of the most common sources of PCBs.

There are no structures or electrical transformers on the project site thus, there is no basis to assume presence of PCBs.

Radon

Radon is a carcinogenic, radioactive gas resulting from the natural breakdown of uranium in soil, rock, and water. Radon gas enters a building through cracks in foundations and walls. Once inside the building, radon decay products may become attached to dust particles and inhaled, or the decayed radioactive particles alone may be inhaled and cause damage to lung tissue. The EPA has established a safe radon exposure threshold of 4 picocuries per liter of air (pCi/l).

The California Department of Health Services has conducted more than 48,000 indoor radon tests in more than 1,700 zip codes through the State, including in the 94503 (American Canyon) zip code. A total of 18 tests have been conducted in the 94503 zip code, none of which yielded indoor radon levels above 4 pCi/l¹.

¹ California Department of Health Services. 2016. California Indoor Radon Levels. Website: <https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/EMB/Radon/Radon%20Test%20Results.pdf>. Accessed March 17, 2023.

Low-Frequency Electromagnetic Fields

Electrical transmission and distribution lines emit extremely low-frequency electromagnetic fields (EMFs), which have been suspected to be linked to cancer. However, scientific research has never conclusively established a link between EMFs and cancer. In 2007, the World Health Organization issued a report titled “Extremely Low-Frequency Fields, Environmental Health Criteria Monograph No. 238” that concluded that evidence between extremely low-frequency EMFs and childhood leukemia is not strong enough to be considered causal, although it did note that the issue still was of concern. The same report indicated that there is inadequate evidence or no evidence linking low-frequency EMFs and health effects associated with all other diseases.

The nearest high voltage electrical transmission line (i.e., tower line) is located 1.7 miles south of the project site.

Aviation

The Napa County Airport is located 1.65 miles north of the project site and is within Zone D of the Napa County (County) Airport Land Use Compatibility Plan (ALUCP). The County-owned airport consists of three runways, ranging from 2,500 to 5,930 feet in length.² The airport averages 446 operations per day and 163,000 operations annually (the Federal Aviation Administration [FAA] defines an “operation” as one takeoff or landing).³

The County ALUCP contemplates aviation activity at Napa County Airport increasing to 575 operations per day (or approximately 210,000 operations annually).⁴

Phase I ESA

A Phase I ESA was prepared by Cameron-Cole, LLC on April 27, 2023, to evaluate the presence or likely presence of hazardous substances within the project site. Cameron-Cole used historical resources, personal interviews, and federal and State agency files regarding site operations and past historical use, as well as site reconnaissance to inform their conclusions.

Recognized Environmental Conditions

A recognized environmental condition (REC) is defined as the presence of either:

- Hazardous substances or petroleum products in, on, or at the project site to a release to the environment
- The likely presence of hazardous substances or petroleum products in, on, or at the project site due to a release or likely release to the environment, or
- The presence of hazardous substances or petroleum products in, on, or at the project site under conditions that pose a material threat of a future release to the environment.

² County of Napa. Flight Planning. Website: <https://www.countyofnapa.org/1012/Flight-Planning#:~:text=Napa%20County%20Airport%20%2D%20APC&text=Runways%3A,%3A%20134.0%2C%20Double%20tandem%3A%20120.0>. Accessed April 16, 2024.

³ Napa County Airport Land Use Commission. 1999. Airport Land Use Compatibility Plan. December 15.

⁴ Ibid.

The Phase I ESA did not identify any RECs at the time of the report.

Record Searches

Cameron-Cole performed a query of Envirosearch for a comprehensive government agency information search in accordance with American Society of Testing and Materials (ASTM) International Standard E1527-21. The project site was not identified in any of the standard or other ascertainable records databases searched.

Through the review of historical sources, Cameron-Cole identified that the property at 2 Eucalyptus Drive, which is directly east of the project site, was listed in the National Pollutant Discharge Elimination System (NPDES) and the Napa County Leaking Underground Storage Tank (LUST) databases. Note that this property historically included the project site until approximately 2012. In 1990, the property was inspected by Napa County officials. Two 10,000-gallon underground storage tanks (USTs), one 3,000-gallon UST, 55-gallon drums, and hazardous materials were observed in a section of the property east of the project site. These items have since been removed from the adjoining property. The site has undergone two Phase I ESAs as well as a Limited Site Investigation including soil sampling.

The record search identified off-site points of interest with respect to interpreted groundwater flow direction, which is inferred to flow west (Table 3.8-1). However, it was determined that none of the sites in the surrounding areas present an environmental threat to the subject property.

Table 3.8-1: Off-site Points of Interest

Name	Relationship to Project Site (approximate)	Summary
SDG Commerce 330	420 feet south	No violations are listed for this site.
2 Eucalyptus Drive (Napa Junction Elementary School)	1,229 feet southeast	This site is listed as a dredge/fill site. No violations are listed for the project site.
American Canyon Wastewater Treatment Facility	1,021 feet northwest	Sewage treatment facility. California Hazardous Material Incident Report System (CHMIRS)—CA database description mentions a sewage release into a tributary of the Napa River in 2014. The release is contained but unrecoverable. DOCKET database lists the site with the Enforcement Action Case Number CA-200018545. The site has an NPDES Individual Permit, which is expired. The site is listed in the Enforced Permit Compliant Facilities (PCS)

Name	Relationship to Project Site (approximate)	Summary
		ENF) database, which is the federal equivalent of NPDES, as a State Clean Water Act Penalty. No other databases list violations for the site.
Source: Cameron-Cole 2023.		

Site Reconnaissance

Cameron-Cole conducted a site reconnaissance on March 13, 2023, to determine the presence or absence of hazardous substance or petroleum product storage areas or spills as indicated by stressed vegetation, soil staining, storage tanks, drums, etc.

A very minimal oil sheen was observed on a puddle of water in the western portion of the project site. The sheen was determined to be de minimis and is likely attributed to naturally occurring oils from the historic eucalyptus groves on and adjacent to the project site. Furthermore, a de minimis amount of household waste was noted during site reconnaissance. No hazardous waste was observed during the site reconnaissance. Several rock piles were present throughout the project site. A large mound of soil was observed on the southern edge of the project site. The property owner stated that the soil observed on the project site was excess soil placed there during the development of the adjoining property to the south.

Historical Use and Soil Testing

The Phase I ESA found, through the review of historical and aerial photographs, that the project site may have historically been used for agricultural purposes, which commonly is associated with the use of pesticides, herbicides, or fertilizers. However, no evidence of improper applications, releases, or potential releases of agricultural chemicals were noted in the report. As such, the possible historic use of the subject property for agricultural purposes is not considered an REC.

The project site contained a eucalyptus tree grove that existed from at least 1937 through approximately 2012 and was used for paintball activities from approximately 1992 until approximately 2012. A Limited Site Investigation of the 2 Eucalyptus Drive property (of which the project site was formerly a part of), prepared by ICES on April 19, 2019, included soil testing from within the project site. Total petroleum hydrocarbons as diesel (TPHd) was detected above the reported residential Environmental Screening Level (ESL) from soils within the project site, but it is assumed to be the result of the natural oil compounds in eucalyptus trees. Further, the levels of TPHd detected are below the current ESL. Arsenic and vanadium were also identified at concentrations above the stated Regional Screening Levels (RSLs) in project site soil samples but were within background levels for area soils. As such, the concentrations of TPHd, arsenic, and vanadium identified during the 2010 Limited Site Investigation in soils on the project site are not considered recognized environmental conditions for the subject property.

3.8.3 - Regulatory Framework

Federal

Federal Toxic Substances Control Act and Resource Conservation and Recovery Act

The Federal Toxic Substances Control Act of 1976 and the Resource Conservation and Recovery Act of 1976 (RCRA) regulate the generation, transportation, treatment, storage, and disposal of hazardous and non-hazardous waste. The regulatory program is administered by the EPA. It mandates that hazardous waste be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities. RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the “cradle to grave” system of regulating hazardous wastes. The HSWA also prohibited the use of certain techniques for the disposal of some hazardous wastes and provided the framework for a regulatory program designed to prevent releases from USTs. The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks and performance standards to ensure that the stored material will not corrode the tanks.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) introduced active federal involvement to emergency response, site remediation, and spill prevention, most notably the Superfund program. The Act was intended to be comprehensive in encompassing both the prevention of and response to uncontrolled hazardous substances releases. The Act deals with environmental response, providing mechanisms for reacting to emergencies and to chronic hazardous material releases. In addition to establishing procedures to prevent and remedy problems, it establishes a system for compensating appropriate individuals and assigning appropriate liability. It is designed to plan for and respond to failure in other regulatory programs and to remedy problems resulting from action taken before the era of comprehensive regulatory protection.

Transportation of Hazardous Materials

The Hazardous Materials Transportation Act of 1974, as amended, is the basic statute regulating hazardous materials transportation in the United States. Transportation of hazardous materials is regulated by the United States Department of Transportation (USDOT) Office of Hazardous Materials Safety. The Office of Hazardous Materials Safety formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 Code of Federal Regulations Parts 100-185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections; use of vehicle controls and equipment, including emergency equipment; procedures for safe operation of the transport vehicle; instruction on the properties of

the hazardous material being transported; and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 Code of Federal Regulations Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

State

Cortese List

The provisions in Government Code Section 65962.5 are commonly referred to as the "Cortese List." The list, or a site's presence on the list, has bearing on the local permitting process as well as on compliance with the California Environmental Quality Act (CEQA). While Government Code Section 65962.5 makes reference to the preparation of a "list," many changes have occurred related to web-based information access since 1992 and this information is now largely available on the websites of GeoTracker and EnviroStor. Those requesting a copy of the Cortese "list" are now referred directly to the appropriate information resources contained on the internet web sites (e.g., GeoTracker and EnviroStor).

Handling and Storage of Hazardous Waste

The handling and storage of hazardous materials is regulated on the federal level by the EPA under the CERCLA as amended by the Superfund Amendments and Reauthorization Act (SARA). Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses that store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

In California, the handling and storage of hazardous materials is regulated by Chapter 6.95 of the California Health and Safety Code. Under Sections 25500-25543.3, facilities handling hazardous materials are required to prepare a Hazardous Materials Business Plan. The business plan provides information to the local emergency response agency regarding the types and quantities of hazardous materials stored at a facility and provides detailed emergency planning and response procedures in the event of a hazardous materials release. In the event that a facility stores quantities of specific acutely hazardous materials above the thresholds set forth by the California code, facilities are required to prepare a Risk Management Plan and California Accidental Release Plan, which provide information on the potential impact zone of a worst-case release and requires plans and programs designed to minimize the probability of a release and mitigate potential impacts.

California Hazardous Waste Control Law

The California Hazardous Waste Control Law (HWCL) is administered by the California Environmental Protection Agency (Cal/EPA) to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the EPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and approximately 300 common materials that may

be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal, and transportation; and identifies some wastes that cannot be disposed of in landfills.

The California Code of Regulations, Title 22, Chapter 11, Article 2, Section 66261.10 defines hazardous waste as a substance that may:

- (1) Cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported, or disposed or otherwise managed.

According to California Code of Regulations Title 22, substances having a characteristic of toxicity, ignitability, corrosivity, or reactivity are considered hazardous waste. Hazardous wastes are hazardous substances that no longer have a practical use, such as material that has been abandoned, discarded, spilled, or contaminated or is being stored prior to proper disposal.

Toxic substances may cause short-term or long-lasting health effects, ranging from temporary effects to permanent disability or death. For example, toxic substances can cause eye or skin irritation, disorientation, headache, nausea, allergic reactions, acute poisoning, chronic illness, or other adverse health effects if human exposure exceeds certain levels. (The level depends on the substance involved.) Carcinogens (substances known to cause cancer) are a special class of toxic substances. Examples of toxic substances include most heavy metals, pesticides, and benzene (a carcinogenic component of gasoline). Ignitable substances are hazardous because of their flammable properties. Gasoline, hexane, and natural gas are examples of ignitable substances. Corrosive substances are chemically active and can damage other materials or cause severe burns upon contact. Examples include strong acids and bases such as sulfuric (battery) acid or lye. Reactive substances may cause explosions or generate gases or fumes. Explosives, pressurized canisters, and pure sodium metal (which reacts violently with water) are examples of reactive materials.

Other types of hazardous materials include radioactive and biohazardous materials. Radioactive materials and wastes contain radioisotopes, which are atoms with unstable nuclei that emit ionizing radiation to increase their stability. Radioactive waste mixed with chemical hazardous waste is referred to as “mixed wastes.” Biohazardous materials and wastes include anything derived from living organisms. They may be contaminated with disease-causing agents, such as bacteria or viruses.

The Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that any business that handles hazardous materials prepare a business plan that must include details, including floor plans, of the facility and business conducted at the site, an inventory of hazardous materials that are handled or stored on the site, an emergency response plan, a training program in safety procedures and emergency response for new employees, and an annual refresher course in the same topics for all employees.

The Porter-Cologne Water Quality Act (California Water Code, Section 13000, *et seq.*) established the authority of the California State Water Resources Control Board (State Water Board) and provided

the Regional Water Quality Control Board (RWQCB) with the primary responsibility of the protection of water quality in the State of California.

Hazardous Materials Worker Safety

Cal/OSHA and the Federal Occupational Safety and Health Administration (OSHA) are the agencies responsible for assuring worker safety by developing and enforcing workplace safety regulations in the handling and use of chemicals in the workplace. Cal/OSHA standards are generally more stringent than federal regulations. The employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure (8 CCR §§ 337-340, Chapter 3.2). The regulations specify requirements for employee training, availability of safety equipment, accident prevention programs, and hazardous substance exposure warnings.

California Fire Code

California Code of Regulations, Title 24, also known as the California Building Standards Code, contains the California Fire Code at Part 9. The California Fire Code includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The Fire Code requires two points of vehicular access for any nonresidential building 30 feet tall or higher.

California Department of Transportation and California Highway Patrol

The California Vehicle Code Section 31303 requires that hazardous materials be transported via routes with the least overall travel time and prohibits the transportation of hazardous materials through residential neighborhoods. In California, the California Highway Patrol (CHP) is authorized to designate and enforce route restrictions for the transportation of hazardous materials. To operate in California, all hazardous waste transporters must be registered with the California Department of Toxic Substances Control (DTSC). Unless specifically exempted, hazardous waste transporters must comply with the CHP Regulations, the California State Fire Marshal Regulations, and the USDOT Regulations. In addition, hazardous waste transporters must comply with Division 20, Chapter 6.5, Article 6 and 13 of the California Health and Safety Code and Title 22, Division 4.5, Chapter 13 of the California Code of Regulations, both of which are administered by the DTSC.

San Francisco Bay Regional Water Quality Control Board

There are nine RWQCBs throughout the State. The San Francisco Bay RWQCB has jurisdiction over the City of American Canyon. Individual RWQCBs function as the lead agencies responsible for identifying, monitoring, and cleaning up LUSTs. Storage of hazardous materials in USTs is regulated by the State Water Board, which oversees the nine RWQCBs.

California State Aeronautics Act

The State Aeronautics Act, Public Utilities Code Section 21001, *et seq.* are the foundation for the California Department of Transportation (Caltrans) Division of Aeronautics aviation policies. The Division issues permits for and annually inspects hospital heliports and public use airports, makes recommendations regarding proposed school sites within 2 miles of an airport runway, and authorizes helicopter landing sites at/near schools. Aviation system planning provides for the integration of aviation into transportation system planning on a regional, Statewide, and national

basis. The Division of Aeronautics administers noise regulation and land use planning laws that foster compatible land use around airports and encourages environmental mitigation measures to lessen noise, air pollution, and other impacts caused by aviation. The Division of Aeronautics also provides grants and loans for safety, maintenance, and capital improvement projects at airports.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following guiding and implementing policies relevant to hazards and hazardous materials:

- Goal 1N** Ensure the compatibility of development within American Canyon with the Napa County Airport.
- Objective 1.27** Ensure that lands in American Canyon are developed in a manner which protects them from the noise and operational impacts of, and does not adversely constrain, the Napa County Airport.
- Policy 1.27.2** Review all applications for new development, expansion of existing uses, and reuse within Napa County Airport Compatibility Zones “A” through “E” for compliance with the appropriate use and development conditions.
- Goal 6A** Maintain a high level of fire protection and emergency services to City/District businesses and residences.
- Objective 6.3** Ensure that the Fire District’s facility, manpower and equipment needs keep pace with the City’s growth.
- Policy 6.3.1** Require that City planning staff work closely with Fire District officials to ensure that fire facilities and personnel are expanded commensurably to serve the needs of the City’s growing population and development base.
- Policy 6.4.3** Require, through the development review process, that all structures and facilities subject to the District’s jurisdiction adhere to City, State, and federal regulatory standards such as the Uniform Building and Fire Codes and other applicable safety guidelines.

County of Napa

Napa County Airport Land Use Compatibility Plan

The ALUCP governs land use around two Napa County aviation facilities: the Napa County Airport and Parrett Field in Angwin. The ALUCP was adopted by the Napa County Airport Land Use

Commission in April 1991 and revised in December 1999. The project site is within Zone D of the ALUCP.⁵

Flight Hazards

The ALUCP identifies two categories of flight hazards: physical obstructions and land use characteristics.

Physical obstructions are associated with tall objects or structures. The ALUCP establishes a height restriction ranging from 50 feet to 185 feet above ground level.

Land use characteristics involve uses that may produce hazards to aviation. Specific characteristics prohibited within the airport land use planning boundaries are listed below:

- Glare or distracting lights, which could be mistaken for airport lights
- Sources of dust, steam, or smoke that may impair pilot visibility
- Sources of electrical interference with aircraft communications or navigation
- Any use that may attract large flocks or birds, especially landfills or certain agricultural uses

Zone D

The ALUCP provides the following description of Zone D in Table 3-1:

Common Traffic Pattern: This area is defined by the flight pattern of each airport and illustrated in the respective “Airport Impact Areas” figures contained in Part III. These areas are routinely overflowed by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 feet above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes (especially on circle-to-land instrument approaches), a moderate level of risk exists.

The ALUCP establishes the following standards for Zone D:

- Maximum density recommendation of 100 persons per acre inside structures for nonresidential uses.
- Maximum density recommendation of 150 persons per acre (both indoors and outdoors) for nonresidential uses.
- Residential uses are prohibited.
- Uses hazardous to flight are prohibited (i.e., features that attract large numbers of birds and sources of smoke, glare, distracting lights, or electrical interference).
- Overflight easement or deed restrictions are required.

⁵ Napa County Airport Land Use Commission. 1999. Napa County Airport Land Use Compatibility Plan.

- Building envelopes and approach surfaces are required on all development plans within 100 feet of approach zones.
- Clustering is encouraged to maximize open land areas.
- Noise level reduction measures may be required for noise-sensitive uses.

The ALUCP states that most nonresidential uses are considered “normally acceptable” within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheatres, and ponds are identified as “not normally acceptable” within Zone D.

Hazard Mitigation Plan and Emergency Operation Plan

The City of American Canyon is included in the Napa County Hazard Mitigation Plan, which provides an explanation of prevalent hazards within the County and how those hazards may affect the County. The Plan identifies mitigation strategies to respond to the potential hazards, including actions to achieve the greatest risk reduction based upon available resources.⁶

The City of American Canyon is also included in the County of Napa Emergency Operation Plan which addresses coordinated and planned response to extraordinary emergency situations within the County. The Plan is a guide for the response to, management of, and recovery from emergencies.⁷

3.8.4 - Methodology

FirstCarbon Solutions (FCS) evaluated potential impacts on hazards and hazardous materials based on a Phase I ESA and site reconnaissance prepared by Cameron-Cole, LLC on April 27, 2023.

3.8.5 - Thresholds of Significance

The lead agency utilizes the criteria in the CEQA Guidelines Appendix G Environmental Checklist to determine whether hazards and hazardous materials impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

⁶ Napa County. 2020. Hazard Mitigation Plan. Website: <https://www.cityofamericancanyon.org/government/public-safety/emergency-preparedness/hazard-mitigation-plan>. Accessed May 31, 2023.

⁷ Napa County. 2016. Emergency Operations Plan. Website: <https://www.cityofamericancanyon.org/government/public-safety/emergency-preparedness/hazard-mitigation-plan>. Accessed May 31, 2023.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working the project area?
- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?
- g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury, or death involving wildland fires? (Refer to Section 4, Effects Found Not To Be Significant.)

3.8.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Routine Transport, Use, or Disposal of Hazardous Materials/Risk of Upset

Impact HAZ-1: **Buildout of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.**

Impact Analysis

This impact assesses both threshold (a) and (b).

Construction

Construction activities would entail the use of heavy equipment on the project site. Potential hazardous materials transported, used, or disposed of during project construction would be limited to commonly used substances such as gasoline, diesel, oil, grease, mechanical fluids, paints, and cleaning solvents. Construction equipment would be serviced by trained technicians and potentially hazardous materials would be stored in secured facilities. Furthermore, the safe handling of these commonly used substances is governed by occupational health and safety laws and regulations and construction contract requirements. Therefore, the use of this equipment and these substances during construction would not present any undue risks to the public or the environment.

Operation

The proposed wine warehouse would be used for distribution, fulfillment, and storage of a non-hazardous commodity (wine). No large quantity hazardous materials handling would occur.

The proposed end user would be expected to handle small quantities of commonly used hazardous substances such as cleaning solvents, diesel, gasoline, grease/degreasers, mechanical fluids, and oil as part of daily operations. Given the small quantities involved and the characteristics of use (e.g., routine maintenance and cleaning), their use would not be considered a potential significant risk to human health or the environment. The use of acutely hazardous materials of any quantity that have the potential to result in releases that could potentially expose substantial numbers of people or the environment to harm is not anticipated by project end uses.

Furthermore, as summarized in Section 3.7.2, Environmental Setting, the project site does not have RECs or conditions that would create a risk of release of hazardous materials during ground disturbance or during operation of the proposed project.

American Canyon Water Reclamation Facility

The American Canyon Water Reclamation Facility is located approximately 1,021 feet northwest of the project site. Gaseous chlorine is typically used during wastewater treatment and can pose a significant risk to human health because of its properties. In this case, the Water Reclamation Facility does not handle or store gaseous chlorine, which precludes the possibility of the proposed project being exposed to such a release.

Agricultural Chemicals

The project site does not support cultivated agriculture. Aerial photographs and historic topographical maps indicate that the project site has not supported cultivated agricultural production since the 1950s. Thus, there is no basis to assume presence of agricultural chemicals, including herbicides and pesticides.

Hazardous Building Materials

The project site does not contain any structures. Aerial photographs and historic topographical maps indicate that the project site has not supported structures in the past; thus, there is no basis to assume the presence of hazardous building materials including asbestos, lead, or PCBs.

Radon

The California Department of Health Services has conducted more than 48,000 indoor radon tests in more than 1,700 zip codes through the State, including in the 94503 (American Canyon) zip code. A total of 18 tests have been conducted in the 94503 zip code, none of which yielded indoor radon levels above 4 pCi/l. Moreover, the proposed project proposes slab-on-grade construction, which has a low susceptibility to radon intrusion. In contrast, buildings with subsurface spaces such as basements or parking garages have a much higher susceptibility to radon intrusion.

Electromagnetic Fields

There are no high voltage electrical facilities (e.g., tower lines) within 0.5 mile of the project site. As such, the proposed project site would not be exposed to high levels of low-frequency EMFs.

Conclusion

In summary, the construction and operational activities of the proposed project would not create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials and would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Exposure of Schools to Hazardous Materials

Impact HAZ-2: **The proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.**

Impact Analysis

Napa Junction Magnet Elementary School is located 1,000 feet southeast of the project site, which is less than 0.25 mile.

However, the proposed wine warehouse would be used for distribution, fulfillment, and storage of a non-hazardous commodity (wine). No large quantity hazardous materials handling would occur. Furthermore, the proposed end user would be expected to handle small quantities of commonly used hazardous substances such as cleaning solvents, diesel, gasoline, grease/degreasers, mechanical fluids, and oil as part of daily operations. Given the small quantities involved and the characteristics of use (e.g., routine maintenance and cleaning), their use would not be considered a potential risk to Napa Junction Magnet Elementary School. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Government Code Section 65962.5 Sites—Cortese List

Impact HAZ-3: **The proposed project would not 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 not create a significant hazard to the public or the environment.**

Impact Analysis

Cortese List

The project site is not listed on the Cortese List, which includes various hazardous materials databases compiled to Government Code 65962.5.

Two sites within 0.75 mile of the project site are listed on the Cortese List. Both are listed as “Case Closed,” signifying that the regulatory agency with jurisdiction has determined that no further action is necessary. Thus, they do not pose a risk to human health or the environment and the proposed project would not be exposed to hazards or hazardous materials from past uses of the project site or the site vicinity. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Airports

Impact HAZ-4: **The proposed project would not create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport.**

Impact Analysis

The project site is located 1.65 miles south of the Napa County Airport and is within Zone D of the Napa County ALUCP.

As explained in Section 3.5.6 of this Draft Environmental Impact Report (Draft EIR), the California Supreme Court, in *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 377, has held generally “agencies subject to CEQA generally are *not* required to analyze the impact of existing environmental conditions on a project’s future users or residents.” However, the Court recognized that the Legislature has created an exception with respect to noise, safety, and land use compatibility issues near airports (*Id.* at p. 391). Public Resources Code Section 21096[a] creates special rules for EIRs prepared for projects either “situated within airport land use compatibility plan boundaries” or, where no such plan is in place, “within two nautical miles of a public airport or public use airport.” Such EIRs must use “the Airport Land Use Planning Handbook” published by the Division of Aeronautics of the Department of Transportation as a technical resource.

The Napa County ALUCP states that most nonresidential uses are considered “normally acceptable” within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheaters, and ponds are identified as “not normally acceptable” within Zone D. In addition, uses that are hazardous to flight are prohibited (i.e., features that attract large numbers of birds and are sources of smoke, glare, distracting lights, or electrical interference). The proposed project’s wine warehouse end use is nonresidential in nature and, thus, would be acceptable within Zone D.

Finally, there are no project attributes that would produce sources of smoke, glare, distracting lights, or electrical interference. Therefore, the proposed project complies with the applicable safety requirements of Zone D. As such, the proposed project would not create aviation safety hazards for persons residing or working within 2 miles of the Napa County Airport. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Emergency Response and Evacuation

Impact HAZ-5: **The proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**

Impact Analysis

Vehicular and truck access would be taken from one driveway on Commerce Court that would be shared with the SDG Commerce 330 project. Drive aisles would be provided around the full perimeter of the building to support emergency ingress and egress. In addition, internal connection to the SDG Commerce 217 Warehouse to the north and the SDG Commerce 330 Warehouse to the south would also be provided. Accordingly, the proposed project would provide two points of emergency access and, thus, would comply with California Fire Code requirements.

The bike path south of the Commerce Court cul-de-sac, which provides provide connection to Eucalyptus Drive, has a gated Emergency Vehicle Access point. This would be available for emergency response and evacuation to and from the project site.

Furthermore, no aspect of the proposed project would conflict with the Napa County Emergency Operations Plan or Hazards Mitigation Plan.

For these reasons, the proposed project would provide sufficient emergency access and would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.8.7 - Cumulative Impacts

For most topics, the geographic scope of the cumulative hazards and hazardous materials analysis is the project area. Adverse effects of hazards and hazardous materials tend to be localized; therefore, the area near the project area would be most affected by project activities. For the transport of hazardous materials, the geographic scope includes local and regional transportation facilities.

The proposed project would not result in any significant impacts associated with hazardous materials because there is no evidence of contamination from past uses and any use or storage of hazardous materials during construction or operations would be subject to compliance with regulatory requirements and mitigation measures. Accordingly, all project-related impacts associated with hazardous materials were found be less than significant. As with the proposed project, other past, present, and reasonably foreseeable projects have been and would continue to be required to comply with applicable federal, State, and local regulatory requirements regarding the transport of hazardous materials, cleanup of hazardous materials, and the use and storage of hazardous

materials during construction and operation. Additionally, hazardous material impacts tend to be localized to individual project sites. Consequently, no significant cumulative impacts would occur.

Therefore, the proposed project, in conjunction with other past, approved, and reasonably foreseeable future projects, would not have a cumulatively significant impact related to hazards and hazardous materials.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.9 - Hydrology and Water Quality

3.9.1 - Introduction

This section describes the existing hydrology and water quality setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on the Hydrology Report, Hydraulic Calculations, and Stormwater Control Plan prepared by RSA, provided in Appendix G. Additional information was obtained through site reconnaissance, review of project plans, and review of resources, including the City of American Canyon General Plan, the California Department of Water Resources (DWR) Bulletin 118, the Clean Water Act 303(d) list, and the Western Regional Climate Center.

No public comments pertaining to hydrology and water quality were received in response to the Notice of Preparation.

3.9.2 - Environmental Setting

Climate and Meteorology

The City of American Canyon (City) is characterized by a Mediterranean climate with warm summers, mild winters, and moderate precipitation. Temperatures in American Canyon range from an average monthly low of 38.3°F (degrees Fahrenheit) in January to an average monthly high of 82.1°F in September. Average annual rainfall is 24.6 inches with the majority occurring from November to March. General meteorological data for the American Canyon area, as measured at the Napa State Hospital weather station,¹ are presented in Table 3.9-1.

Table 3.9-1: American Canyon Meteorological Summary

Month	Temperature (°F)		Average Precipitation (inches)
	Average Low	Average High	
January	38.3	57.0	5.14
February	40.8	61.5	4.38
March	42.0	65.0	3.35
April	43.7	69.6	1.65
May	47.6	74.6	0.68
June	51.3	79.8	0.21
July	53.4	81.9	0.02
August	53.2	81.7	0.06
September	51.5	82.1	0.31
October	47.9	76.5	1.36

¹ Western Regional Climate Center. 2022. Napa State Hospital (WRCC ID# 046074). Website: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca6074>. Accessed December 11, 2023.

Month	Temperature (°F)		Average Precipitation (inches)
	Average Low	Average High	
November	42.6	65.9	2.98
December	38.8	57.6	4.50
Annual Average	45.9	71.1	24.66

Notes:
 °F = degrees Fahrenheit
 Averages derived from measurements taken between January 1, 1893, and June 10, 2016, at Napa State Hospital (WRCC ID# 046074).
 Source: Western Regional Climate Center. 2023.

Regional Hydrology

The project site is located within the 426-square-mile Napa River Watershed. The Napa River drains 47 tributaries along its 55-mile length from the headwaters of Mount St. Helena in the Mayacamas Mountain Range at approximately 3,700 feet above mean sea level to San Pablo Bay, part of San Francisco Bay.

Within the large Napa River Watershed, major land cover types are forest (35 percent), grassland/rangeland (23 percent), and agriculture (19 percent). The San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) indicates that two-thirds of the agricultural land is vineyards and urban development covers approximately 8 percent of the watershed.² The majority of streams in the Napa Valley have been altered by urbanization, agriculture, and grazing. Since the 1800s, large sections of the Napa River have been straightened, the banks hardened, flows redirected, and several levees constructed.

Local Hydrology

At a more local scale, the project site is within the North Slough watershed. North Slough begins in the Sulfur Springs Mountains northeast of American Canyon and meanders to the southwest through the Green Island Business Park and Wetlands Edge Park to its confluence with the Napa River. North Slough is located immediately west of the project site.

The predominant soil type at the project site is Haire Clay Loam, which is identified as Hydraulic Soil Group D.³

Storm Drainage

The project site is undeveloped and does not have any existing storm drainage facilities. Runoff either ponds on-site and percolates into the soil or sheet flows into the municipal storm drainage

² San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). Basin Plan.

³ RSA. 2023. Hydrology Report for SDG Commerce 220 Distribution Center, American Canyon, CA. Project #4122068.0. July 21, 2023.

facilities within Green Island Road. Runoff from the project site moves via surface flows to the west, where it is ultimately conveyed through the North Slough to the Napa River.⁴

Surface Water Quality

The Napa River is listed as impaired on the Clean Water Act 303(d) list for pathogens and sediment/siltation. These pollutants are a result of agriculture, urban runoff, and storm sewers; land development; and construction. The Napa River was previously listed on the Clean Water Act 303(d) list for nutrients; however, the RWQCB de-listed the Napa River for this pollutant in 2014 (Resolution Number R2-2014-0006).

Groundwater

The project site is located within the 40,500-acre Napa-Sonoma Lowlands Groundwater Subbasin. The subbasin consists primarily of alluvium and alluvial fans that were deposited at and near the mouths of the Napa River and Sonoma Creek adjacent to San Pablo Bay. To a lesser extent, portions of the City are underlain by sandstone and mudstone/shale, of which the former comprises some of the more productive water-bearing units within the region. The City of American Canyon does not maintain any municipal groundwater wells; however, as many as 41 private wells have been identified that draw from the subbasin within and near the City. Nearly all of these wells reported relatively low-flow rates, ranging from 0.5 gallon per minute (gpm) to 45 gpm.⁵

Groundwater Quality

Groundwater quality in the Napa-Sonoma Lowlands Subbasin is generally suitable for municipal and agricultural uses. Primary constituents of concern are high total dissolved solids (TDS), nitrate, boron, and organic compounds. High TDS are typically found in wells in areas closest to the San Francisco Bay. The DWR indicates that the Napa-Sonoma Lowlands Subbasin shows a TDS range of 50 to 300 milligrams per liter (mg/L) with an average of 185 mg/L.

3.9.3 - Regulatory Framework

Clean Water Act

Section 303 of the Clean Water Act (CWA) requires states to adopt water quality standards for all surface waters of the United States. Water quality standards are typically numeric, although narrative criteria based upon biomonitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards (see description of the Porter-Cologne Water Quality Control Act, below). Standards are based on the designated beneficial use(s) of the water body. Where multiple uses exist, water quality standards must protect the most sensitive use.

Section 401 of the CWA requires any person applying for a federal permit or license that may result in the discharge of pollutants into waters of the United States (including wetlands) to obtain a state water quality certification. In California, such certifications are administered by the California State Water Resources Control Board (State Water Board) through the nine RWQCBs (see a description of

⁴ RSA. 2023. Hydrology Report for SDG Commerce 220 Distribution Center, American Canyon, CA. Project #4122068.0. July 21, 2023.

⁵ California Department of Water Resources (DWR). 2003. Bulletin 118: Napa-Sonoma Lowlands Groundwater Subbasin.

State regulations below). In order to acquire certification, it must be demonstrated that the activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit by a federal agency may be granted until 401 certification has been granted. Section 401 water quality certifications are typically required prior to obtaining a Section 404 permit from the United States Army Corps of Engineers (USACE).

Section 402 of the CWA mandates that certain types of construction activity comply with the requirements of the National Pollutant Discharge Elimination System (NPDES) stormwater program. In California, any construction activity (with the exception of certain industrial activities, none of which are proposed for this project) that disturbs at least 1 acre is covered under the NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) issued by the State Water Board and implemented and enforced by RWQCBs.

Pursuant to Section 402 of the CWA and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in the City of American Canyon are regulated under the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, MS4 Order No. 2013-0001-DWQ (General Permit). In 1987, Congress amended the CWA to mandate controls on discharges from municipal separate storm sewer systems (MS4s). Acting under the federal mandate and the California Water Code, California RWQCBs require cities, towns, and counties to regulate activities that can result in pollutants entering their storm drains. All municipalities prohibit non-stormwater discharges to storm drains and require residents and businesses to use Best Management Practices (BMPs) to minimize the amount of pollutants in runoff. The Municipal Regional Permit is overseen by the San Francisco Bay RWQCB. On February 5, 2013, the State Water Board reissued the Phase II Stormwater NPDES Permit for small MS4s. Provision E.12, “Post-Construction Stormwater Management Program,” mandates municipalities to require specified features and facilities—to control pollutant sources, runoff volumes, rates, and durations and to treat runoff before discharge from the site—be included in development plans of projects that create or replace 5,000 square feet or more of impervious surface as conditions of issuing approvals and permits. The new requirements continue a progression of increasingly stringent requirements since 1989.

Provision E.12 required all municipal permittees to implement these requirements by June 30, 2015, to the extent allowed by applicable law. This includes projects requiring discretionary approvals that have not been deemed complete for processing and discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals.

In July of 2014, the Bay Area Stormwater Management Agencies Association (BASMAA), through the BASMAA Phase II Committee, created the BASMAA Manual to assist applicants for development approvals to prepare submittals to demonstrate that their projects comply with the NPDES permit requirements. Applicants who seek development approvals for applicable projects should follow the manual when preparing their submittals. The manual is designed to ensure compliance with the requirements and promote integrated Low Impact Development (LID) design.

Section E.12.c of the General Permit pertains to LID and how it relates to hydromodification management. This permit provision requires that stormwater discharges not cause an increase in the

erosion potential of the receiving stream over the existing condition. Increases in runoff flow and volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

Section 404 of the CWA requires that a permit be obtained from the USACE prior to any activity associated with discharge of dredged or fill material into waters of the United States, including wetlands.

State

Water Quality Statutes and Regulations

Section 303(d) of the CWA requires that the State Water Board identify surface water bodies within California that do not meet established water quality standards. Once identified, the affected water body is included in the State Water Board “303(d) Listing of Impaired Water Bodies” and a comprehensive program must then be developed to limit the amount of pollutant discharges into that water body. This program includes the establishment of Total Maximum Daily Loads (TMDL) for pollutant discharges into the designated water body. The most recent 303(d) listing for California was approved by the United States Environmental Protection Agency (EPA) in 2010.

The Porter-Cologne Water Quality Control Act of 1969 authorized the State Water Board to provide comprehensive protection for California’s waters through water allocation and water quality protection. The State Water Board implements the requirement of the CWA Section 303, indicating that water quality standards have to be set for certain waters by adopting water quality control plans under the Porter-Cologne Act. The Porter-Cologne Act established the responsibilities and authorities of the nine RWQCBs, which include preparing water quality plans for areas in the region, identifying water quality objectives, and issuing NPDES permits and Waste Discharge Requirements (WDRs). Water quality objectives are defined as limits or levels of water quality constituents and characteristics established for reasonable protection of beneficial uses or prevention of nuisance. The Porter-Cologne Act was later amended to provide the authority delegated from the EPA to issue NPDES permits. The San Francisco Bay RWQCB has jurisdiction over the project site.

Post-construction stormwater controls to satisfy requirements of the NPDES Program are permitted under the Phase II Small Municipal Separate Storm Sewer System (MS4) Permit (Order R2-2015-0049). Facilities must be designed to evapotranspire, infiltrate, harvest/use, and bio treat stormwater. As of July 1, 2016, hydromodification management procedures are required.

Projects disturbing more than 1 acre of land during construction are required to comply with the General Permit. General Permit activities are regulated at a local level by the RWQCB pursuant to a general permit. No site-specific authorization is needed. To obtain coverage under the General Permit, a project applicant must provide a Notice of Intent (NOI), a Storm Water Pollution Prevention Plan (SWPPP), and other documents required by Attachment B of the General Permit. Activities subject to the General Permit include clearing, grading, and disturbances to the ground, such as grubbing or excavation.

The General Permit uses a risk-based permitting approach and mandates certain requirements based on the project risk level (Level 1, Level 2, or Level 3). The project risk level is based on the risk of sediment discharge and the receiving water risk. The sediment discharge risk depends on project location and timing (such as wet season versus dry season activities). The receiving water risk depends on whether the proposed project would discharge to a sediment-sensitive receiving water. The determination of the project risk level would be made when the NOI is filed (once more details of the timing of the construction activity are known).

The performance standard in the General Permit is that dischargers minimize or prevent pollutants in stormwater discharges and authorized non-stormwater discharges through the use of controls, structures, and BMPs. A SWPPP must be prepared by a qualified SWPPP developer who meets the certification requirements in the General Permit. The purpose of the SWPPP is (1) to help identify the sources of sediment and other pollutants that could affect the quality of stormwater discharges, and (2) to describe and ensure the implementation of BMPs to reduce or eliminate sediment and other pollutants in stormwater as well as non-stormwater discharges resulting from construction activity. Examples of BMPs include silt fencing, street sweeping, and inspection. Operation of BMPs must be overseen by a qualified SWPPP practitioner who meets the requirements outlined in the permit.

Section 1600–1616 of the California Fish and Game Code requires that the California Department of Fish and Wildlife (CDFW) be notified of activity that will: substantially divert or obstruct the natural flow of any river, stream, or lake; substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. If CDFW determines that the activity may substantially adversely affect fish and wildlife resources, a Lake or Streambed Alteration Agreement will be prepared that outlines reasonable conditions necessary to protect natural resources threatened by the proposed activity.

Stormwater Guidance Publications

California Stormwater Quality Association (CASQA), a professional organization, has published guidance for stormwater management. The organization’s Stormwater Best Management Handbook provides guidance for compliance with State stormwater regulations for construction. The Handbook provides detailed monitoring guidance and inspection forms, including a SWPPP Template. The handbook addresses selection and implementation of BMPs to eliminate or to reduce the discharge of pollutants and control or reduce impacts to the hydrologic cycle associated with development and redevelopment activities.

The California Department of Transportation (Caltrans) also has published a Stormwater Quality Handbook Construction Site Best Management Practices Manual that provides similar guidance for transportation projects.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following guiding and implementing policies relevant to hydrology and water quality:

Goal 10 Protect the lives and property of American Canyon’s residents and visitors from flood hazards.

Objective 10.1 Design both new development and redevelopment projects in a manner that minimizes hazards associated with flooding.

Policies

Policy 10.1.1 Retain and enhance natural watercourses, including perennial and intermittent streams, as the City’s primary flood control channels whenever feasible.

Policy 10.1.4 Ensure that stormwater drainage is designed for peak flow conditions.

Policy 10.1.5 Prohibit the development of structures designed for human occupancy within the 100-year floodplain, unless flood hazards are adequately mitigated. Mitigation can be accomplished by building foundations a minimum of one (1) foot above the 100-year flood elevation, or by other means approved by the City Engineer.

Policy 10.1.12 Require that proposed developments within the 100-year floodplain submit information regarding the flood hazard prepared by a qualified Civil Engineer or Hydrologist.

Policy 10.1.13 Require that proposed developments within the 100-year floodplain submit plans to adequately mitigate flood hazards and demonstrate that such improvements will not create or increase downstream or upstream flood hazards.

Stormwater Management

As required under State Water Board Order No. 2013-001 DWQ, the City of American Canyon maintains a Storm Water Management Plan (SWMP) (NPDES Permit No. CAS 612007). As one element of that program, the City requires regulated projects to address post-construction stormwater quality. The City of American Canyon requires regulated projects, such as this one, to prepare a Stormwater Control Plan in accordance with the Bay Area Stormwater Management Agencies Association–Post-Construction Manual. The Stormwater Control Plan must include post-construction stormwater treatment measures such as bioretention facilities and source control BMPs. The SWMP must also address ongoing maintenance of those facilities.

In addition, the City requires that a Preliminary Hydrology and Hydraulics Study be prepared to determine whether there are significant impacts. Storm drain design is required to conform to Section 4 of the City’s Engineering Standard Plans and Specifications for Public Improvements. Those

standards require, among other things, that post-development runoff be no greater than 90 percent of pre-development runoff.

3.9.4 - Methodology

FCS conducted site reconnaissance of the project vicinity in November 2022. Additional information was provided by review of project plans and review of resources, including the City of American Canyon General Plan, the DWR Bulletin 118, the CWA 303(d) list, and the Western Regional Climate Center.

3.9.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether hydrology and water quality impacts resulting from the implementation of the proposed project would be considered significant if the project would:

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?
- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - (i) Result in substantial erosion or siltation on- or off-site;
 - (ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - (iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
or
 - (iv) Impede or redirect flood flows?
- d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? (Refer to Section 4, Effects Found not to be Significant)
- e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? (Refer to Section 4, Effects Found not to be Significant)

3.9.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Water Quality

Impact HYD-1: The proposed project could violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.

Impact Analysis

This analysis assesses the potential for the proposed project to degrade surface water quality in downstream water bodies.

The potential for the proposed project to degrade water quality arises from (1) short-term land disturbance from construction activities and presence of contaminants associated with construction machinery, and (2) long-term changes to land use and drainage patterns that may increase the delivery of sediments, nutrients, organic compounds, trash/debris, and other contaminants to waterways tributary to the Napa River. Left unabated, increased loading of such pollutants could cause geomorphic change in downstream channel reaches, degrade habitat, and undermine TMDL and other water quality requirements.

Construction activities would disturb the entire 10.45 acres of the project site and would include grading, building construction, paving, and utility installation. Construction would require the use of gasoline and diesel-powered heavy equipment, such as bulldozers, backhoes, water pumps, and air compressors. Chemicals, such as gasoline, diesel fuel, lubricating oil, hydraulic oil, lubricating grease, automatic transmission fluid, paints, solvents, glues, and other substances, could be used during construction. An accidental release of any of these substances could degrade the quality of the surface water runoff and adversely affect receiving waters. As such, Mitigation Measure (MM) HYD-1 is proposed, requiring the development and implementation of a SWPPP to outline site-specific stormwater quality control measures (such as BMPs) during construction activities to prevent pollutants from entering downstream waterways. With implementation of MM HYD-1, construction-related water quality impacts would be reduced to a less than significant level.

As part of the proposed project, the parcel's stormwater runoff would be directed to the proposed detention/bioretention pond via storm drain pipes. The stormwater detention/bioretention pond is designed to provide sufficient capacity to accommodate and treat the stormwater in conformance with federal, State, and regional requirements. The roof drains will be connected to the proposed detention/bioretention pond and storm drain systems surrounding the building by way of down spouts on the exterior of the building.

According to the Hydrology Report, the proposed project would result in a net decrease in peak stormwater runoff rates from the existing conditions. The proposed stormwater detention and treatment satisfies the City of American Canyon Engineering Standards Plans and Specifications (ESPS) and the BASMAA Stormwater Control Plan standards.⁶

A Stormwater Control Plan was prepared for the proposed project and is included as Appendix G. The Stormwater Control Plan has been reviewed and verified by the City of American Canyon to ensure the proposed stormwater controls are adequate pursuant to the requirements of Order No.

⁶ RSA. 2023. Hydrology Report for SDG Commerce 220 Distribution Center, American Canyon, CA. Project #4122068.0. July 21, 2023.

R2-2015-0049 (or a more recent permit) and that an operation and maintenance program is in place to ensure the long-term functionality of the stormwater controls.

As indicated in the Stormwater Control Plan, post-construction typical urban contaminants associated with roadways, parking areas, and rooftops will be introduced to the project site. Moreover, the increase in impervious surface coverage increases the efficiency by which sediment and other pollutants are delivered downstream. Concentration of flow by the storm drain system could increase the erosive energy of flows, thereby increasing sediment supply from the project site. Runoff from landscaped areas may also contain residual pesticides and nutrients. Consequently, there is potential for long-term degradation of runoff water quality from the implementation of the proposed project.⁷

Utilizing a three-tiered LID/BMP design approach, the proposed project would implement the following post-construction stormwater management methods:

- Provide site-specific designed BMPs to maintain pre-development runoff characteristics, protect sensitive resource areas, and attempt to minimize new impervious areas. The site has been designed to limit the amount of disturbed area and new impervious areas.
- Utilize source control BMPs that use structural controls and operational procedures to limit pollutants at their source. The proposed project would implement the following source control BMPs: mark “No Dumping! Flows to River” on storm drain inlets; plumb interior floor drains to sanitary sewer; carefully manage pesticide use for landscaped areas; post “Do Not Dump Hazardous Materials Here” on refuse areas; utilize enclosed trash compactors; grade loading docks to minimize run-on and contain spills; and drain parking areas to bioretention planters.
- Utilize treatment control BMPs designed to reduce the amount of pollutants in stormwater and to reduce runoff rates or volumes. All new impervious areas would be routed through either a bioretention basin or an infiltration planter. The floors of bioretention basins would be amended with a layer of gravel overlain by a layer of specialized biosoil. The biosoil shall be a sandy loam material to promote infiltration while allowing for vegetation to establish. An underdrain shall be installed to facilitate infiltration as the local soils have low infiltration potential. Bioretention basins have been configured to drain within 48 hours to prevent vector concerns.

The pollution prevention measures, BMPs, LID design concepts, and ongoing maintenance requirements provided in the Stormwater Control Plan shall be implemented during construction to control stormwater pollution from operational activities and facilities. Additionally, MM HYD-1 requires the development and implementation of a SWPPP to outline site-specific stormwater quality control measures during construction activities to prevent pollutants from entering downstream waterways. The impact would be less than significant with mitigation incorporated.

⁷ RSA. 2023. Stormwater Control Plan for a Regulated Project for Commerce 220 Distribution Center, American Canyon, CA. #4122068.0. July 21, 2023.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM HYD-1 Prior to the issuance of grading permits or building permits (whichever occurs first), the project applicant shall obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (General Permit) (Order WQ 2022-0057-DWQ, NPDES No. CAS000002) by preparing a Storm Water Pollution Prevention Plan (SWPPP) and submitting it, along with a Notice of Intent (NOI), to the San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB). The City of American Canyon shall confirm that the applicant has prepared a SWPPP and obtained coverage under the General Permit prior to issuance of grading or building permits. The SWPPP shall identify a practical sequence for Best Management Practice (BMP) implementation and maintenance, site restoration, contingency measures, responsible parties, and agency contacts. The SWPPP shall address both the project site and adjacent parcel where soil stockpiles would be removed and the borrow pit would be created to provide fill for the project site. The SWPPP shall include but not be limited to the following elements:

- Temporary erosion control measures shall be employed for disturbed areas.
- No disturbed surfaces shall be left without erosion control measures in place during the winter and spring months. Disturbed areas shall be covered with soil stabilizers, mulch, fiber rolls, or temporary vegetation.
- Sediment shall be retained on-site by a system of sediment basins, traps, or other appropriate measures. Drop inlets shall be lined with filter fabric/geotextile.
- Discharge from the stormwater system shall be diffused in such a way as to mimic existing overland flow conditions.
- The construction contractor shall prepare Standard Operating Procedures for the handling of hazardous materials on the construction site to eliminate or reduce discharge of materials to storm drains. This may include locating construction-related equipment and processes that contain or generate pollutants in a secure way, away from storm drains, gutters, and wetlands; parking, fueling, and cleaning all vehicles and equipment in the secure area; designating concrete washout areas; and preventing or containing potential leakage or spilling from sanitary facilities.
- BMP performance and effectiveness shall be determined either by visual means where applicable (e.g., observation of above-normal sediment release), or by actual water sampling in cases where verification of contaminant reduction or elimination (such as inadvertent petroleum release) is required by the RWQCB to determine adequacy of the measure.
- In the event of significant construction delays or delays in final landscape installation, native grasses or other appropriate vegetative cover shall be established on the construction site as soon as possible after disturbance as an interim erosion control measure throughout the wet season.

Prior to issuance of grading permits for the proposed project, the applicant shall submit to the City of American Canyon for review and approval a SWPPP in accordance with the requirements of the Statewide General Permit. The SWPPP shall be implemented during construction.

Level of Significance After Mitigation

Less than significant impact with mitigation incorporated.

Groundwater

Impact HYD-2: **The proposed project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.**

Impact Analysis

This analysis assesses the potential for the proposed project to deplete groundwater supplies (overdraft) or interfere substantially with groundwater recharge.

Groundwater Overdraft

The proposed project would be served with potable and recycled water service provided by the City of American Canyon; potable and recycled water infrastructure currently exist within Commerce Court. The City of American Canyon Public Works Department provides potable and nonpotable water to a service area of approximately 30 square miles that encompasses city limits and its sphere of influence. The City obtains its water supply from a variety of sources, all of which (except for recycled water) are imported from outside of the City. Imported water is mostly sourced from the State Water Project (SWP) and purchased from the Napa County Flood Control and Water Conservation District (FCWCD) and the City of Vallejo.

The City of American Canyon does not maintain any municipal groundwater wells; however, as many as 41 private wells have been identified that draw from the subbasin within and near the City. The proposed project would not rely on groundwater wells as a water supply source. Therefore, the proposed project would not exacerbate groundwater overdraft (to the extent that it exists) or conflict with the provisions of a sustainable groundwater management plan. Impacts would be less than significant.

Groundwater Recharge

The proposed project would result in an increase in additional pervious surfaces. However, the project site is at a relatively low elevation and is near the Napa River; thus, groundwater levels tend to be high and soils in the lowest portions of the site are often saturated. Accordingly, the groundwater water recharge potential of the project site is limited. The proposed project includes a groundwater basin where stormwater would be allowed to infiltrate into the soils, contributing to groundwater recharge. In addition, the on-site wetlands would be preserved and would continue to contribute to groundwater recharge. For these reasons, impacts to groundwater recharge would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Drainage

Impact HYD-3: The proposed project would not substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site; (ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; (iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or (iv) impede or redirect flood flows.

Impact Analysis

The proposed project would result in the development of a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. Thus, the proposed project would increase the amount of impervious surface coverage on the project site and would create the potential for increased runoff leaving the project site that may create potential flooding conditions in downstream waterways. However, the Hydrology Report indicates that the proposed project would result in a net decrease in peak stormwater runoff rates, and the proposed detention and treatment would satisfy the City of American Canyon ESPS and the BASMAA stormwater standards.

The proposed project would install a storm drainage system designed for a 100-year/24-hour storm event, consistent with the City's engineering standards plan and specifications. Inlets would capture surface runoff, where it would enter an underground piping system that would convey stormwater to the proposed detention/bioretenion pond.

In accordance with applicable provisions of Section C.3 of the San Francisco Bay RWQCB Municipal Regional Permit (Order No. R2-2015-0049, NPDES Permit No. CAS612008 or a more recent permit), the proposed project would implement LID stormwater management methods into the on-site storm drainage system consisting of rainwater harvesting and use, infiltration, evapotranspiration, or biotreatment.

Collectively, these measures would serve to slow, reduce, and meter the volume of runoff leaving the project site and ensure that the proposed project would not substantially alter the existing drainage pattern of the project site through the addition of impervious surfaces or result in substantial erosion. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.9.7 - Cumulative Impacts

The geographic scope of the cumulative hydrology and water quality analysis is the North Slough watershed, which generally encompasses the areas south of Green Island Road on the west side of State Route (SR) 29. Hydrologic and water quality impacts tend to be localized to a watershed; therefore, the area within the North Slough watershed would be most affected by project activities.

The proposed project would involve short-term construction and long-term operational activities that would have the potential to degrade water quality in downstream water bodies. These activities are subject to regulatory requirements that would ensure no significant adverse impacts would occur. MM HYD-1 would require implementation of various construction and operational water quality control measures that would prevent the release of pollutants into downstream waterways. These measures include preparation of a SWPPP in accordance with the requirements of the Statewide Construction General Permit and compliance with the Municipal Regional Permit, including implementation of BMPs and LID features.

Other past, present, and reasonably foreseeable projects that propose new development have been and would be required to implement similar mitigation measures in accordance with applicable laws and regulations. The combined implementation of construction and operation water quality control measures by other past, present, and reasonably foreseeable projects would avoid, or reduce to a less than significant level, any related cumulative impacts on downstream waterways including North Slough and the Napa River.

All other project-related hydrology impacts were found to be less than significant and did not require mitigation (e.g., groundwater and drainage). Other past, present, and reasonably foreseeable projects that result in groundwater and drainage impacts have been and would be required to comply with applicable laws and regulations designed to protect groundwater resources and ensure adequate drainage facilities are provided for all projects and include facilities to prevent and reduce runoff from development sites.

Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable planned and approved projects in the vicinity, would not have a cumulatively significant impact related to hydrology and water quality.

Level of Cumulative Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

Implementation of MM HYD-1

Level of Cumulative Significance After Mitigation

Less than significant impact with mitigation incorporated.

3.10 - Land Use

3.10.1 - Introduction

This section describes the existing land use and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on-site reconnaissance and review of the City of American Canyon General Plan, the American Canyon Municipal Code, and the Napa County Airport Land Use Compatibility Plan (ALUCP).

The following public comments pertaining to land use were received in response to the Notice of Preparation (NOP):

- A commenter requested that the proposed project avoid land use conflicts between warehouses and sensitive receptors and mitigate the impacts of any unavoidable land use conflicts.
- A commenter asked whether a warehouse development is allowed on land zoned for Recreation.

3.10.2 - Environmental Setting

Land Use

Project Site

The project site contains undeveloped land that gently slopes from east to west and is approximately 13 to 25 feet above mean sea level. A linear wetland and another isolated wetland are located within the northern portion of the property. The southern portion of the project site contains several soil stockpiles that are intended for use at the SDG Commerce 217 property. A young eucalyptus tree is located near Commerce Court. The project frontage with Commerce Court is improved with curb, gutter, and sidewalk. Chapter 2, Project Description, Exhibit 2-3 provides photographs of the project site.

Surrounding Area

North

A wine distribution warehouse known as SDG Commerce 217 is being constructed to the north of the project site at the time of this writing. This parcel totals 10.39 acres. The area further to the north consists of multiple industrial warehouses and other industrial type land uses.

East

Commerce Court, a two-lane undivided roadway, forms the eastern boundary of the project site. A 68-foot-wide City Public Access and Utility easement is located within Commerce Court with underground sewer, water, reclaimed water, sewer force main and underground power. A eucalyptus grove is located east of Commerce Court. A residence, dirt/gravel roads, and various accessory structures are located throughout this eucalyptus grove as well as Paint Jungle, a paintball recreation area.

Land Use

South

A wine distribution warehouse known as SDG Commerce 330 is located south of the project site. This parcel totals 15.24 acres. Napa Junction Magnet Elementary School is located further to the south.

West

An 11.23-acre parcel containing a eucalyptus grove and North Slough are located west of the project site. The American Canyon Water Reclamation Facility is located west of North Slough. Further west is the Napa River and associated wetlands.

Land Use Designations

Project Site

The project site is designated Commercial Recreation (CR) by the City of American Canyon General Plan¹ and zoned Recreation (REC).² A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The Ordinance allows wine-related warehousing and distribution facilities as a conditionally permitted use within the REC zoning district.

A Recreation Zoning District Code Amendment (Ordinance No. 2018-01) was adopted by the City Council on January 16, 2018. The adopted Ordinance was “to make winery uses more feasible” and allows wine-related warehousing and distribution facilities as conditionally permitted uses within the REC zoning district.

Surrounding Land Uses

Table 3.10-1 summarizes the surrounding land uses. As shown in the table, all surrounding properties are designated for either industrial or public use.

Table 3.10-1: Surrounding Land Use Designations

Land Use	Relationship to Project Site	Land Use Designation	
		General Plan	Zoning
American Canyon Water Reclamation Facility	West	Public	Public
Eucalyptus grove	West	Commercial Recreation	Recreation
SDG Commerce 217 (Warehouse under construction)	North	Commercial Recreation	Recreation
Eucalyptus grove/Residence	East	Commercial Recreation	Recreation
SDG Commerce 330 (Existing Warehouse)	South	Commercial Recreation	Recreation

¹ City of American Canyon. 1992. General Plan.

² City of American Canyon. 2022. Zoning Ordinance.

Land Use	Relationship to Project Site	Land Use Designation	
		General Plan	Zoning
Source: City of American Canyon Public Map. Website: https://gis.countyofnapa.org/portal/apps/webappviewer/index.html?id=7138cfe804e34f43a03f6bb603439965 . Accessed February 28, 2023.			

Napa County Airport

The Napa County Airport is located 1.65 miles north of the project site. The County-owned airport occupies approximately 824 acres and contains three runways (ranging from 2,510 to 5,931 feet in length), associated taxiways and tarmacs, a control tower, approximately 200 hangars, approximately 160 tie-down spaces, and a helicopter pad. The airport averages 148 operations per day and 54,020 operations annually. (The Federal Aviation Administration defines an “operation” as one takeoff or landing).

Per the Napa County ALUCP, the project site is located within Napa County Airport Land Use Compatibility Zone D (Common Traffic Pattern). Zone D is defined as the area where structures are routinely over flown by aircraft at altitudes of 300 to 1,000 feet with frequent single-event noise intrusion³.

3.10.3 - Regulatory Framework

State

State Aeronautics Act

The State Aeronautics Act requires each county with an airport to establish an Airport Land Use Commission (ALUC) to regulate land use around airports to protect public safety and ensure that land uses near airports do not interfere with aviation operations. The Napa County ALUCP regulates land use around the Napa County Airport, as well as two other aviation facilities in the County, by requiring compliance with the policies of the plan. In certain circumstances, local governments may override the decisions of the ALUC.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan provides a blueprint for future development within American Canyon and the Sphere of Influence. The American Canyon Council adopted its most recent General Plan on November 3, 1994. The General Plan contains the following chapters: land use, housing, economic development, circulation, utilities, public facilities and services, parks and recreation, natural historic/cultural resources, geology, flooding, and noise. Each chapter establishes goals and policies to guide future land use activities and development within the General Plan boundaries. Note that the Circulation Element was comprehensively updated in 2013, the Housing Element was comprehensively updated in 2015, and incremental amendments have been made to

³ Napa County Airport Land Use Commission (ALUC). 1991, as amended 1999. Napa County Airport Land Use Compatibility Plan.

the Land Use Element over time and as recently as 2021. In early 2020, the City initiated the General Plan Update process. The update will ensure that the City grows according to current community needs and priorities. The expected completion date is unknown as of the writing of this document.

Commercial Recreation

The City of American Canyon General Plan designates the project site as CR. According to Goal 1H of the General Plan, commercial recreation centers are intended to provide for the development of commercial enterprises that capitalize upon the natural environmental setting and resources of the City. Typical permitted uses include recreation vehicle parks, interpretative nature centers and conference facilities and similar uses. Density is to be determined based on characteristics of site and resources. Policy 1.21.4 indicates that the appropriate scale of development should be determined on a case-by-case basis to account for the specific environmental characteristics of a site and nature of the proposed project in areas designated as CR.

American Canyon Zoning Ordinance

American Canyon Municipal Code Title 19 contains the Zoning Ordinance. The project site is designated “Recreation” by the Zoning Ordinance. The Zoning Ordinance indicates the purpose of the Recreation zone is to maintain adequate open space, preserve important environmental resources, accommodate passive recreation, preclude development or activities in wetlands and significant habitats, and support compatible commercial activities which capitalize on local and regional agricultural vineyard resources. Zoning Ordinance (No. 2018-01) was adopted by the City Council on January 16, 2018 expanding the Zoning to “allow limited non-winery uses with a conditional use permit.” Per Municipal Code Section 19.15.020, winery related uses, including such activities as bottling, storage, logistics, distribution, wine packing and wine-related services, are conditionally permitted within the Recreation zone subject to approval of a use permit by the planning commission. However, when a discretionary application subject to a CEQA environmental review requires a statement of overriding considerations, the City Council is the approval authority (Municipal Code 19.01(C,D), Relationship to other Regulations and Requirements).

County of Napa

Napa County Airport Land Use Compatibility Plan

The Napa County ALUCP governs land use around two Napa County aviation facilities: the Napa County Airport and Parrett Field in Angwin. The ALUCP was adopted by the Napa County ALUC in April 1991, revised in December 1999, and is currently being updated with an expected completion date of late fall 2023 or spring/summer 2024.

Noise

Table 2-1 of the ALUCP identifies acceptable aviation noise levels by land use. For warehouse and light industrial uses, aviation noise levels of up to 60 A-weighted decibel (dBA) Community Noise Equivalent Level (CNEL) are listed as “clearly acceptable” and noise levels between 60 and 65 dBA CNEL are listed as “normally acceptable.” Noise levels between 65 and 75 dBA CNEL are listed as “marginally acceptable.”

Flight Hazards

The ALUCP identifies two categories of flight hazards: physical obstructions and land use characteristics.

Physical obstructions are associated with tall objects or structures. The ALUCP establishes a height restriction ranging from 50 feet to 185 feet above ground level.

Certain land use activities may pose hazards to aviation. Specific characteristics that should be avoided within the airport land use planning boundaries are listed below:

- Glare or distracting lights, which could be mistaken for airport lights.
- Sources of dust, steam, or smoke that may impair pilot visibility.
- Sources of electrical interference with aircraft communications or navigation.
- Any use that may attract large flocks or birds, especially landfills or certain agricultural uses.

Zone D

The ALUCP provides the following description of Zone D in Table 3-1:

Common Traffic Pattern: This area is defined by the flight pattern of each airport and illustrated in the respective “Airport Impact Areas” figures contained in Part III. These areas are routinely overflowed by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 feet above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes (especially on circle-to-land instrument approaches) a moderate level of risk exists.

The ALUCP establishes the following standards for Zone D:

- Maximum density recommendation of 100 persons per acre inside structures for nonresidential uses.
- Maximum density recommendation of 150 persons per acre (both indoors and outdoors) for nonresidential uses.
- Residential uses are prohibited.
- Uses hazardous to flight are prohibited (i.e., features that attract large numbers of birds and sources of smoke, glare, distracting lights, or electrical interference).
- Overflight easement or deed restrictions are required.
- Building envelopes and approach surfaces are required on all development plans within 100 feet of approach zones.
- Clustering is encouraged to maximize open land areas.
- Noise level reduction measures may be required for noise-sensitive uses.

The ALUCP states that most nonresidential uses are considered “normally acceptable” within Zone D. Schools, libraries, hospitals, nursing homes, large shopping malls, amphitheaters, and ponds are identified as “not normally acceptable” within Zone D.

3.10.4 - Methodology

FirstCarbon Solutions (FCS) evaluated the potential for land use impacts through site reconnaissance and review of applicable land use policy documents. FCS performed site reconnaissance on the project site and surrounding land uses in November 2022. Photographs were taken of the project site and surrounding land uses to document existing conditions. FCS reviewed the City of American Canyon General Plan, the American Canyon Zoning Ordinance, and the Napa County ALUCP to identify applicable policies and provisions that pertain to the proposed project. The proposed project’s plans were reviewed to evaluate consistency with General Plan and Zoning Ordinance’s standards.

3.10.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether impacts to land use are significant environmental effects. Thus, the proposed project would have a significant effect if it would:

- a) Physically divide an established community (Refer to Section 4, Effects Found not to be Significant); or
- b) 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.

3.10.6 - Project Impacts Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

General Plan Consistency

Impact LU-1: The proposed project would not conflict with the applicable provisions of the City of American Canyon General Plan.

Impact Analysis

This impact assesses project consistency with the General Plan land use designation and the applicable goals, objectives, and policies of the General Plan

Land Use Designation

The City of American Canyon General Plan designates the project site as CR. General Plan Land Use Element Goal 1H indicates the purpose of the CR designation is to provide for the development of commercial enterprises that capitalize upon the natural environmental setting and resources of the City. Density is to be determined on a case-by-case basis to account for the specific environmental characteristics of the site and nature of the proposed project area.

The proposed project would consist of the development of a 219,834-square-foot wine warehouse on the project site with a floor area ratio (FAR) of 0.496. The wine storage and distribution warehouse capitalizes on the local area's agricultural resources related to "Winery" work in conjunction with viticulture-related activities, such as bottling, storage, logistics, fulfillment, distribution, wine-packing, and wine-related services activities, including the use of cool night air for refrigeration purposes, and, therefore, is consistent with the CR designation in this regard.

The General Plan describes typical permitted uses in the CR land use category as recreation vehicle parks, interpretative nature centers and conference facilities, and similar uses.⁴ The proposed use is consistent with the Recreation Designation in the General Plan because wine-related uses are permitted uses in this designation through the implementation of the Commercial Recreation zoning district. The wine storage and distribution warehouse would be consistent with the policies of the General Plan as indicated in Table 3.10-2. The approval of significantly similar wine distribution warehouses directly to the south and north of the project site in 2019 and 2021 (Commerce 330 and Commerce 217) within the CR land use designation, confirms the proposed project's consistency with allowable uses in the CR Land Use designation. As indicated in the environmental documentation for the adjacent wine distribution warehouses, the City Attorney reviewed the allowed uses in the Recreation zone (which includes the proposed project type use) and determined they are consistent with the CR land use in the General Plan.^{5,6} Furthermore, as discussed in Impact LU-2, the proposed project would be consistent with the types of conditionally permitted uses set forth in the Zoning Ordinance for the Recreation zoning district. As such, the proposed project, with the issuance of a conditional use permit, would be consistent with the CR land use designation.

Goals, Objectives, and Policies

Table 3.10-2 evaluates project consistency with the relevant goals, objectives, and policies of the City of American Canyon General Plan. The conclusions expressed in Table 3.10-2 reflect the best judgment of City staff. The ultimate question of the meaning of particular General Plan policies, and thus the proposed project's consistency with them, lies with the City Council. The ultimate question of the meaning of particular General Plan policies, and thus the proposed project's consistency with them, lies with the City Council. The language found in general plans is sometimes susceptible to varying interpretations. Case law interpreting the Planning and Zoning Law (Government Code § 65000 *et seq.*) makes it clear that: (i) the ultimate meaning of such policies is to be determined by the elected City Council or a lower tier decision-making body such as a planning commission, as opposed to City staff and EIR consultants, applicants, or members of the public; and (ii) the decision-making body's interpretations of such policies will prevail if they are "reasonable," even though other reasonable interpretations are also possible (*See No Oil, Inc. v. City of Los Angeles* (1987) 196 Cal.App.3d 223, 245-246, 249). Courts also have recognized that, because general plans often contain numerous policies adopted to effect differing or competing legislative goals, a development project may be "consistent" with a general plan, taken as a whole, even though the project appears to be inconsistent or arguably inconsistent with some specific policies within a given general plan (*Sequoyah Hills Homeowners Association v. City of Oakland* (1993) 23 Cal.App.4th 704, 719).

⁴ City of American Canyon, General Plan Land Use Element. 1994, as amended through September 2021.

⁵ City of American Canyon, 2021, Final Initial Study for the SDG Commerce 217 Distribution Center Project. February.

⁶ City of American Canyon, 2019, Final Initial Study for the SDG Commerce 330 Warehouse Project. January.

Furthermore, courts strive to “reconcile” or “harmonize” seemingly disparate general plan policies to the extent reasonably possible (*No Oil, supra*, 196 Cal.App.3d at p. 244).

As shown in the table, City staff concludes that the proposed project is consistent with all applicable goals, objectives, and policies. Impacts would be less than significant. Should City decision-makers choose to approve the proposed project, they may rely on the analysis in the table as support for the conclusion that the proposed project is consistent with the General Plan. Certification of the Final EIR will be indicative of agreement with the conclusions in the table.

Table 3.10-2: General Plan Consistency Analysis

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
Land Use	Goal 1A	Provide for a diversity of land uses that a. serve the needs of existing and future residents; b. capitalize upon the tourism and agricultural heritage of the region; c. capitalize upon and preserves the unique environmental resources and character of the area; d. offer sustained employment opportunities for residents of the City and the surrounding region; e. sustain and enhance the long-term economic viability of the City; f. revitalize areas of physical and economic deterioration and/or obsolescence; g. are developed at densities/intensities that are economically viable and complementary with the natural environmental setting and existing development; and h. provide a greater balance of jobs and housing.	Consistent: The proposed project would develop 219,834 square feet of wine warehouse on the project site. The project site is designated Commercial Recreation (CR) by the General Plan and the end uses are consistent with the allowable uses for this land use designation. The proposed project would create approximately 35 full-time and 20 part-time jobs, stimulate capital investment, and expand the tax base. The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. As such, the proposed project would be consistent with the provisions of this goal, including serving the needs of residents, protecting environmental resources, creating employment opportunities, and balancing jobs and housing.
	Objective 1.1	Accommodate the development of a balance of land uses that (a) provide for the housing, commercial, employment, educational, cultural, entertainment, and recreation needs of residents, (b) capture visitor and tourist activity, (c) provide employment opportunities for residents of the greater sub region; and (d) provide open space and	Consistent: The proposed project would develop a 219,834-square-foot wine warehouse that would create approximately 35 full-time and 20 part-time jobs, primarily for residents of the region. The proposed project would also preserve on-site wetland areas, consistent with the item that calls for open space and aesthetic relief from developed urban areas.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		aesthetic relief from developed urban/suburban areas.	
	Policy 1.1.4	Provide adequate transportation (vehicle, bicycle, and pedestrian) and utility (sewer, water, energy, etc.) infrastructure and public services (police, fire, schools, etc.) to support the needs of the residents and businesses of American Canyon.	Consistent: This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Goal 1B	Provide for the orderly development of American Canyon that maintains its distinctive character.	Consistent: The proposed project would develop 219,834 square feet of new industrial uses on a site designated for such use located within the American Canyon city limits. The project site is surrounded by urban uses and infrastructure on three sides. As such, it is well suited for new development and would advance the goal of orderly development that maintains American Canyon’s distinctive character.
	Objective 1.2	Promote a rate of growth that is consistent with the ability of the City to provide adequate infrastructure and services and does not adversely impact the distinctive character and quality of life in American Canyon.	Consistent: The proposed project would develop 219,834 square feet of new industrial uses on a site designated for such use located within the American Canyon city limits. The project site is surrounded by urban uses and infrastructure on three sides. The proposed project would occur in an area where adequate infrastructure and services exist such that it would not exceed the City’s ability to serve it. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 1.2.2	Establish as a priority the development of projects that are contiguous with and infill the existing pattern of development, avoiding leap-frog development, except for large scale	Consistent: The project site is surrounded by urban uses and infrastructure on three sides. The proposed project would meet the

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		master planned projects that are linked to and planned to be extensions of existing development and for which infrastructure and services are in place or funded.	criteria set forth in this policy for a “priority” project.
	Objective 1.3	Ensure that land use development is coordinated with the ability to provide adequate public infrastructure (transportation facilities, wastewater collection and treatment, water supply, electrical, natural gas, telecommunications, solid waste disposal, and storm drainage) and public services (governmental administrative, capital improvements, police, fire, recreational, cultural, etc.).	Consistent: This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 1.3.1	Implement public infrastructure and service improvements necessary to support land uses accommodated by the Land Use Plan (as defined in the Circulation and Public Utilities and Services Elements.)	Consistent: Adequate infrastructure and service levels exist in the project vicinity such that only minor improvements or upgrades are necessary to serve the proposed project. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 1.3.2	Require that type, amount, and location of development be correlated with the provision of adequate supporting infrastructure and services (as defined in the Circulation and Public Utilities and Services Elements.)	Consistent: This Draft EIR evaluates the adequacy of public services, transportation facilities, and utility systems to serve the proposed project and identifies mitigation where necessary to achieve acceptable service levels. Refer to Section 3.12, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 1.3.3	Regulate the type, location, and/or timing of development as necessary in the event that there is inadequate public infrastructure or services to support land use development.	Consistent: Adequate infrastructure and service levels exist in the project vicinity such that only minor improvements or upgrades are necessary to serve the proposed project. Refer to Section 3.13, Public Services, Section 3.13, Transportation, and Section 3.14, Utilities and Service Systems, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Goal 1C	Create a pattern and character of land use development that establishes American Canyon as a distinct “place” differentiated from adjacent urban areas, maintains a semi-rural character, and respects the environmental setting.	Consistent: The project site is designated for commercial recreation. The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. As such, the proposed project would promote a development pattern that differentiates American Canyon from adjacent urban areas and also respects the natural environment.
	Objective 1.4	Provide for a pattern of development that (a) establishes distinct neighborhoods, districts, places of community activity and culture and open spaces that are interlinked and promote a cohesive image, (b) locates jobs, commerce, recreation, and other places of community activity within close proximity to all housing units, minimizing the need for vehicular use, (c) achieves a balance of uses to serve both sides of Highway 29, and (d) establishes an overall compact urban form surrounded by open space.	Consistent: The project site would be consistent with the surrounding neighborhood. The proposed project would create approximately 35 full-time and 20 part-time jobs in proximity to nearby housing to the south. The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. Accordingly, the proposed project would advance the objectives associated a cohesive image, creation of jobs near housing units, and promoting a compact urban form surrounded by open space.
	Policy 1.4.1	Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the Land Use Plan Map (Figure 1-1).	Consistent: The proposed project is consistent with the CR land use designation and is therefore consistent with the patterns and distribution of use and density depicted on the Land Use Plan Map (Figure 1-1 of the General Plan).
	Policy 1.4.2	Require that development within each land use classification adheres to applicable requirements and standards.	Consistent: The project site is designated for commercial recreation. As discussed in Impacts LU-1 and LU-2, the proposed project would comply with all applicable requirements and standards.
	Objective 1.5	Maintain the character and quality of the natural environmental resources of the City and protect the population and development from	Consistent: The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. Refer to Section 3.1,

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		the adverse impacts of environmental hazards.	Aesthetics; Section 3.3, Biological Resources; Section 3.8, Hazards and Hazardous Materials; and Section 3.9, Hydrology and Water Quality for further discussion.
	Policy 1.5.1	Require that development be designed and sited to protect significant environmental resources by adherence to the policies, standards, and programs contained in the Natural and Historic/Cultural Resources, Geology and Flood Hazards, and Noise Elements of the General Plan, as well as federal (NEPA) and State (CEQA) regulations.	Consistent: The proposed project site includes two existing isolated wetlands that would be avoided and preserved by the proposed project. Refer to Section 3.1, Aesthetics; Section 3.3, Biological Resources; Section 3.6, Geology, Soils, and Seismicity; Section 3.8, Hazards and Hazardous Materials; Section 3.9, Hydrology and Water Quality; and Section 3.11, Noise for further discussion.
	Goal 11	Ensure the development of industrial uses that provide employment for residents of American Canyon and the surrounding region and contribute significant revenue for the City.	Consistent: The proposed project would develop a 219,834-square-foot warehouse on a site designated for such use located within the American Canyon city limits. The proposed project is estimated to create approximately 35 full-time and 20 part-time jobs for local residents. As such, it would advance the goal of providing employment opportunities and contributing significant revenue for the City.
	Objective 1.22	Provide for the continuation of existing and development of new industries that capitalize upon the geographic advantages of the City (including adjacency to Napa County Airport and the railroad), the agricultural production of the region, and emerging types of businesses (such as “thematic” and “environmental” based industries), offer opportunities for the clustering of key economic sectors, and maintain the environmental quality of the City.	Consistent: The project site is designated for commercial recreation. The proposed project would develop a 219,834-square-foot wine warehouse. This is consistent with the objective of promoting the development of existing and new industries that capitalize on the geographic advantages of the City.
	Policy 1.22.2	Allow for the inclusion of businesses that are ancillary to and support industrial uses such as related retail sales facilities for manufacturers,	Consistent: The proposed project would develop a 219,834-square-foot wine warehouse uses. Ancillary office space would be

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		financial institutions, restaurants, photocopy shops, specialty recreational uses (batting cages and health clubs/spas), and similar uses.	provided within the warehouses. The provision of these ancillary uses is consistent with the intent of this policy.
	Policy 1.22.3	Permit development according to the following standards: a. Labor-intensive uses: a maximum floor area ratio of 0.5. b. Low labor uses (such as warehousing): a maximum floor area ratio of 0.7.	Consistent: The proposed project would have a 0.496 floor area ratio (FAR), which would be within the General Plan’s allowable FAR of 0.50 for labor-intensive uses and FAR of 0.70 for low labor uses.
	Policy 1.22.4	Require that development be designed to achieve a high level of quality and compatibility with existing uses including the consideration of the following: a. architectural treatment of all building elevations; b. use of extensive landscape along the primary street frontages and parking lots; and c. enclosure of storage areas visible from principal highways (including Highway 29) and peripheral residential and commercial districts with decorative screening or other elements.	Consistent: The proposed buildings would use concrete tilt-up panel construction and contemporary finishes and treatments similar to other industrial buildings in the project vicinity. Landscaping would be installed within parking areas and along the Commerce Court frontage. The City’s design review process would ensure consistency with the applicable policies.
	Policy 1.22.5	Require that industrial areas developed as research and development and office-oriented business parks be designed to convey a unified character by consideration of Policy 1.22.4 and the following: a. inclusion of pedestrian walkways, arcades, an/or other visual elements to interconnect individual buildings; b. differentiation of building façades by materials, color, architectural details and modulation of building volumes; c. incorporation of extensive landscape in parking areas, along building frontages, and other public areas; d. use of consistent and well-designed public and informational signage; and e. installation of elements that define the key entries to the industrial district.	Consistent: The proposed project would provide internal pedestrian facilities, contemporary finishes and treatments similar to other industrial buildings in the project vicinity, landscaping within parking areas and along the Commerce Court frontage, and signage consistent with this policy. The City’s design review process would ensure consistency with the applicable policies.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.22.7	Require that truck access be controlled so that it is safe and efficient and minimizes exposure to adjacent residential neighborhoods.	Consistent: Trucks would access the project site from Commerce Court via Green Island Road. The project site’s location also allows for convenient access to State Route (SR) 29 such that residential areas in American Canyon would be avoided by trucks accessing the project site.
	Goal 1N	Ensure the compatibility of development within American Canyon with the Napa County Airport.	Consistent: As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of the Napa County Airport Land Use Compatibility Plan (ALUCP). Refer to Section 3.8, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Objective 1.27	Ensure that lands in American Canyon are developed in a manner which protects them from the noise and operational impacts of, and does not adversely constrain, the Napa County Airport.	Consistent: As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of the Napa County ALUCP including those that pertain to noise and safety. Refer to Section 3.6, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Policy 1.27.1	Require that development comply with the land use and development conditions stipulated in Tables 1-1 and 1-2 for areas depicted on Figure 1-3. [. . .] ZONE D Common Traffic Pattern: This area is defined by the flight pattern for the Napa County Airport as illustrated on Figure 1-3. These areas are routinely overflowed by aircraft operating to and from the airport with frequent single-event noise intrusion. Overflights in these areas can range from near the traffic pattern altitude (about 1,000 feet above the ground) to as low as 300 above the ground. Accident risk varies from low to moderate. Areas where aircraft are near pattern altitude (e.g., downwind leg) have the lowest risk. In areas where aircraft are at lower altitudes	Consistent: The project site is located within Zone D of the Napa County ALUCP. As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of Zone D as set forth in Tables 1-1 and 1-2. Refer to Section 3.8, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		(especially on circle-to-land instrument approaches) a moderate level of risk exists.	
	Policy 1.27.2	Review all applications for new development, expansion of existing uses, and reuse within Napa County Airport Compatibility Zones “A” through “E” for compliance with the appropriate use and development conditions.	Consistent: As discussed in Impact LU-3, the proposed project is compatible with all applicable provisions of Zone D of the Napa County ALUCP. Refer to Section 3.8, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Goal 1R	Ensure a high quality of the City’s built environment, architecture, landscape, and public open spaces.	Consistent: The proposed project consists of a contemporary 219,834 square foot wine warehouse. This would advance the goal of providing a high-quality built environment and open space. Refer to Section 3.1, Aesthetics.
	Objective 1.32	Attain residential, commercial, industrial, and public buildings and sites which convey a high-quality visual image and character.	Consistent: The proposed buildings would use concrete tilt-up panel construction and contemporary finishes and treatments similar to other industrial buildings in the project vicinity. Landscaping would be installed within parking areas and along the Commerce Court frontage. Outdoor storage areas would be enclosed where necessary to screen them from view from major roadways. Overall, these characteristics would advance the objective of attaining high-quality visual character. The City’s design review process would ensure consistency with the applicable policies. Refer to Section 3.1, Aesthetics, for further discussion.
	Policy 1.32.1	Require adherence to the Design and Development Principles prescribed in this Plan and the City’s Design Review Guidelines which shall be updated periodically.	Consistent: The proposed project would incorporate relevant design concepts set forth in the latest adopted edition of the Design Review Guidelines. Moreover, the City’s design review process would ensure consistency with the applicable policies.
	Policy 1.32.2	Require that development projects subject to discretionary review	Consistent: The proposed project is subject to discretionary review and,

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		submit and implement a landscaping plan.	therefore, the applicant has prepared and submitted a preliminary landscaping plan to the City, which will be considered as part of the approval process. A final landscaping plan will be required as part of the City’s design review process, which would ensure consistency with the applicable policies. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.32.5	Require the use of drought tolerant species in landscape design in accordance with the provisions of the Water Conservation and Landscape Act.	Consistent: The proposed landscaping plan incorporates drought tolerant species in accordance with the provisions of the Water Conservation and Landscape Act. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.32.6	Require that commercial, industrial, and multi-family residential development incorporate adequate drought-conscious irrigation systems and maintain the health of the landscape.	Consistent: The proposed landscaping plan incorporates adequate drought-conscious irrigation systems in accordance with the provisions of the Water Conservation and Landscape Act. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.32.7	Require that all commercial, industrial, multi-family, and common area landscape be adequately irrigated with automatic irrigation systems.	Consistent: The proposed landscaping plan incorporates automatic irrigation systems. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.32.8	Promote the use of reclaimed water for the irrigation of public and private landscape, as available.	Consistent: The proposed project would be served with reclaimed water provided by the City of American Canyon for landscape irrigation purposes. Refer to Chapter 2, Project Description, for further discussion.
	Objective 1.33	Ensure that structures and sites are designed and constructed to maintain their long-term quality and provide for the needs of their occupants.	Consistent: All proposed structures would be designed to suit the needs of the end user, consistent with this objective. The City’s design review process would ensure consistency with the applicable policies. Refer to Chapter 2, Project Description, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 1.33.1	Require that all structures be constructed in accordance with the requirements of the City’s building and other pertinent codes and regulations; including new, adaptively reused, and renovated buildings.	Consistent: All proposed structures would be required to adhere to the latest adopted edition of the California Building Standards Code (CBC) at the time building permits are sought.
	Policy 1.33.3	Require that all development be designed to provide adequate space for access, parking, supporting functions, open space, and other pertinent elements.	Consistent: The proposed project would provide 134 car and 23 truck parking spaces. Five would be designated handicap access and one would be compact. There would be five electric vehicle supply equipment (EVSE) stalls, one van accessible EVSE stall, and 19 electric vehicle (EV) capable stalls. Per the 2022 California Green Building Standards Code (CALGreen), nonresidential developments with 101–150 parking spaces must provide at least 17 EV capable spaces and at least four EV capable spaces provided with EVSE. The proposed project would meet these requirements. Additionally, the proposed project would preserve the existing on-site wetlands. Refer to Chapter 2, Project Description, for further discussion.
	Policy 1.33.4	Require that all commercial, industrial, and public development incorporate appropriate design elements to facilitate access for and use by the physically challenged.	Consistent: All proposed structures would be required to incorporate all applicable disability access requirements set forth by the Americans with Disabilities Act (ADA). The proposed project would provide 134 car and 23 truck parking spaces. Five would be designated handicap access and one would be compact. Refer to Chapter 2, Project Description, for further discussion.
Economic Development Element	Goal 3	Provide for the economic needs of American Canyon residents by capitalizing on the marketability of the City’s industrial land and promoting a mix of uses which create quality jobs and foster fiscal stability.	Consistent: The proposed project would develop a 219,834-square-foot wine warehouse. The proposed project would create approximately 35 full-time jobs and 20 part-time jobs, stimulate capital investment,

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			and expand the tax base. These characteristics are consistent with the goal of providing for the economic needs of American Canyon residents.
	Objective 3.1	Maximize the City’s market potential in terms of industrial/ business park and community-serving commercial activity. Increased industrial activity can be a catalyst for broadening the City’s economic base by providing quality jobs and tax revenues, as well as, stimulating infrastructure improvements.	Consistent: The proposed project would develop a 219,834-square-foot wine warehouse. The proposed project would create approximately 35 full-time jobs and 20 part-time jobs, stimulate capital investment, and expand the tax base. These characteristics are consistent with the objective of maximizing the City’s market potential in terms of industrial/ business park activity.
	Policy 3.1.1	Adopt a Land Use Map which designates acreage for heavy industrial, light industrial/ business park, commercial, and recreational commercial activities.	Consistent: The project site is currently designated CR by the City of American Canyon General Plan and the proposed project’s uses are consistent with the allowable uses of this land use designation. Refer to Impact LU-1 for further discussion.
	Goal 3A	Generate new industrial growth through diversification of the industrial base and maintenance of current activity to provide employment opportunities for residents and generate fiscal revenues for the City.	Consistent: The proposed project would develop a 219,834-square-foot wine warehouse. This is consistent with the goal of generating new industrial growth through diversification of the industrial base.
	Objective 3.4	Increase the number of firms within the industries now represented in the City and capture new, clean, nonpolluting industries that are stable and compatible with City needs in terms of traffic, air quality, and employment.	Consistent: The proposed project would develop a 219,834-square-foot wine warehouse and is consistent with other adjacent warehousing firms. The proposed project is estimated to create approximately 35 full-time jobs and 20 part-time jobs. The proposed project would implement traffic improvements as necessary and feasible to mitigate impacts on traffic operations. Refer to Section 3.2, Air Quality, and Section 3.13, Transportation, for further details.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 3.4.2	Establish design and FAR standards for industrial buildings which will create and maintain an attractive image for American Canyon’s industrial areas without imposing overly restrictive regulations.	Consistent: The proposed project would have a FAR of 0.496 that would be within the allowable FAR of the project site.
	Policy 3.4.3	In partnership with landowners and tenants, improve the infrastructure (particularly access across the North Slough drainage channel and the railroad) in the Green Island Industrial Park and Annexes and expand infrastructure services to the undeveloped sites on the north side of Green Island Road to link the two industrial areas and provide land use and design continuity to both sides of Green Island Road.	Consistent: The proposed project would take vehicular access from Commerce Court via Green Island Road. The proposed project would be located among existing warehouse land uses.
	Objective 3.5	Make available sufficient acreage in order to capture the City’s fair-share of regional industrial growth through the year 2010.	Consistent: The project site is designated CR by the General Plan and is served with existing infrastructure. Thus, the project site is well suited to advance the objective of facilitating industrial development within American Canyon.
	Policy 3.5.1	Designate a sufficient amount of land to accommodate the projected growth in demand for industrial space by 2010.	Consistent: The project site is designated CR by the General Plan and is served with existing infrastructure. Thus, the project site is well suited to advance the policy of accommodating new industrial development within American Canyon.
Circulation Element	Guiding Policy 1.1	Community Priorities. Safe and convenient access to activities in the community is provided by a well-designed local roadway system. That system serves the community’s primary need for mobility and includes a planned hierarchy of roadways to meet that need. The following Community Priorities relate most directly to this Element: <ul style="list-style-type: none"> Encourage and foster a strong sense of community and safety, as well as the “hometown” feeling by 	Consistent: Vehicular access to the project site would be provided from Commerce Court, which provides a connection to SR-29. The project site’s location also allows for convenient access to SR-12 such that safe and convenient access can be provided for trucks and residential areas would be avoided. Refer to Section 3.13, Transportation for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		<p>creation of a town center through land use and circulation planning.</p> <ul style="list-style-type: none"> ● Improve a hierarchy of roadway networks to achieve and maintain acceptable traffic Level of Service (LOS) and provide a Citywide system of bicycle lanes and recreational trails that improve accessibility without the use of an automobile. ● Improve SR-29 so that it serves as a visually attractive gateway into the City while providing access to commercial businesses and serving intra and inter-regional traffic and goods movement. 	
	Guiding Policy 1.2	Implement planned roadway improvements. Use Figure 3: General Plan Circulation System, and Table 3: Major Circulation Improvements, to identify, schedule, and implement roadway and complementary intersection improvements to support General Plan buildout conditions. Planned improvements may be phased as development occurs and need for increased capacity is identified.	Consistent: This Draft EIR evaluates project-related transportation impacts. Refer to Section 3.13, Transportation, for further discussion.
	Guiding Policy 1.3	Design circulation system to focus regional travel on SR-29. SR-29 is important for both Citywide and north-south regional travel. As both City and regional travel grow, design the City circulation system to discourage regional traffic from bypassing SR-29 and impacting City streets. Also, cooperatively work with regional partners, including Caltrans, NCTPA and others explore a complete streets approach that will expand the travel capacity of SR-29.	Consistent: Vehicular access to the project site would be provided from Commerce Court which provides a connection to SR-29 and SR-12 via Green Island Road, which are all truck routes. Refer to Section 3.13, Transportation, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Guiding Policy 1.6	<p>Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak hours where possible and as long as possible. However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond the control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce the impact of any development use or density planned for in the Land Use Element of the General Plan.</p> <p>The following locations that may not achieve or maintain LOS D are as follows and therefore will be exempt from the LOS D policy:</p> <ul style="list-style-type: none"> • State Route 29 through the City • American Canyon Road from SR-29 to Flosden Road–Newell Drive • Flosden Road south of American Canyon Road. 	<p>Consistent: This Draft EIR evaluates project-related transportation impacts. Refer to Section 3.13, Transportation, for further discussion.</p>
	Guiding Policy 1.9	<p>Use of existing facilities. Make efficient use of existing transportation facilities, and improve these facilities as necessary in accordance with the Circulation Map.</p>	<p>Consistent: The proposed project would rely on the existing Commerce Court for vehicular access.</p>
	Guiding Policy 1.11	<p>Reduce Vehicle Miles Traveled. Through layout of land uses, improved alternate modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by City residents.</p>	<p>Consistent: The project site has convenient access to SR-12 and SR-29. The development of the proposed project’s a 219,834-square-foot wine warehouse is within the North Bay Region and would contribute to reducing trip length by locating these facilities closer to customers within this region. Finally, the development of approximately 35 full-time jobs and 20 part-time jobs in a housing-rich part of the Bay Area region would allow employees to work closer to where they live, thereby reducing vehicle miles traveled. Refer to</p>

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			Section 3.13, Transportation, for further discussion.
	Guiding Policy 1.12	Circulation System Enhancements. Achieve, maintain and/or improve mobility in the City by considering circulation system enhancements beyond improvements identified on the Circulation Map, where feasible and appropriate. Improve the circulation system, in accordance with the Circulation Map, at minimum, to support multimodal travel of all users and goods and where feasible, apply creative circulation system enhancements that increase system capacity and that are acceptable to the City and its residents and where applicable, Caltrans.	Consistent: This Draft EIR evaluates project-related transportation impacts. Refer to Section 3.13, Transportation, for further discussion.
	Implementing Policy 1.13	Financing Program. Develop a transportation financing program that will fully fund the planned expansion of the existing transportation network consistent with the General Plan. The financing program will include an update to the existing Transportation Impact Fee (TIF) program consistent with AB 1600.	Consistent: The proposed project would pay fees in accordance with the City’s latest adopted traffic impact fee schedule, as applicable. This is consistent with the policy of implementing a transportation financing program that will fully fund the planned expansion of the existing transportation network.
	Implementing Policy 1.14	Work with Caltrans on highway improvements. Continue to work with the Caltrans to achieve timely context sensitive design solutions, funding and construction of programmed highway improvements.	Consistent: The proposed project would not result in impacts to Caltrans facilities. Refer to Section 3.13, Transportation, for further discussion.
	Implementing Policy 1.16	Use of Congestion Management Process. Utilize the NCTPA Congestion Management Program (CMP) to determine the timing and degree of regional roadway facility improvements in accordance with region wide plans. Actively participate in the Community-Based SR-29 Gateway Corridor Improvement Plan process to identify a funded SR-29 travel capacity enhancement through the City.	Consistent: The proposed project would not result in impacts to regional roadway facilities. Refer to Section 3.13, Transportation, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Implementing Policy 1.17	Regional fair-share fee program. Work with Caltrans, NCTPA, Napa County, and other jurisdictions to establish a fair-share fee program for improvements to routes of regional significance and State highways. This fee should reflect traffic generated by individual municipalities/ unincorporated communities as well as pass-through traffic.	Consistent: The proposed project would pay fees in accordance with the City’s latest adopted traffic impact fee schedule, as applicable. This includes improvements under the jurisdiction of Caltrans, Napa County Transportation and Planning Agency (NCTPA), and the County of Napa.
	Implementing Policy 1.19	Complete Streets. When constructing or modifying transportation facilities, consistent with Resolution 2012-72, “Complete Streets Policy of the City of American Canyon,” strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists and pedestrians appropriate for the road classification and adjacent land use.	Consistent: The proposed project does not include the construction or modification of transportation facilities. It would be accessed from the existing Commerce Court. Refer to Section 3.13, Transportation, for further discussion.
	Implementing Policy 1.23	Access Restriction. Minimize, where possible, the number of access points along arterial roadways, including by consolidating or relocating driveways to provide for more efficient traffic movement.	Consistent: The proposed project would have one access point on Commerce Court and connect to the warehouses to the south and north. This is consistent with the policy of providing for more efficient traffic movement.
	Implementing Policy 1.24	Impacts of new development. Based upon the findings of a traffic impact study, consistent with Guiding Policy 1.26, new development will be responsible for mitigation of transportation related impacts.	Consistent: A traffic impact study was prepared as part of this Draft EIR. Refer to Section 3.13, Transportation, for further discussion.
	Implementing Policy 1.26	Update and adopt Transportation Impact Analysis (TIA) guidelines. Update and adopt Transportation Impact Analysis guidelines and a Multimodal LOS assessment methodology for the evaluation of potential transportation impacts resulting from new development that is specific to the City and that will supersede existing LOS standards and guidelines.	Consistent: A traffic impact study was prepared as part of this Draft EIR in accordance with the City of American Canyon’s latest guidance for such studies. Refer to Section 3.13, Transportation, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Implementing Policy 1.35	General transit and pedestrian access. In reviewing designs of proposed developments, ensure that provision is made for access to current and future public transit services. In particular, pedestrian access to arterial and collector streets from subdivisions should not be impeded by continuous segments of sound walls.	Consistent: There is an existing sidewalk along the project frontage with Commerce Court. In addition, Commerce Court is suitable for bicycle travel. Furthermore, the project site is located near the Commerce Court Emergency Vehicle Access that connects to Eucalyptus Drive, which also functions as a Class I bicycle/pedestrian facility.
	Guiding Policy 2.1	Promote walking and bicycling. Promote walking and bike riding for transportation, recreation, and improvement of public and environmental health.	Consistent: There is an existing sidewalk along the project frontage with Commerce Court. In addition, Commerce Court is suitable for bicycle travel. Furthermore, the project site is located near the Commerce Court Emergency Vehicle Access that connects to Eucalyptus Drive, which also functions as a Class I bicycle/pedestrian facility.
	Guiding Policy 2.3	Develop a safe and efficient non-motorized circulation system. Provide safe and direct pedestrian routes and bikeways between places.	Consistent: There is an existing sidewalk along the project frontage with Commerce Court. In addition, Commerce Court is suitable for bicycle travel. Furthermore, the project site is located near the Commerce Court Emergency Vehicle Access that connects to Eucalyptus Drive, which also functions as a Class I bicycle/pedestrian facility. Collectively, these characteristics would promote a safe and efficient non-motorized circulation system.
	Implementing Policy 2.7	Universal design. Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts.	Consistent: There is an existing sidewalk along the project frontage with Commerce Court. In addition, Commerce Court is suitable for bicycle travel. Furthermore, the project site is located near the Commerce Court Emergency Vehicle Access that connects to Eucalyptus Drive, which also functions as a Class I bicycle/pedestrian facility. The proposed project's internal pedestrian facilities would also comply with the ADA.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Implementing Policy 2.18	Pedestrian connections to employment destinations. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade-separated crossings over State Route 29.	Consistent: The proposed project's internal pedestrian facilities would connect to the Commerce Court sidewalk and, thus, advance the policy of providing pedestrian connections to employment destinations. The City's design review process would ensure consistency with this policy.
	Guiding Policy 4.1	Promote safe and efficient goods movement. Promote the safe and efficient movement of goods via truck and rail with minimum disruptions to residential areas.	Consistent: The project site has convenient access to SR-12 and SR-29. This is consistent with the policy of promoting safe and efficient goods movement. Refer to Section 3.13, Transportation for further discussion.
	Guiding Policy 4.2	Promote railroad safety. Minimize the safety problems associated with the railroad, including the construction and maintenance of at-grade crossings and the physical barrier effect of the track alignment on the City.	Consistent: Both existing railroad grade crossings on Green Island Road would receive safety improvements as part of a City-sponsored project. Although these improvements are independent of the proposed project, they would promote railroad safety on a route used by project-related trips.
	Guiding Policy 4.4	New truck route designation. All highways, arterials, and industrial streets shall be designated truck routes.	Consistent: The project site would be accessed via Commerce Court which is a designated truck route.
	Guiding Policy 4.6	Location of industrial development. Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements.	Consistent: The project site's land use would be consistent with other adjacent land uses. There are no residential adjacent to this area, nor would project-related truck routes travel through such areas.
	Guiding Policy 4.7	Secure truck parking. Encourage high-security off-street parking for tractor-trailer rigs in industrial designated areas.	Consistent: The proposed project would provide 134 car and 23 truck parking spaces. Five would be designated handicap access and one would be compact. The project site would include nighttime lighting. As such, the proposed project would provide secure truck parking.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
Utilities	Goal 5	It shall be the goal of American Canyon to establish and maintain a secure water supply and treatment, distribution and storage system to serve the land uses proposed under the General Plan.	Consistent: This Draft EIR evaluates project impacts on water supply and distribution and concludes that adequate supplies and infrastructure are available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Objective 5.2	Obtain additional water supply sources as necessary to supplement the [North Bay Aqueduct] supply and serve anticipated growth under the proposed land use plan.	Consistent: The City of American Canyon had adequate water supplies available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 5.2.4	Promote water conservation and wastewater reclamation as additional water supply sources.	Consistent: The proposed project would employ drought tolerant landscaping and be served with recycled water for nonpotable irrigation purposes. This is consistent with the policy of promoting water conservation and wastewater reclamation. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 5.2.5	In the event that sufficient capacity is not available to serve a proposed project, the City shall not approve the project until additional capacity or adequate mitigation is provided.	Consistent: The City of American Canyon has adequate water supplies available to serve the project. In addition, the proposed project would comply with the City’s Zero Water Footprint Policy, which requires new development projects to secure offsets to ensure that existing customers do not experience a loss in reliability or an increase in rates.
	Objective 5.4	Establish a water management program to promote water conservation and wastewater reuse.	Consistent: The proposed project would employ drought tolerant landscaping and be served with recycled water for nonpotable irrigation purposes. This is consistent with the objective of promoting water conservation and wastewater reuse. Refer to Section 3.14, Utilities and Service Systems, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 5.4.1	Promote the use of water-saving plumbing fixtures and water-saving landscaping.	Consistent: The proposed project would employ drought tolerant landscaping. The proposed project’s plumbing fixtures would comply with the water conservation standards set forth in the latest adopted edition of the California Plumbing Code. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Goal 5B	It shall be the goal of American Canyon to develop and maintain a water treatment and distribution system that meets generally accepted operational criteria for service to provide daily and peak demands, including fire flow requirements, to meet present and future needs in a timely and cost effective manner.	Consistent: This Draft EIR evaluates project impacts on water supply and distribution and concludes that adequate supplies and infrastructure are available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Objective 5.7	Expand water treatment, storage and distribution facilities as necessary to meet increasing water demands.	Consistent: The existing water distribution lines in Commerce Court have adequate capacity to serve the proposed project. The City of American Canyon also has adequate water supplies available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 5.7.3	Require adequate water supply, distribution, storage, and treatment facilities to be operational prior to the issuance of certificates of occupancy.	Consistent: The existing water distribution lines in Commerce Court have adequate capacity to serve the proposed project. The City of American Canyon has adequate water supplies available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Policy 5.7.4	Require all new development to be served from an approved domestic water supply.	Consistent: The proposed project would be served with potable water provided by the City of American Canyon, which is an approved domestic water supply.
	Policy 5.7.5	Monitor the demands on the water system and, as necessary, manage	Consistent: This Draft EIR evaluates project impacts on water supply

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		development to mitigate impacts and/or facilitate improvements.	and distribution and concludes that adequate supplies and infrastructure are available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion.
	Objective 5.8	Ensure that the costs of improvements to the water supply, distribution, storage, and treatment system are borne by those who benefit.	Consistent: The project applicant would construct or provide the full cost of on-site water infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.8.1	Require improvements to the existing water supply, distribution, storage, and treatment facilities necessitated by a new development proposal be borne by the project proponent (in proportion to benefit); either through the payment of fees, or by the actual construction of the improvements.	Consistent: The project applicant would construct or provide the full cost of on-site water infrastructure and off-site improvements necessary to serve the proposed project.
	Goal 5C	Establish and maintain adequate planning, construction, maintenance, and funding for storm drain and flood control facilities to support permitted land uses and preserve the public safety; upgrading existing deficient systems and expanding, where necessary, to accommodate new permitted development and to protect existing development in the City. Pursue public funding sources (i.e., grants) to reduce fiscal impacts of implementation to the City.	Consistent: The proposed project would install an on-site stormwater drainage system that would include storm drain pipes and a bioretention pond. The system would be designed to accommodate peak storm event runoff in accordance with the City’s latest adopted standards. This is consistent with the goal of providing adequate storm drain and flood control facilities to support permitted land uses and preserve the public safety. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Objective 5.10	Ensure that adequate storm drain and flood control facilities are provided and properly maintained to protect life and property from flood hazards.	Consistent: The proposed project would install an on-site stormwater drainage system that would be designed to accommodate peak storm event runoff in accordance with the City’s latest adopted standards. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 5.10.1	Provide for the maintenance of existing public storm drains and flood control facilities and for the construction of upgraded and expanded storm drain and flood control facilities, where necessary, to protect existing and accommodate new permitted development.	Consistent: The project applicant would install on-site storm drainage infrastructure and be responsible for its maintenance and upkeep. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Policy 5.10.3	Require that adequate storm drain and flood control facilities be constructed coincident with new development.	Consistent: The project applicant would be required to install on-site storm drainage infrastructure prior to issuance of the certificate of occupancy. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Policy 5.10.4	Limit new development, when necessary, until adequate flood control facilities are constructed to protect existing development and accommodate the new development runoff, or until mitigation is provided.	Consistent: The project applicant would be required to install on-site storm drainage infrastructure prior to issuance of the certificate of occupancy. This is consistent with the policy of requiring adequate flood control facilities to be constructed in conjunction with new development. Refer to Chapter 2, Project Description, for further discussion.
	Objective 5.11	Ensure that the costs of improvements to the storm drain and flood control system are borne by those who benefit.	Consistent: The project applicant would construct or provide the full cost of on-site storm drainage infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.11.1	Require improvements to existing storm drain and flood control facilities necessitated by a new development proposal be borne by the project proponent; either through the payment of fees, or by the actual construction of the improvements in accordance with State Nexus Legislation.	Consistent: The project applicant would construct or provide the full cost of on-site storm drainage infrastructure and off-site improvements necessary to serve the proposed project.
	Policy 5.11.3	Collect adequate amounts of fees and charges to fund the operation/maintenance of existing facilities and to construct new facilities.	Consistent: The project applicant would provide all required storm drainage fees to the City of American Canyon.
	Goal 5D	Maintain the quality of surface and subsurface water resources within	Consistent: As required by applicable laws and regulations, the

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		the City of American Canyon and its Planning Area.	proposed project would implement stormwater quality measures and practices to maintain the quality of surface and subsurface water resources.
	Objective 5.12	Enhance runoff water quality upstream of points of discharge to channelized drainage courses.	Consistent: As required by applicable laws and regulations, the proposed project would implement stormwater quality measures and practices that would enhance runoff water quality prior to discharge in downstream waterways. Refer to Section 3.9, Hydrology and Water Quality for further discussion.
	Policy 5.12.1	Capitalize on opportunities to reduce pollutant loading through passive treatment systems such as vegetated filter strips, grass swales, and infiltration/ sedimentation areas in suitable open space areas, and incorporated into landscaping adjacent to parking lots and streets.	Consistent: Passive treatment systems would be incorporated into the proposed project's storm drainage system where appropriate. Refer to Section 3.9, Hydrology and Water Quality for further discussion.
	Policy 5.12.2	Incorporate features in new drainage detention facilities which enhance the water quality of discharges from the facility.	Consistent: The proposed project's storm drainage system would include storm drain pipes and a bioretention pond, which would serve to enhance the water quality of discharges from the facility through percolation of pollutants into the soil. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Policy 5.12.3	Minimize impervious area that is directly connected to piped or channelized drainage systems in new development.	Consistent: The two, on-site isolated wetlands would be preserved. This would be consistent with the policy of minimizing impervious area that is directly connected to piped or channelized drainage systems in new development. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Objective 5.13	Prevent degradation of surface water quality due to construction activities and industrial operations.	Consistent: As required by applicable laws and regulations, the proposed project would implement construction and operation

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			stormwater pollution prevention measures to prevent degradation of surface water quality. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Policy 5.13.1	Require that development activities comply with the State General Storm Water Permit For Construction Activities with measures that protect surface water quality to the maximum extent practicable.	Consistent: The proposed project’s construction and operation stormwater pollution prevention measures would comply with the applicable stormwater permits. Refer to Section 3.9, Hydrology and Water Quality, for further discussion.
	Goal 5E	It shall be the goal of the City of American Canyon to establish and maintain adequate planning, construction, maintenance, and funding for wastewater collection and treatment facilities to support land uses; upgrading existing deficient systems, and expanding, where necessary, in the City’s service area.	Consistent: This Draft EIR evaluates project impacts on wastewater collection and treatment and concludes that adequate capacity is available to serve the proposed project. Refer to Section 3.14, Utilities and Service Systems, for further discussion. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Objective 5.14	Provide a system of wastewater collection and treatment facilities which will adequately convey and treat wastewater generated by existing and future development in the City’s service area.	Consistent: Aside from laterals to serve proposed buildings, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in place prior to the issuance of a certificate of occupancy. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Policy 5.14.2	Provide for the construction of upgraded and expanded wastewater collection and treatment improvements to support existing and new development.	Consistent: The proposed project would connect to an existing sewer line located within Commerce Court. Aside from laterals to serve proposed buildings, no other wastewater upgrades would be required. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 5.14.4	Require new development to connect to a master planned sanitary sewer system. Where construction of master planned facilities is not feasible, and where the future construction of master planned facilities will not be jeopardized, the City Council may permit the construction of interim facilities sufficient to serve the present and short-term future needs.	Consistent: The proposed project would be served with sanitary sewer service provided by the City of American Canyon. The proposed project would connect to an existing sewer line located within Commerce Court; no interim facilities would be necessary. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Policy 5.14.5	Require all new development to secure sewer capacity rights prior to or at the time building permits are issued.	Consistent: The City of American Canyon has indicated that the proposed project would be served with adequate sewer capacity. See also Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Objective 5.15	Ensure that wastewater collection and treatment facilities are upgraded and installed in a timely manner to meet usage requirements and maximize cost efficiency.	Consistent: Aside from laterals to serve the proposed building, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in place prior to the issuance of a certificate of occupancy. Refer to Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Policy 5.15.1	Require that wastewater collection and treatment facilities be installed and available for use prior to the issuance of a certificate of occupancy.	Consistent: Aside from laterals to serve the proposed building, all wastewater infrastructure necessary to serve the proposed project is currently in place. The laterals would be required to be in place prior to the issuance of a certificate of occupancy. Refer to Section 3.6, Geology, Soils, and Seismicity for discussion on septic tanks and alternative wastewater disposal facilities.
	Objective 5.16	Ensure that the costs of infrastructure improvements are borne by those who benefit.	Consistent: The project applicant would construct or provide the full cost of on-site sewer infrastructure and off-site improvements

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			necessary to serve the proposed project and would be subject to City fee programs.
	Policy 5.16.1	Require that the cost for improvements to the existing wastewater collection and treatment facilities necessitated by a new development proposal be borne by the project proponent in proportion to benefit; either through the payment of fees, or by the actual construction of the improvements.	Consistent: The project applicant would construct or provide the full cost of on-site sewer infrastructure and off-site improvements necessary to serve the proposed project and would be subject to City fee programs.
Public Services and Facilities	Goal 6A	Maintain a high level of fire protection and emergency services to City/District businesses and residences.	Consistent: This Draft EIR evaluates project impacts on the American Canyon Fire Protection District and concludes that adequate levels of service can be provided. Refer to Section 3.12, Public Services, for further discussion.
	Objective 6.3	Ensure that the Fire District’s facility, manpower and equipment needs keep pace with the City’s growth.	Consistent: This Draft EIR evaluates project impacts on the American Canyon Fire Protection District and concludes that adequate levels of service can be provided. Refer to Section 3.12, Public Services, for further discussion.
	Policy 6.3.1	Require that City planning staff work closely with Fire District officials to ensure that fire facilities and personnel are expanded commensurably to serve the needs of the City’s growing population and development base.	Consistent: The American Canyon Fire Protection District was consulted during the preparation of this Draft EIR to determine whether the proposed project would impede its ability to provide fire protection. Refer to Section 3.12, Public Services, for further discussion.
	Policy 6.4.3	Require, through the development review process, that all structures and facilities subject to the District’s jurisdiction adhere to City, State and federal regulatory standards such as the Uniform Building and Fire Codes and other applicable safety guidelines.	Consistent: All proposed project structures would be required to comply with the latest adopted edition of the California Fire Code.
	Goal 6B	Ensure a high level of police protection for the City’s residents, businesses and visitors.	Consistent: This Draft EIR evaluates project impacts on the American Canyon Police Department and

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
			concludes that no new or expanded police facilities would be required. Refer to Section 3.12, Public Services, for further discussion.
	Objective 6.7	Coordinate development activities with the Napa County Sheriff's Department or other contract agency to ensure that adequate facilities and services are maintained for the City's residents, businesses and visitors.	Consistent: This Draft EIR evaluates project impacts on the American Canyon Police Department and concludes that no new or expanded police facilities would be required. Refer to Section 3.12, Public Services, for further discussion.
	Policy 6.7.1	Work with the Sheriff's Department to ensure that enough personnel are added to the Department to serve the needs of a growing population and a developing City.	Consistent: This Draft EIR evaluates project impacts on the American Canyon Police Department and concludes that no new or expanded police facilities would be required. Refer to Section 3.12, Public Services, for further discussion.
	Objective 6.9	Increase the residents' and Sheriff's Department ability to minimize crime and improve security for all uses of public and private buildings, sites, and open spaces.	Consistent: The proposed project incorporates design features such as low-profile landscaping and exterior lighting to prevent and deter criminal activity.
	Policy 6.9.2	Require that landscaping in proximity to commercial, industrial, multi-family, and public structures be sited to allow for security surveillance.	Consistent: The proposed project would provide low-profile, non-obtrusive landscaping to allow for adequate security surveillance. Refer to Chapter 2, Project Description, for discussion of the proposed project's landscaping.
	Policy 6.9.3	Require the incorporation of lighting which provides adequate exterior illumination to facilitate security surveillance around commercial, industrial, multi-family, and public structures.	Consistent: The proposed project would provide exterior lighting that would provide adequate illumination.
Natural and Historic/ Cultural Resources	Goal 8	Protect and preserve the significant habitats, plants and wildlife that exist in the City and its Planning Area.	Consistent: This Draft EIR evaluates the proposed project's potential impacts on biological resources and requires mitigation where necessary to reduce impacts to a level of less than significant. Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.1	Maintain data and information regarding areas of significant biological	Consistent: This Draft EIR's evaluation of potential impacts on

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		value within the Planning Area to facilitate resource conservation and the appropriate management of development.	biological resources included review of relevant databases of biological information and field surveys of the project site. The findings thereof were used in developing appropriate mitigation for project impacts. This is consistent with the objective of using best available information to facilitate resource conservation. Refer to Section 3.3, Biological Resources, for further discussion.
	Policy 8.1.1	Acquire and maintain the most current information available regarding the status and location of sensitive biological elements (species and natural communities) within the City and, as appropriate, within the Sphere of Influence and Urban Limit Line.	Consistent: This Draft EIR’s evaluation of potential impacts on biological resources included review of relevant databases of biological information and field surveys of the project site. The findings thereof were used in developing appropriate mitigation for project impacts. This is consistent with the policy of using the best available information to evaluate impacts on biological resources. Refer to Section 3.3, Biological Resources, for further discussion.
	Policy 8.1.4	Regularly monitor and review developments proposed within the City’s Planning Area to assess their impacts on local biological resources and to recommend appropriate mitigation measures that the developer and/or government agency can implement.	Consistent: This Draft EIR evaluates the proposed project’s potential impacts on biological resources and requires mitigation where necessary to reduce impacts to a level of less than significant. Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.2	Balance the preservation of natural habitat areas, including coastal saltmarsh, mixed hardwood forest, oak savanna, and wetland and riparian habitats, with new development in the City.	Consistent: The proposed project site includes two isolated wetlands that would be preserved. This is consistent with the objective of balancing the preservation of natural habitat areas with new development.
	Policy 8.2.1	Land use applications for developments located within sensitive habitats, including coastal saltmarsh, mixed hardwood forest, oak savanna, and riparian habitats or with areas potentially occupied by vernal pools	Consistent: The project site contains two isolated wetlands. This Draft EIR includes biological and wetland analysis conducted by FCS, a biological consulting firm.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		<p>(see Figure 8-2) shall be accompanied by sufficient technical background data to enable an adequate assessment of the potential for impacts on these resources, and possible measures to reduce any identifiable impacts. In addition to examining Figure 8-1 for information on these sensitive habitats, an on-site assessment shall be conducted by a City approved qualified Biologist to determine whether sensitive habitats exist on-site.</p> <p>In instances where the potential for significant impacts exists, the applicant must submit a Biological Assessment Report prepared by a qualified professional.</p>	Refer to Section 3.3, Biological Resources, for further discussion.
	Objective 8.3	Protect natural drainages and riparian corridors within the American Canyon Planning Area.	Consistent: The proposed project avoids any impacts to North Slough, which is located west of the project site. The on-site wetlands would be preserved. This is consistent with the objective of protecting natural drainages and riparian corridors.
	Policy 8.3.1	<p>Review proposed developments in wetlands and riparian habitats to evaluate their conformance with the following policies and standards:</p> <p>a. The development plan shall fully consider the nature of existing biological resources and all reasonable measures shall be taken to avoid significant impacts, including retention of sufficient natural open space and undeveloped buffer zones.</p> <p>b. Development shall be designed and sited to preserve watercourses, riparian habitat, vernal pools, and wetlands in their natural condition, unless these actions result in an unfeasible project, in which case habitat shall be replaced in accord with subsection “g.”</p> <p>c. Where riparian corridors are retained, they shall be protected</p>	Consistent: The proposed project is designed to preserve the two isolated wetlands. The proposed project would be required to obtain approvals from United States Army Corp of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and Regional Water Quality Control Board (RWQCB) and adhere to all provisions of those permits. For these reasons, the proposed project is consistent with the provisions of this policy.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		<p>by an adequate buffer with a minimum 100-foot protection zone from the edge of the tree, shrub, or herb canopy (see Policy 8.3.2).</p> <p>d. Development shall incorporate habitat linkages (wildlife corridors) to adjacent open spaces, where appropriate and feasible.</p> <p>e. Development shall incorporate fences, walls, vegetative cover, or other measures to adequately buffer habitat areas, linkages or corridors from built environment.</p> <p>f. Roads and utilities shall be located and designed such that conflicts with biological resources, habitat areas, linkages or corridors are avoided where feasible.</p> <p>g. Future development shall utilize appropriate open space or conservation easements in order to protect sensitive species or their habitats.</p> <p>h. Future development shall mitigate unavoidable adverse impacts to waters of the United States, wetlands and riparian habitats (pursuant to the Federal Clean Water Act and the California Fish and Game Code, Section 1600 <i>et seq.</i>) by replacement on an in-kind basis. Furthermore, replacement shall be based on a ratio determined by the California Department of Fish and Wildlife and/or United States Army Corp of Engineers in order to account for the potentially diminished habitat values of replacement habitat. Such replacement should occur on the original development site, whenever possible. Alternatively, replacement can be effected, subject to State and federal regulatory approval, by creation or restoration of replacement habitats elsewhere (off-site but preferably within the City's Planning Area), protected in perpetuity by provision for an</p>	

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		appropriate conservation easement or dedication.	
	Policy 8.3.2	<p>Prohibit development and grading that alters the biological integrity of the Riparian Corridors as depicted on the Biological Habitats Map, unless no feasible alternative exists or the damaged habitat is replaced with habitat of equivalent value.</p> <p>Development that is permitted within Riparian Corridors shall:</p> <ol style="list-style-type: none"> a. minimize removal of vegetation, erosion, sedimentation and runoff by appropriate protection or vegetation and landscape; b. provide for sufficient passage of native and anadromous fish; c. minimize wastewater discharges and entrapment; d. prevent ground water depletion or substantial interference with surface and subsurface flows; e. provide for natural vegetation buffers; f. minimize the channelization of streams and other watercourses; g. provide for the enhancement of riparian corridors. 	<p>Consistent: The proposed project avoids any impacts to North Slough, which is located west of the project site.</p>
	Policy 8.3.3	<p>Permit only the following uses within retained Riparian Corridors:</p> <ol style="list-style-type: none"> a. education and research, excluding buildings and other structures; b. passive (non-motorized) recreation; c. trails and scenic overlooks on public land(s) if located outside of undeveloped buffer zones; d. fish and wildlife management activities; e. necessary water supply projects; f. resource consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code; g. flood control projects where no other methods are available to protect the public safety; 	<p>Consistent: The proposed project avoids any impacts to North Slough, which is located west of the project site.</p>

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		h. bridges when supports are not in significant conflict with riparian resources; and i. underground utilities.	
	Policy 8.3.5	Establish a network of open spaces along the City’s natural drainages and riparian corridors and link significant biological habitats. Any recreational use of these areas shall be designed to avoid damaging sensitive habitat areas.	Consistent: The proposed project avoids any impacts to North Slough, which is located west of the project site.
	Policy 8.4.2	Preserve, where possible, the habitat of several in-fact endangered species, including those shown on Figure 8-2 and listed in Table 8-1, as well as those that may be considered by the City in the future.	Consistent: The proposed project preserves the two isolated wetlands on the project site.
Geology	Goal 9	Reduce the potential level of death, injury, property damage, economic and social dislocation (i.e., business closures and homelessness due to structural damage) and disruption of vital services that could result from earthquake damage.	Consistent: Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC to reduce the potential level of death, injury, property damage, and economic and social dislocation to acceptable levels. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Goal 9C	Ensure that seismic, geologic, and soils hazards that might affect areas designated for human use or habitation are properly mitigated or avoided entirely prior to development.	Consistent: Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC to ensure that seismic hazards are properly mitigated or avoided entirely prior to development. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.1	Protect life, ensure public safety, substantially reduce the damage to and ensure the orderly evacuation of building occupants following a seismic event.	Consistent: Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC to protect life, ensure public safety, and substantially reduce damage to structures. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Policy 9.1.1	Promote the collection of relevant data on fault location and the history of fault displacement as a basis for future refinement of fault zone policies and development standards. Particular attention should be paid to the West Napa Fault that is generally depicted in Figure 9-1 and should be evaluated in conjunction with proposed development. Based on predevelopment studies, limitations on new development shall be imposed if necessary in the identified fault areas.	Consistent: The project site is not located within the West Napa Fault zone. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.1.2	Implement mandatory development restrictions and investigation requirements (by the State, under the Alquist-Priolo Act, or by the City) on that portion of the West Napa Fault zone located within American Canyon and its Planning Area.	Consistent: The project site is not located within the West Napa Fault zone. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.2	Protect health and life safety, and reduce the level of potential property damage from the adverse effects of strong seismic ground shaking by implementing effective, state-of-the-art standards for seismic design of structures in the City.	Consistent: Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC to ensure that strong seismic ground shaking hazards are properly mitigated. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.2.1	Require that development be designed in accordance with seismic requirements of the Uniform Building Code.	Consistent: Implementation of the proposed project would require compulsory compliance with the latest adopted edition of the CBC seismic design requirements. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.3	Protect life and essential lifelines (e.g., gas, electricity, water), reduce the risk of property damage due to liquefaction, and promote the collection of more complete information on liquefaction susceptibility throughout the Planning Area.	Consistent: The risk of liquefaction at the project site is low. Refer to Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Policy 9.3.1	Avoid development in areas with known liquefaction risk. If these	Consistent: The risk of liquefaction at the project site is low. Refer to

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		areas cannot be avoided, require a qualified geologist, hydrologist, or civil engineer to determine the liquefaction potential at proposed development sites.	Section 3.6, Geology, Soils, and Seismicity, for further discussion.
	Objective 9.6	Minimize to the greatest extent feasible the loss of life, serious injuries, and major social and economic disruption caused by the collapse of, or severe damage to, vulnerable structures (e.g., buildings, bridges, water storage facilities, key railroad components) resulting from an earthquake.	Consistent: Project structures and infrastructure would be designed and constructed in accordance with the latest adopted edition of the CBC’s seismic safety requirements. Adherence to these standards would minimize potential exposure to disruptions associated with earthquakes. Refer to Section 3.6, Geology, Soils, and Seismicity for further discussion.
Flood Hazards	Goal 10	Protect the lives and property of American Canyon’s residents and visitors from flood hazards.	Consistent: The project site is located outside of a 100-year flood hazard area. Therefore, the proposed project’s uses (including employees) would not be exposed to flood hazards. Refer to Section 3.9, Hydrology and Water Quality.
	Objective 10.1	Design both new development and redevelopment projects in a manner that minimizes hazards associated with flooding.	Consistent: The project site is located outside of a 100-year flood hazard area. Therefore, the proposed project’s uses (including employees) would not be exposed to flood hazards. Refer to Section 3.9, Hydrology and Water Quality.
	Policy 10.1.1	Retain and enhance natural watercourses, including perennial and intermittent streams, as the City’s primary flood control channels whenever feasible.	Consistent: The proposed project avoids any impacts to North Slough, which is located west of the project site.
	Policy 10.1.4	Ensure that stormwater drainage is designed for peak flow conditions.	Consistent: The proposed project’s storm drainage system would be designed in accordance with the City’s peak flow design standards. Refer to Section 3.9, Hydrology and Water Quality.
	Policy 10.1.5	Prohibit the development of structures designed for human occupancy within the 100-year floodplain, unless flood hazards are adequately mitigated. Mitigation can be accomplished by building foundations a minimum of	Consistent: The project site is located outside of a 100-year flood hazard area. Therefore, the proposed warehouse would not be located within the 100-year

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		one (1) foot above the 100-year flood elevation, or by other means approved by the City Engineer (see Figure 10-1).	floodplain. Refer to Section 3.9, Hydrology and Water Quality.
Noise	Goal 11	Ensure that American Canyon’s existing and future residents, employees and employers, as well as visitors to the City, are protected from the adverse human health and environmental impacts of excessive noise levels created by stationary and ambient (intrusive) noise sources and conditions. Take all necessary and appropriate action to avoid or mitigate the detrimental effects of such excessive noise on the community.	Consistent: This Draft EIR includes an evaluation of project-related noise impacts. No mitigation is necessary to achieve acceptable noise levels. Refer to Section 3.11, Noise, for further discussion.
	Objective 11.1	Control both ambient and stationary (intrusive) noise conditions and impacts that may occur in American Canyon. Maintain base line information regarding ambient and stationary noise sources within the community.	Consistent: This Draft EIR includes an evaluation of project-related noise impacts including ambient and stationary noise sources. Refer to Section 3.11, Noise, for further discussion.
	Policy 11.1.1	Promote noise compatible land use relationships by implementing the noise standards identified in Figure 11-2, to be utilized for design purposes in new development and for establishing a program to attenuate existing noise problems.	Consistent: This Draft EIR includes an evaluation of project-related noise impacts and assesses noise levels against the standards identified in Figure 11-2 to determine whether significant impacts would occur. No mitigation is necessary to achieve acceptable noise levels. Refer to Section 3.11, Noise, for further discussion.
	Policy 11.1.2	Monitor and update available data regarding the community’s ambient and stationary noise levels.	Consistent: This Draft EIR includes an evaluation of project-related noise impacts including the analysis of ambient and stationary noise levels. Refer to Section 3.11, Noise, for further discussion.
	Objective 11.2	Protect residents, employees, and visitors to the community from excessive noise exposure. If possible, mitigate the adverse impacts of existing or unavoidable excessive noise on these same groups.	Consistent: This Draft EIR includes an evaluation of project-related noise impacts. No mitigation is necessary to achieve acceptable noise levels. Refer to Section 3.11, Noise, for further discussion.
	Policy 11.2.1	Require that new development for locations in which the exterior or interior noise levels indicated in Figure 11-2 are likely to be exceeded,	Consistent: The project site is not located in any “Sensitive Noise Areas” depicted on Figure 11-2. Regardless, a noise analysis was

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		submit a noise attenuation study prepared by a qualified acoustical engineer in order to determine appropriate mitigation measures.	prepared for the proposed project and no mitigation is identified as necessary. Refer to Section 3.11, Noise, for further discussion.
	Policy 11.2.4	Require that new industrial, commercial and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior Ldn of 65 dB(A) in areas containing housing, schools, health care facilities, or other “noise-sensitive” land uses. Additionally, require that potentially significant noise generators, including uses such as night clubs that cause sporadic noise intensities, submit noise analyses prepared by an acoustical expert that include specific recommendations for mitigation when: a) the project is located in close proximity to noise-sensitive land uses or land that is planned for noise-sensitive land uses, or b) the proposed noise source could violate the noise provisions of the General Plan or City Noise ordinance.	Consistent: Noise-sensitive land uses near the project site were identified and analyzed as a part of this Draft EIR. The proposed project would not have the potential to increase ambient noise levels above 65 dBA L _{dn} . Refer to Section 3.11, Noise for further discussion.
	Objective 11.3	Minimize the adverse impacts of traffic-generated noise on residential and other “noise-sensitive” uses as depicted on Figure 11-5.	Consistent: Trucks traveling to and from the project site would use Green Island Road to reach SR-29 and SR-12, which would avoid areas designated for residential use by the General Plan. Refer to Section 3.11, Noise for further discussion.
	Policy 11.3.1	Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design by employing the following strategies: a. Consider the impacts of truck routes, the effects of a variety of truck traffic, and future motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned. b. Mitigate traffic volumes and vehicle speed through residential neighborhoods.	Consistent: Trucks would use Green Island Road to reach SR-29 and SR-12 to reach the project site. This routing would avoid residential areas and, therefore, would be consistent with this policy. Refer to Section 3.8, Hazards and Hazardous Materials and Section 3.11, Noise, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
		c. Work closely with the State of California Department of Transportation (Caltrans) in the early stages of highway improvements and design modifications to ensure that proper consideration is given to potential noise impacts on the City.	
	Policy 11.3.2	Require that all new nonresidential development design and configure on-site ingress and egress points to divert traffic (and its resultant noise) away from “noise-sensitive” land uses to the greatest degree practicable.	Consistent: Trucks traveling to and from the project site would use Green Island Road to reach SR-29 and SR-12, which would avoid areas designated for residential use by the General Plan as well as nearby sensitive receptors. Refer to Section 3.11, Noise for further discussion.
	Policy 11.4.1	Restrict the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses (see Figure 11-5).	Consistent: The project site is located outside the 55 dBA CNEL contour of Napa County Airport. Regardless, the proposed project consists of industrial uses which are “normally acceptable” land use activities within this noise contour. Refer to Section 3.8, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Policy 11.4.2	Require that development in the vicinity of Napa Airport comply with the noise standards contained in the Airport Land Use Compatibility Plan (ALUCP).	Consistent: The Napa County ALUCP identifies aviation noise levels between 60 and 65 dBA CNEL as “normally acceptable” for warehouse uses. As such, the proposed project would be consistent with the ALUCP noise standards. Refer to Section 3.9, Hazards and Hazardous Materials, and Section 3.11, Noise, for further discussion.
	Objective 11.5	Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or “noise-sensitive” uses.	Consistent: The project site is in an area that contains noise-tolerant nonresidential uses. As such, the proposed project would not have the potential to cause “spillover” noise into adjoining residential neighborhoods or “noise-sensitive” uses. Refer to Section 3.11, Noise, for further discussion.

Element	Goal/Objective/Policy		Consistency Determination
	No.	Text	
	Objective 11.7	Minimize the impacts of construction noise on adjacent uses.	Consistent: The project site is in an area that contains noise-tolerant nonresidential uses. As such, surrounding land uses would not experience intrusive noise levels during project-related construction activities. Refer to Section 3.11, Noise, for further discussion.

Source: City of American Canyon 2023; FirstCarbon Solutions (FCS) 2023.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Municipal Code Consistency

Impact LU-2: The proposed project would not conflict with the applicable provisions of the American Canyon Municipal Code.

Impact Analysis

The proposed project would develop a 219,834-square-foot wine warehouse on the project site.

Per Municipal Code Section 19.15.020, winery related uses, including such activities as bottling, storage, logistics, distribution, wine packing and wine-related services, are conditionally permitted within the Recreation zone subject to approval of a use permit by the planning commission. Therefore, the project’s proposed end uses would be consistent with the types of conditionally permitted uses set forth in the Zoning Ordinance for the Recreation zoning district.

The proposed project would also be consistent with the Municipal Code’s applicable development standards for the Recreation zone as outlined in Table 3.10-3.

Table 3.10-3: Development Standards Consistency

Development Standard	Allowable	Proposed Project
Maximum Site Coverage ^{1,2}	50%	49.6 (0.496 FAR)
Maximum Building Height	35 Feet	35 Feet
Minimum Building Setback from Local Streets	15 feet	63 Feet
Minimum Building Setback—Interior Nonresidential—Side	35 Feet	65 Feet (minimum)
Minimum Building Setback—Interior Nonresidential—Rear	35 Feet	88 Feet (minimum)

Development Standard	Allowable	Proposed Project
<p>Notes:</p> <p>¹ Outdoor winery related equipment such as tanks and crushing equipment customarily located outside of buildings are not included within the lot coverage standards. Note that no crushing is proposed.</p> <p>² Outdoor winery related equipment shall be screened from view of public streets, parks and trails with landscaping, opaque fence or wall. Note that no outdoor winery equipment is proposed.</p> <p>Source: FirstCarbon Solutions (FCS) 2023. City of American Canyon Municipal Code 2023.</p>		

Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Airport Land Use Compatibility Plan Consistency

Impact LU-3: The proposed project would not conflict with the applicable provisions of the Napa County Airport Land Use Compatibility Plan.

Impact Analysis

The project site falls within the Napa County ALUCP Area.

The ALUCP establishes policies and compatibility zones addressing four key focus areas: noise, safety, airspace protection, and overflight. The ALUCP defines five compatibility zones that address the key focus areas in a composite manner:

- Zone A encompasses the Runway Protection Zones and areas lateral to the runway.
- Zone B includes the approach/departure zone where aircraft will be below 100 feet above ground.
- Zone C is defined by the extended approach/departure zone where aircraft will be below 300 feet above ground level.
- Zone D encompasses the common traffic pattern. These areas are routinely overflown by aircraft.
- Zone E includes the other airport environs and defines the Airport’s influence area and ALUC’s planning area.

The project site falls entirely within Zone D. Zone D is characterized by moderate risk, frequent noise intrusion and routine overflights below 1,000 feet above ground level. The ALUCP indicates that warehousing, low intensity light industrial uses and office uses are normally acceptable uses. ALUCP Table 3-2, Airport Vicinity Land Use Compatibility Criteria, establishes maximum densities for indoor and outdoor uses. Within Zone D, indoor uses are limited to no more than 100 people per net acre. Uses with an outdoor component can have up to 150 per net acre. The ALUCP does not limit the number of people that can be clustered in any one acre of the parcel within Zone D. Net acreage is

defined as the total site area inclusive of parking areas and landscaping, less the area dedicated for streets.

Additionally, the ALUCP prohibits residential uses and uses posing hazards to flight. Hazards to flight include objects that penetrate FAR Part 77 airspace surfaces, uses that would attract large numbers of birds, and uses that would create smoke, glare, distracting lights, or electronic interference.

The analysis that follows assesses the ALUCP density and airspace criteria that relate to the project site.

Maximum Density

The proposed project includes a single distribution warehouse for winery related functions. This land use is generally consistent with ALUCP criteria, provided that the uses do not attract large concentrations of people.

The ALUCP sets forth maximum density criterion of 100 people per net acre for Zone D. The ALUCP identifies three methods for calculating density: (1) parking ordinance; (2) maximum occupancy; and (3) other methodologies in cases where density cannot be reasonably estimated based upon parking or square footage. The ALUCP identifies the parking ordinance methodology as the preferred method for calculating density.

A total of 134 car and 23 truck parking spaces would be provided on-site. It is anticipated that approximately 35 full-time employees and up to 20 part-time employees would be on-site at any given time. The proposed uses would generate client or user trips and it is estimated that such trips would be limited to 2 or 4 occurrences per day. Therefore, an anticipated maximum persons on-site would be approximately 59 (employees plus maximum estimated client or user trips), which is far less than the density criterion of 100 people per net acre for Zone D. Conversely, if the parking space totals were used to estimate on-site density, the anticipated maximum persons on-site would be approximately 151, also far less than the density criterion of 100 people per net acre for Zone D. Furthermore, an Avigation and Hazard Easement Deed extending over the whole of the property was executed by the landowner and recorded by Napa County on July 26, 2019. As such, the proposed project would be consistent with maximum allowable densities in Zone D. Impacts would be less than significant.

Wildlife Attractants

The two isolated wetlands would be preserved. Depending on their characteristics, wetlands can be avian attractants. Avian species are considered potential hazards to aviation activities due to the potential for bird strikes.

The isolated wetlands are small in comparison to adjacent available wetland areas and do not currently attract significant amounts of avian species. Upon project completion, the wetlands would be surrounded by pervious surfaces including buildings, parking areas, and drive aisles. These features would be expected to deter avian activity.

As such, the proposed project would not increase the avian attractant attributes of the project site or nearby areas under the Napa County Airport flight path compared to existing conditions. Impacts would be less than significant.

Light, Glare, Dust, Steam, and Other Aviation Hazards

The ALUCP Policy 3.3.5 states the following:

Policy 3.3.5: Land uses which may produce hazards to aircraft in flight shall not be permitted within any airport's planning area. Specific characteristics to be avoided include: (1) glare or distracting lights which could be mistaken for airport lights; (2) sources of dust, steam, or smoke which may impair pilot visibility; (3) sources of electrical interference with aircraft communications or navigation; and (4) any use which may attract large flocks of birds, especially landfills and certain agricultural uses.

The proposed project's end uses include warehouse and ancillary office operations, which are considered normally acceptable by the ALUCP as long as they do not create hazards. As indicated in Section 3.1, Aesthetics, the proposed project is not expected to result in significant impacts related to light and glare and would be required to abide by applicable Municipal Code Ordinances regarding light, glare and light spillage. As such, the proposed project would not create hazards to aviation. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.10.7 - Cumulative Impacts

The geographic scope of the cumulative land use analysis is the area within 1 mile of the project site. Existing development in this area is predominantly industrial uses, including the airport. Projects under construction include the Napa Logistics Park Project, which is approved for warehouse and other similar uses. Foreseeable future development in the area includes SDG Commerce 217 and the Green Island Road Widening Project.

The proposed project would be consistent with the American Canyon General Plan, American Canyon Zoning Ordinance, and the Napa County ALUCP because its proposed uses are allowed under these plans. The existing uses in the area are generally industrial and related compatible uses. Projects under consideration in the area and reasonably foreseeable future projects would also be required to be consistent with the General Plan, the City's Zoning Ordinance, and the Airport Land Use Compatibility Plan. Additionally, the proposed project and other nearby development would be and have been required to implement wildlife management plans to ensure compatibility with airport operations. Consequently, the proposed project, in conjunction with past, present, and reasonably foreseeable development, would not result in a cumulatively significant land use impact.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

THIS PAGE INTENTIONALLY LEFT BLANK

3.11 - Noise

3.11.1 - Introduction

This section describes the existing noise setting and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on noise modeling performed by FirstCarbon Solutions (FCS). The noise modeling output is included in this Draft Environmental Impact Report (Draft EIR) as Appendix H.

The following public comments pertaining to noise were received in response to the Notice of Preparation (NOP):

- Notes that noise levels resulting from warehouse uses, such as truck traffic and loading activities, should be analyzed in the Draft EIR.
- States that noise impacts on sensitive receptors should be addressed in the Draft EIR.
- States that the Draft EIR should analyze ways in which noise impacts could be reduced via physical, structural, and/or vegetative buffers.
- Requests that the Department of Justice Best Practices and Mitigation Measures for Warehouses¹ be incorporated into the proposed project.
- States that construction noise should be addressed in the Draft EIR.

3.11.2 - Environmental Setting

Characteristics of Noise

Noise is generally defined as unwanted or objectionable sound. Sound becomes unwanted when it interferes with normal activities, when it causes actual physical harm, or when it has adverse effects on health. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment. Noise effects can be caused by pitch or loudness. *Pitch* is the number of complete vibrations or cycles per second of a wave that result in the range of tone from high to low; higher-pitched sounds are louder to humans than lower-pitched sounds. *Loudness* is the intensity or amplitude of sound.

Sound is produced by the vibration of sound pressure waves in the air. Sound pressure levels are used to measure the intensity of sound and are described in terms of decibels. The decibel (dB) is a logarithmic unit, which expresses the ratio of the sound pressure level being measured to a standard reference level. The 0 point on the dB scale is based on the lowest sound level that the healthy, unimpaired human ear can detect. Changes of 3 dB or less are only perceptible in laboratory environments. Audible increases in noise levels generally refer to a change of 3 dB or more, as this level has been found to be barely perceptible to the human ear in outdoor environments. Only audible changes in existing ambient or background noise levels are considered potentially significant.

¹ California Department of Justice. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Website: <https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf>. Accessed November 28, 2023.

The human ear is not equally sensitive to all frequencies within the audible sound spectrum, so sound pressure level measurements can be weighted to better represent frequency-based sensitivity of average healthy human hearing. One such specific “filtering” of sound is called “A-weighting.” A-weighted decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear. Because decibels are logarithmic units, they cannot be added or subtracted by ordinary arithmetic means. For example, if one noise source produces a noise level of 70 dB, the addition of another noise source with the same noise level would not produce 140 dB; rather, they would combine to produce a noise level of 73 dB.

Noise Descriptors

There are many ways to rate noise for various intervals, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time-varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq} and community noise equivalent level (CNEL) or the day-night average level (L_{dn}) based on dBA. CNEL is the time-varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and a 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). L_{dn} is similar to the CNEL scale but without the adjustment for events occurring during the evening hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Other noise rating scales of importance when assessing the annoyance factor include the maximum noise level (L_{max}), which is the highest exponential time-averaged sound level that occurs during a stated time period. The noise environments discussed in this analysis are specified in terms of maximum levels denoted by L_{max} for short-term noise impacts. L_{max} reflects peak operating conditions and addresses the annoying aspects of intermittent noise.

Noise Propagation

From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source, as well as ground absorption, atmospheric conditions (wind, temperature gradients, and humidity) and refraction, and shielding by natural and manmade features. Sound from point sources, such as an air conditioning condenser, a piece of construction equipment, or an idling truck, radiates uniformly outward as it travels away from the source in a spherical pattern.

The attenuation or sound drop-off rate is dependent on the conditions of the land between the noise source and receiver. To account for this ground-effect attenuation (absorption), two types of site conditions are commonly used in noise models: soft-site and hard-site conditions. Soft-site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. For point sources, a drop-off rate of 7.5 dBA per each doubling of the distance

(dBA/DD) is typically observed over soft ground with landscaping, as compared with a 6 dBA/DD drop-off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. For line sources, such as traffic noise on a roadway, a 4.5 dBA/DD is typically observed for soft-site conditions compared to the 3 dBA/DD drop-off rate for hard-site conditions. Table 3.11-1 briefly defines these measurement descriptors and other sound terminology used in this section.

Table 3.11-1: Sound Terminology

Term	Definition
Sound	A vibratory disturbance created by a vibrating object which, when transmitted by pressure waves through a medium such as air, can be detected by a receiving mechanism such as the human ear or a microphone.
Noise	Sound that is loud, unpleasant, unexpected, or otherwise undesirable.
Ambient Noise	The composite of noise from all sources near and far in a given environment.
Decibel (dB)	A unitless measure of sound on a logarithmic scale, which represents the squared ratio of sound pressure amplitude to a reference sound pressure. The reference pressure is 20 micropascals, representing the threshold of human hearing (0 dB).
A-Weighted Decibel (dBA)	An overall frequency-weighted sound level that approximates the frequency response of the human ear.
Equivalent Noise Level (L_{eq})	The average sound energy occurring over a specified time period. In effect, L_{eq} is the steady-state sound level that in a stated period would contain the same acoustical energy as the time-varying sound that actually occurs during the same period.
Maximum and Minimum Noise Levels (L_{max} and L_{min})	The maximum or minimum instantaneous sound level measured during a measurement period.
Day-Night Level (DNL or L_{dn})	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m. (nighttime).
Community Noise Equivalent Level (CNEL)	The energy average of the A-weighted sound levels occurring during a 24-hour period, with 5 dB added to the A-weighted sound levels occurring between 7:00 p.m. and 10:00 p.m. and 10 dB added to the A-weighted sound levels occurring between 10:00 p.m. and 7:00 a.m.
Source: Data compiled by FirstCarbon Solutions (FCS). 2023.	

Traffic Noise

The level of traffic noise depends on the three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the number of trucks in the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and greater number of trucks. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires. Because of the logarithmic nature of noise levels, a doubling of the traffic volume (assuming that the speed and truck mix do not change) results in a noise level increase of 3 dBA. Based on the Federal Highway Administration (FHWA) community noise assessment criteria, this change is “barely perceptible”; for reference, a doubling of perceived noise levels would require an increase of approximately 10 dBA. The truck mix on a given roadway also has an effect on community noise levels. As the number of heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels increase.

Stationary Noise

A stationary noise producer is any entity in a fixed location that emits noise. Examples of stationary noise sources include machinery, engines, energy production, and other mechanical or powered equipment and activities such as loading and unloading or public assembly that may occur at commercial, industrial, manufacturing, or institutional facilities. Furthermore, while noise generated by the use of motor vehicles over public roads is preempted from local regulation, the use of these vehicles is considered a stationary noise source when operated on private property such as at a construction site, a truck terminal, or warehousing facility. The emitted noise from the producer can be mitigated to acceptable levels either at the source or on the adjacent property through the use of proper planning, setbacks, block walls, acoustic-rated windows, or dense landscaping or by changing the location of the noise producer.

The effects of stationary noise depend on factors such as characteristics of the equipment and operations, distance and pathway between the generator and receptor, and weather. Stationary noise sources may be regulated at the point of manufacture (e.g., equipment or engines), with limitations on the hours of operation, or with provision of intervening structures, barriers, or topography.

Construction activities are a common source of stationary noise. Construction-period noise levels are higher than background ambient noise levels but eventually cease once construction is complete. Construction is performed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on each construction site and, therefore, would change the noise levels as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.11-2 shows typical noise levels of construction equipment as measured at a distance of 50 feet from the operating equipment.

Table 3.11-2: Typical Construction Equipment Maximum Noise Levels

Type of Equipment	Impact Device? (Yes/No)	Specification Maximum Sound Levels for Analysis (dBA at 50 feet)
Impact Pile Driver	Yes	95
Auger Drill Rig	No	85
Vibratory Pile Driver	No	95
Jackhammers	Yes	85
Pneumatic Tools	No	85
Pumps	No	77
Scrapers	No	85
Cranes	No	85
Portable Generators	No	82
Rollers	No	85
Bulldozers	No	85
Tractors	No	84
Front-End Loaders	No	80
Backhoe	No	80
Excavators	No	85
Graders	No	85
Air Compressors	No	80
Dump Truck	No	84
Concrete Mixer Truck	No	85
Pickup Truck	No	55
Notes: dBA = A-weighted decibel Source: Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.		

Noise from Multiple Sources

Because sound pressure levels in decibels are based on a logarithmic scale, they cannot be added or subtracted in the usual arithmetical way. Therefore, sound pressure levels in decibels are logarithmically added on an energy summation basis. In other words, adding a new noise source to an existing noise source, both producing noise at the same level, will not double the noise level. Instead, if the difference between two noise sources is 10 dBA or more, the louder noise source will dominate, and the resultant noise level will be equal to the noise level of the louder source. In general, if the difference between two noise sources is 0–1 dBA, the resultant noise level will be 3 dBA higher than the louder noise source, or both sources if they are equal. If the difference between two noise sources is 2–3 dBA, the resultant noise level will be 2 dBA above the louder noise source.

If the difference between two noise sources is 4–10 dBA, the resultant noise level will be 1 dBA higher than the louder noise source.

Characteristics of Vibration

Groundborne vibration consists of rapidly fluctuating motion through a solid medium, specifically the ground, which has an average motion of zero and in which the motion’s amplitude can be described in terms of displacement, velocity, or acceleration. The effect of groundborne vibration typically only causes a nuisance to people, but in extreme cases, excessive groundborne vibration has the potential to cause structural damage to buildings. Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Groundborne noise is an effect of groundborne vibration and only exists indoors, since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude such as the maximum instantaneous peak in the vibrations velocity, which is known as the peak particle velocity (PPV) or the root mean square (rms) amplitude of the vibration velocity. Because of the typically small amplitudes of vibrations, vibration velocity is often expressed in decibels—denoted as LV—and is based on the reference quantity of 1 microinch per second. To distinguish vibration levels from noise levels, the unit is written as “VdB.”

Although groundborne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. When assessing annoyance from groundborne vibration, vibration is typically expressed as rms velocity in units of decibels of 1 microinch per second, with the unit written in VdB. Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. Human perception of vibration starts at levels as low as 67 VdB. Annoyance due to vibration in residential settings starts at approximately 70 VdB.

Off-site sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible groundborne noise or vibration. Construction activities, such as blasting, pile driving, and operating heavy earthmoving equipment, are common sources of groundborne vibration. Construction vibration impacts on building structures are generally assessed in terms of PPV. Typical vibration source levels from construction equipment are shown in Table 3.11-3.

Table 3.11-3: Vibration Levels of Construction Equipment

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Water Trucks	0.001	57
Scraper	0.002	58
Bulldozer (small)	0.003	58
Jackhammer	0.035	79

Construction Equipment	PPV at 25 Feet (inches/second)	rms Velocity in Decibels (VdB) at 25 Feet
Concrete Mixer	0.046	81
Concrete Pump	0.046	81
Paver	0.046	81
Pickup Truck	0.046	81
Auger Drill Rig	0.051	82
Backhoe	0.051	82
Crane (mobile)	0.051	82
Excavator	0.051	82
Grader	0.051	82
Loader	0.051	82
Loaded Trucks	0.076	86
Bulldozer (large)	0.089	87
Caisson drilling	0.089	87
Vibratory Roller (small)	0.101	88
Compactor	0.138	90
Clam Shovel Drop	0.202	94
Vibratory Roller (large)	0.210	94
Pile Driver (impact-typical)	0.644	104
Pile Driver (impact-upper range)	1.518	112
Notes: PPV = peak particle velocity rms = root mean square VdB = velocity in decibels Source: Federal Highway Administration (FHWA). 2006. Highway Construction Noise Handbook. August.		

The propagation of groundborne vibration is not as simple to model as airborne noise. This is because noise in the air travels through a relatively uniform medium, while groundborne vibrations travel through the earth, which may contain significant geological differences. Factors that influence groundborne vibration include:

- **Vibration source:** Type of activity or equipment, such as impact or mobile, and depth of vibration source;
- **Vibration path:** Soil type, rock layers, soil layering, depth to water table, and frost depth; and
- **Vibration receiver:** Foundation type, building construction, and acoustical absorption.

Among these factors that influence groundborne vibration, there are significant differences in the vibration characteristics when the source is underground compared to at the ground surface. In

addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock. Vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface and can result in groundborne vibration problems at large distance from the source. Factors such as layering of the soil and depth to the water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils. There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil type, but it has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests. The vibration level (calculated below as "PPV") at a distance from a point source can generally be calculated using the vibration reference equation:

$$PPV = PPV_{ref} * (25/D)^n \text{ (in/sec)}$$

Where:

PPV_{ref} = reference measurement at 25 feet from vibration source

D = distance from equipment to the receptor

n = vibration attenuation rate through ground

According to Chapter 12 of the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual, an "n" value of 1.5 is recommended to calculate vibration propagation through typical soil conditions.²

Existing Noise Levels

The project site is located in the City of American Canyon (City), Napa County (County), California. The project site is bounded by a eucalyptus grove, North Slough, and Napa River to the west; a parcel entitled for a wine distribution warehouse known as SDG Commerce 217 and other industrial development to the north; Commerce Court, beyond which is a paintball recreation area within a stand of eucalyptus trees to the east; and a wine distribution warehouse known as SDG Commerce 330 to the south beyond which is wetlands Edge Park; refer to Chapter 2, Project Description, Exhibit

² Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment Manual. May.

2-2. Napa County Airport is located approximately 1.6 miles north of the project site. The dominant noise sources in the project vicinity are traffic on local roadways and railroad and airport activity.

Noise-Sensitive Land Uses

Noise-sensitive land uses generally consist of those uses where exposure to noise would result in adverse effects, as well as uses for which 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. Other typical noise-sensitive land uses include hospitals, convalescent facilities, hotels, schools, religious institutions, libraries, and other uses where low noise levels are essential.

3.11.3 - Regulatory Framework

Federal

Currently, no federal noise standards regulate environmental noise associated with temporary construction activities or the long-term operations of development projects. As such, both temporary and long-term noise impacts result from the proposed project would be largely regulated or otherwise evaluated by State and local agency standards designed to protect public well-being and health.

Federal Transit Administration Standards and Guidelines

Though not regulatory in nature, vibration impact criteria for buildings and other structures have been established by the FTA, as building and structural damages are generally the foremost concern when evaluating the impacts of construction-related vibrations. For the evaluation of the proposed project’s construction-related vibration impacts, the following FTA vibration impact criteria, shown in Table 3.11-4, are used given the absence of applicable federal, State, and City standards specific to temporary construction activities and their potential to result in building and structural damages.³

Table 3.11-4: Federal Transit Administration Construction Vibration Impact Criteria

Building Category	PPV (in/sec)	Approximate VdB
I. Reinforced-Concrete, Steel or Timber (no plaster)	0.5	102
II. Engineered Concrete and Masonry (no plaster)	0.3	98
III. Non-engineered Timber and Masonry Buildings	0.2	94
IV. Buildings Extremely Susceptible to Vibration Damage	0.12	90
Notes: PPV = peak particle velocity VdB = velocity in decibels Source: Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual. September.		

³ Federal Transit Administration (FTA). 2018. Transit Noise and Vibration Impact Assessment Manual.

State

California General Plan Guidelines

The State of California’s General Plan Guidelines propose county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. The State’s suggested compatibility considerations between various land uses and exterior noise levels are not regulatory in nature but are recommendations intended to aid communities in determining their own noise-acceptability standards.

Local

Since the State and federal government have preempted the setting of standards for noise levels that can be emitted by transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning. The applicable sections of the City of American Canyon General Plan (General Plan) and City of American Canyon Municipal Code (Municipal Code) are stated below.

City of American Canyon

General Plan

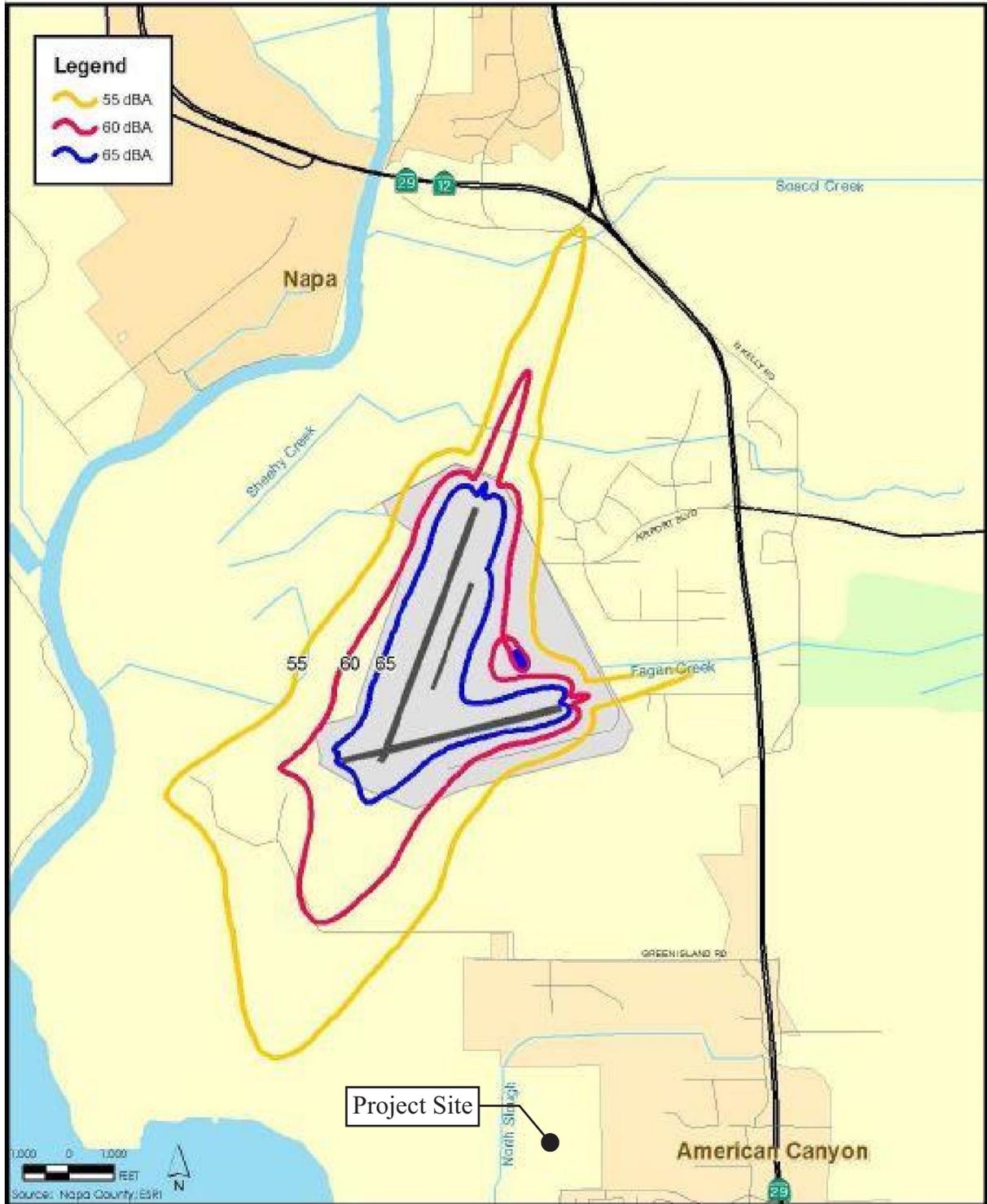
The General Plan sets forth the following goal of ensuring that American Canyon’s existing and future residents, employees and employers, as well as visitors to the City, are protected from the adverse human health and environmental impacts of excessive noise levels created by stationary and ambient (intrusive) noise sources and conditions. The City takes all necessary and appropriate action to avoid or mitigate the detrimental effects of such excessive noise on the community. Exhibit 3.11-1 illustrates the acceptable noise-compatible land use relationships by implementing the noise standards identified in Figure 11-2 of the General Plan. The objectives and policies relevant to noise that are applicable to the proposed project are:

Objective 11.1 Control both ambient and stationary (intrusive) noise conditions and impacts that may occur in American Canyon. Maintain base line information regarding ambient and stationary noise sources within the community.

Policy 11.1.1 Promote noise-compatible land use relationships by implementing the noise standards identified in Figure 11-2 [of the General Plan], to be utilized for design purposes in new development and for establishing a program to attenuate existing noise problems.

Policy 11.1.2 Monitor and update available data regarding the community’s ambient and stationary noise levels.

Objective 11.2 Protect residents, employees, and visitors to the community from excessive noise exposure. If possible, mitigate the adverse impacts of existing or unavoidable excessive noise on these same groups.



Source: Napa County, 2004. The City of American Canyon General Plan.

THIS PAGE INTENTIONALLY LEFT BLANK

- Policy 11.2.1** Require that new development for locations in which the exterior or interior noise levels indicated in Figure 11-2 [of the General Plan] are likely to be exceeded, submit a noise attenuation study prepared by a qualified acoustical engineer in order to determine appropriate mitigation measures.
- Policy 11.2.4** Require that new industrial, commercial, and related land uses, or the expansion of these existing land uses, demonstrate that they would not directly cause ambient noise levels to exceed an exterior Ldn of 65 dBA in areas containing housing, schools, health care facilities, or other “noise-sensitive” land uses. Additionally, require that potentially significant noise generators, including uses such as night clubs that cause sporadic noise intensities, submit noise analyses prepared by an acoustical expert that include specific recommendations for mitigation when: (a) the project is located in close proximity to noise-sensitive land uses or land that is planned for noise-sensitive land uses, or (b) the proposed noise source could violate the noise provisions of the General Plan or City Noise Ordinance.
- Objective 11.3** Minimize the adverse impacts of traffic-generated noise on residential and other “noise-sensitive” uses as depicted on Figure 11-5 [of the General Plan].
- Policy 11.3.1** Minimize motor vehicle noise impacts from streets and highways through proper route location and sensitive roadway design by employing the following strategies:
- a. Consider the impacts of truck routes, the effects of a variety of truck traffic, and future motor vehicle volumes on noise levels adjacent to master planned roadways when improvements to the circulation system are planned.
 - b. Mitigate traffic volumes and vehicle speed through residential neighborhoods.
 - c. Work closely with the State of California Department of Transportation (Caltrans) in the early stages of highway improvements and design modifications to ensure that proper consideration is given to potential noise impacts on the City.
- Policy 11.3.2** Require that all new nonresidential development design and configure on-site ingress and egress points to divert traffic (and its resultant noise) away from “noise-sensitive” land uses to the greatest degree practicable.
- Policy 11.4.1** Restrict the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses (see Figure 11-5 [of the General Plan]).
- Policy 11.4.2** Require that development in the vicinity of Napa Airport comply with the noise standards contained in the Airport Land Use Compatibility Plan (ALUCP).
- Objective 11.5** Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or “noise-sensitive” uses.
- Objective 11.7** Minimize the impacts of construction noise on adjacent uses.

City of American Canyon Municipal Code

The Municipal Code establishes an exterior noise level criterion of 50 dBA for single- or multi-family residential land uses; 55 dBA for multi-family residential land uses from 10:00 p.m. to 7:00 a.m.; and 60 dBA for all residential land uses from 7:00 a.m. to 10:00 p.m. within outdoor activity areas of each residential land uses. Additionally, the City requires that cumulative noise exposure from exterior noise sources within noise-sensitive dwellings not exceed 55 dBA from 10:00 p.m. to 7:00 a.m. and 60 dBA from 7:00 a.m. to 10:00 p.m. The City establishes different exterior noise limits for construction noise impacts for residential land uses to be 75 dBA from 7:00 a.m. to 7:00 p.m. and 60 dBA from 7:00 p.m. to 7:00 a.m.

3.11.4 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether noise impacts resulting from the implementation of the proposed project would be considered significant if the project would cause:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?
- b) Generation of excessive groundborne vibration or groundborne noise levels?
- c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

3.11.5 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Substantial Noise Increase in Excess of Standards

Impact NOI-1:	The proposed project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.
----------------------	---

Impact Analysis

Construction

For purposes of this analysis, a significant impact would occur if construction noise impacts were greater than 75 dBA between the hours of 7:00 a.m. and 7:00 p.m. or greater than 60 dBA from 7:00 p.m. to 7:00 a.m., per the City's policies, and would result in a substantial temporary increase in ambient noise levels that could result in annoyance or sleep disturbance of nearby sensitive receptors.

Construction-related Traffic Noise

Noise impacts from construction activities associated with the proposed project would be a function of the noise generated by construction equipment, equipment location, sensitivity of nearby land uses, and the timing and duration of the construction activities. One type of short-term noise impact that could occur during project construction would result from the increase in traffic flow on local streets associated with the transport of workers, equipment, and materials to and from the project site. The transport of workers and construction equipment and materials to the project site would incrementally increase noise levels on access roads leading to the site. Because workers and construction equipment would use existing routes, noise from passing trucks would be similar to existing vehicle-generated noise on these local roadways. Typically, a doubling of the Average Daily Traffic (ADT) hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels, which, as discussed in the characteristics of noise discussion above, is the lowest change that can be perceptible to the human ear in outdoor environments. Project-related construction trips would not be expected to double the hourly or daily traffic volumes along any roadway segment in the project vicinity. For this reason, short-term intermittent noise from construction trips would not be expected to result in a perceptible increase in hourly or daily average traffic noise levels in the project vicinity. Therefore, short-term construction-related noise impacts associated with the transportation of workers and equipment to the project site would be less than significant.

Construction Equipment Operational Noise

The second type of short-term noise impact is related to noise generated during construction on the project site. Construction is completed in discrete steps, each of which has its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on the site and, therefore, the noise levels surrounding the site as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase. Table 3.11-2 lists typical construction equipment noise levels, based on a distance of 50 feet between the equipment and a noise receptor. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 or 4 minutes at lower power settings. Impact equipment such as pile drivers are not expected to be used during construction of the proposed project.

The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery and compacting equipment, such as bulldozers, draglines, backhoes, front loaders, roller compactors, scrapers, and graders.

Construction of the project is expected to require the use of scrapers, bulldozers, water trucks, haul trucks, and pickup trucks. Based on the information provided in Table 3.11-2, the maximum noise level generated by each scraper is assumed to be 85 dBA L_{max} at 50 feet from this equipment. Each bulldozer would also generate 85 dBA L_{max} at 50 feet. The maximum noise level generated by graders is approximately 85 dBA L_{max} at 50 feet. A characteristic of sound is that each doubling of sound sources with equal strength increases a sound level by 3 dBA. Assuming that each piece of

construction equipment operates at some distance from the other equipment, a reasonable worst-case combined noise level during this phase of construction would be 90 dBA L_{max} at a distance of 50 feet from the acoustic center of a construction area. This would result in a reasonable worst-case hourly average of 86 dBA L_{eq} . The acoustic center reference is used because construction equipment must operate at some distance from one another on a project site and the combined noise level as measured at a point equidistant from the sources (acoustic center) would be the worst-case maximum noise level. The effect on sensitive receptors is evaluated below.

The closest residential receptor to the project site's construction footprint is the single-family residential unit located approximately 900 feet east of the project site. At this distance, and with the screening provided by the intervening brush and trees, construction noise levels would result in a relative worst-case hourly average of 45 dBA L_{eq} at this receptor. These noise levels could occur temporarily under the reasonable worst-case scenario of multiple pieces of heavy construction equipment operating simultaneously in relatively the same locations at the nearest project boundary for an hour period. If these noise levels were to occur every hour from 7:00 a.m. to 7:00 p.m., they would result in a reasonable worst-case average noise level of 42 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The next closest sensitive receptor is the Napa Junction Magnet Elementary School located south of the project site, just north of Eucalyptus Drive. This receptor would be approximately 1,200 feet from the acoustic center of construction activity where multiple pieces of heavy construction equipment would operate simultaneously during construction of the proposed parking areas near the project's southeastern boundary. At this distance, construction noise levels would result in a relative worst-case hourly average of 43 dBA L_{eq} at this receptor. These noise levels could occur temporarily under the reasonable worst-case scenario of multiple pieces of heavy construction equipment operating simultaneously in relatively the same locations at the nearest project boundary for an hour-long period. If these noise levels were to occur every hour from 7:00 a.m. to 7:00 p.m., they would result in a reasonable worst-case average noise level of 40 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The proposed project would limit construction activity to the hours of 7:00 a.m. to 7:00 p.m. The calculated reasonable worst-case construction noise levels identified in the analyses above are within the construction noise limits established by the City of no greater than 75 dBA during the hours of 7:00 a.m. to 7:00 p.m. and no greater than 60 dBA during nighttime hours. Therefore, project construction activities would not generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of City standards, and temporary construction noise impacts would be less than significant.

Operation

Implementation of the proposed project would result in mobile and stationary operational noise sources. Potential noise impacts with these project-related sources are analyzed below.

Mobile Source Operational Noise Impacts

A significant impact would occur if implementation of the proposed project would result in a substantial increase in traffic noise levels compared with traffic noise levels existing without the proposed project. The County does not define what is a substantial increase in traffic noise levels. As noted in the characteristics of noise discussion, audible increases in noise levels generally refer to a change of 3 dBA or more as this level has been found to be barely perceptible to the human ear in outdoor environments. A change of 5 dBA is considered the minimum readily perceptible change to the human ear in outdoor environments. Furthermore, a doubling of the ADT hourly volumes on a roadway segment is required in order to result in an increase of 3 dBA in traffic noise levels. Therefore, for the purposes of this analysis, a doubling of the existing ADT volumes would result in a substantial permanent increase in traffic noise levels.

Based on the traffic analysis prepared by W-Trans for the proposed project,⁴ the proposed project would generate an estimated total of 372 average daily trips, with 35 trips occurring during the AM peak-hour and 27 trips occurring during the PM peak-hour. These traffic volumes would not result in a doubling of traffic on Commerce Boulevard, adjacent to the project site. For instance, the facility immediately south of the project site was analyzed and determined to generate 559 average weekday trips.⁵ Therefore, project-related traffic would result in a less than 3 dBA increase in traffic noise levels on local access roadways in the project vicinity.

Therefore, the increase in hourly average or daily traffic noise levels resulting from project operations would not be perceptible along any roadway segment in the project vicinity. Implementation of the project would not result in a substantial increase in traffic noise levels compared with traffic noise levels existing without the project and would represent a less than significant impact.

Stationary Source Operational Noise Impacts

A significant impact would occur if operational noise levels generated by stationary noise sources at the proposed project site would result in a substantial permanent increase in ambient noise levels in excess of the City's noise performance standards. The City requires that new industrial, commercial, and related land uses demonstrate that they would not directly cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA in areas containing housing, schools, health care facilities, or other "noise-sensitive" land uses. Furthermore, the City has established an exterior noise level criterion of 50 dBA for single- or double-family residential land uses; 55 dBA for multi-family residential land uses from 10:00 p.m. to 7:00 a.m.; and 60 dBA for all residential land uses from 7:00 a.m. to 10:00 p.m. within outdoor activity areas of each residential land uses.

The proposed project would generate noise from parking lot activities, new exterior mechanical equipment sources, such as rooftop ventilation systems on proposed industrial uses, and truck loading and unloading activities. Potential impacts from these noise sources are discussed below.

⁴ W-Trans. 2023. 1055 Commerce Court Memorandum of Assumptions. April 26.

⁵ City of American Canyon. 2019. Final Initial Study for the SDG Commerce 330 Warehouse Project. January.

Parking Lot Activities

Typical parking lot activities include people conversing, doors shutting, and vehicles idling, which generate noise levels ranging from approximately 60 dBA to 70 dBA L_{max} at 50 feet. These activities are expected to occur sporadically throughout the day as visitors and staff arrive and leave the parking lot areas at the project site.

The closest residential receptor to the project site construction footprint is the single-family residential unit located approximately 900 feet east of the project site. With the distance attenuation and assuming minimal shielding from intervening brush and trees, noise levels associated with daily parking lot activities would attenuate to approximately 42 dBA L_{max} at this façade. Assuming a reasonable worst-case scenario of one parking movement for every parking stall within a single hour would result in an hourly average noise level of 31 dBA L_{eq} as measured at this nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 38 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The next closest noise-sensitive receptor is the Napa Junction Magnet Elementary School located south of the project site, just north of Eucalyptus Drive. The nearest façade of this receptor is located over 1200 feet south of the nearest proposed parking areas. With the distance attenuation and assuming minimal shielding from intervening structures and terrain, noise levels associated with daily parking lot activities would attenuate to approximately 39 dBA L_{max} at this façade. Assuming a reasonable worst-case scenario of one parking movement for every parking stall within a single hour would result in an hourly average noise level of 27 dBA L_{eq} as measured at this nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 34 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

Therefore, the proposed project's reasonable worst-case parking lot noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA for receiving school land uses, nor would they exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses. Therefore, project parking lot activities would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and the impact of noise produced by project-related parking lot activities to off-site sensitive receptors would be less than significant.

Mechanical Equipment Operations

The proposed project would include mechanical cooling system equipment that would be located in an enclosed mechanical area on the north side of the proposed building. In addition, the project would include a night air cooling system that consists of wall mounted intake fans covered by louvers. The loudest of these systems would be the mechanical cooling system compressor fans. Typical mechanical equipment cooling system compressor fans have documented noise levels ranging from 50 dBA to 60 dBA L_{eq} at a distance of 25 feet.

The closest residential receptor to the project site construction footprint is the single-family residential unit located approximately 900 feet east of the project site. At this distance, noise generated by the proposed mechanical cooling system compressor fans would attenuate to below 16

dBa L_{eq} at the nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 23 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The next closest noise-sensitive receptor is the Napa Junction Magnet Elementary School located south of the project site, just north of Eucalyptus Drive. The nearest façade of this receptor is located approximately 1,265 feet south of the nearest potential location for proposed mechanical cooling system compressor fans. At this distance, noise generated by the compressor fan equipment would attenuate to below 12 dBA L_{eq} at the nearest façade. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 18 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

Therefore, the proposed project's reasonable worst-case mechanical equipment operations noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA for receiving school land uses, nor would they exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses. Therefore, project mechanical equipment operations would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and the impact of noise produced by project-related mechanical equipment operations to off-site sensitive receptors would be less than significant.

Truck Loading Activities

Noise would also be generated by truck loading and unloading activities at the loading docks along the western side of the proposed building and at the proposed surface level loading areas on the north and south sides of the building. Typical maximum noise levels from truck loading and unloading activity are 70 dBA L_{max} as measured at 50 feet. These maximum noise levels include noise from associated truck loading/unloading activity, including trucks maneuvering, truck trailer loading, truck trailer unloading, backup alarms or beepers, and truck docking noise.

The closest residential receptor to the project site construction footprint is a single-family residential land use east of the project site. The nearest façade of this receptor is located 1,030 feet from the nearest loading docks. Assuming a reasonable worst-case scenario of one truck loading operation for every loading dock within a single hour would result in an hourly average noise level of 28 dBA L_{eq} as measured at this nearest receptor. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 35 dBA L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

The next closest noise-sensitive receptor is the Napa Junction Magnet Elementary School located south of the project site, just north of Eucalyptus Drive. The nearest façade of this receptor is located 1,280 feet from the nearest loading docks. Assuming a reasonable worst-case scenario of one truck loading operation for every loading dock within a single hour would result in an hourly average noise level of 27 dBA L_{eq} as measured at this nearest receptor. If these noise levels were to occur every hour for a 24-hour period, they would result in a reasonable worst-case average noise level of 33

dBa L_{dn} as measured at this nearest receptor. The calculation spreadsheet with the detailed modeling assumptions is included in Appendix H.

Therefore, the proposed project's truck loading/unloading activity noise levels would not cause ambient noise levels to exceed an exterior L_{dn} of 65 dBA for receiving school land uses, nor would they exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses. Therefore, project truck loading/unloading operations would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and the impact of noise produced by project-related truck loading/unloading operations to off-site sensitive receptors would be less than significant.

Stationary Source Operational Noise Impact Conclusion

As shown in the analysis above, none of the proposed project's stationary operational noise sources would result in an increase of 3 dBA or greater above the City's performance threshold of 65 dBA L_{dn} for stationary noise sources as measured at the nearest sensitive receptor, nor would they exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses. Therefore, noise impacts from stationary operational noise sources would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Groundborne Vibration/Noise Levels

Impact NOI-2: The proposed project would not result in generation of excessive groundborne vibration or groundborne noise levels.

Impact Analysis

This section analyzes both construction and operational groundborne vibration and noise impacts. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. Vibrating objects in contact with the ground radiate vibration waves through various soil and rock strata to the foundations of nearby buildings. Groundborne noise is generated when vibrating building components radiate sound, or noise generated by groundborne vibration. In general, if groundborne vibration levels do not exceed levels considered perceptible, then groundborne noise levels would not be perceptible in most interior environments. Therefore, this analysis focuses on determining exceedances of groundborne vibration levels.

The City of American Canyon has not established quantitative groundborne vibration thresholds for construction or operation. Therefore, for the purposes of this analysis, the FTA's vibration impact criteria are utilized to analyze vibration impacts. The FTA has established industry-accepted standards for vibration impact criteria and impact assessment. These guidelines are published in its

Transit Noise and Vibration Impact Assessment Manual.⁶ The construction vibration impact criteria are summarized in Table 3.11-4.

Construction

A significant impact would occur if existing structures at the project site or in the project vicinity would be exposed to groundborne vibration levels in excess of levels established by the FTA's Construction Vibration Impact Criteria for the listed type of structure, as shown in Table 3.11-4.

Of the variety of equipment used during construction, the large vibratory rollers that could be used in the site preparation phase of construction would produce the greatest groundborne vibration levels. Large vibratory rollers produce groundborne vibration levels ranging up to 0.201 inch per second (in/sec) PPV at 25 feet from the operating equipment.

The nearest off-site receptor to the project construction footprint where the heaviest construction equipment would operate is the commercial building located south of the project site. The façade of this structure would be located approximately 130 feet from the nearest point on the project site where the heaviest construction equipment would potentially operate. At this distance, groundborne vibration levels would range up to 0.017 PPV from operation of the types of equipment that would produce the highest vibration levels, which is well below the FTA's Construction Vibration Impact Criteria of 0.5 PPV for this type of structure, which is a building of reinforced-concrete, steel or timber (no plaster) construction. Therefore, the impact of short-term groundborne vibration associated with construction to off-site receptors would be less than significant.

Operation

Implementation of the proposed project would not include any permanent sources that would expose persons at any existing sensitive land use in the project vicinity to groundborne vibration levels that could be perceptible without instruments.

For informational purposes, the Southern Pacific Railroad rail line is located over 3,000 feet northeast of the project site. At this distance potential groundborne vibration impacts would be less than significant for the proposed type of structure, based on FTA vibration screening criteria. There are no other existing significant permanent sources of groundborne vibration in the project vicinity to which the proposed project would be exposed.

Therefore, project operational groundborne vibration level impacts would be considered less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

⁶ Federal Transit Administration. 2018. Transit Noise and Vibration Impact Assessment Manual. September.

Excessive Noise Levels from Airport Activity

Impact NOI-3: **The proposed project would not expose people residing or working in the project area to excessive noise levels 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.**

Impact Analysis

A significant impact would occur if the proposed project would expose people residing or working in the project area to excessive noise levels for a project located in the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport. The City's General Plan Policy 11.4.1 restricts the development of uses located within the 65 CNEL contour of Napa Airport to industrial, agricultural, or other open space uses; and General Plan Policy 11.4.2 requires that development in the vicinity of Napa Airport comply with the noise standards contained in the ALUCP.

The project site is not located within the vicinity of a private airstrip. However, the project site is located within 2 miles of a public airport; the Napa County Airport is located approximately 1.6 miles north of the project site. As such, the project site is located outside of the 55 dBA CNEL airport noise contours. Therefore, while aircraft noise is occasionally audible on the project site from aircraft flyovers, aircraft noise associated with nearby airport activity would not expose people residing or working near the project site to excessive noise levels. These noise levels are considered normally acceptable for new industrial land use development within the City as shown in Exhibit 3.11-1. On this basis, implementation of the project would not expose persons residing or working in the project vicinity to noise levels from airport activity that would be in excess of normally acceptable standards for the proposed land use development, and impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.11.6 - Cumulative Impacts

The geographic scope for the cumulative analysis for noise and vibration impacts is limited to areas within 1,000 feet of the project site boundary for on-site noise sources because of the localized nature of noise and vibration impacts. This analysis first evaluates whether the impacts of cumulative development could result in a cumulatively significant noise or vibration impact. If there is a cumulative significant impact, this analysis then considers whether the incremental contribution of the impacts associated with the implementation of the proposed project would be cumulatively considerable. Both conditions must apply for the project's cumulative effects to rise to the level of significance.

Construction Noise

As noted above, the geographic scope of the cumulative noise analysis is the project vicinity, including surrounding sensitive receptors. Noise impacts tend to be localized; therefore, the area surrounding the project site (approximately 1,000 feet) would be the area most affected by proposed project activities. Cumulative development would be required to comply with all applicable construction hour requirements and would also be anticipated to incorporate appropriate Best Management Practices (BMPs) to help reduce construction noise. Additionally, cumulative development would comply with design review regulations directing the siting, design, and insulation of new development and redevelopment and all applicable noise policies, standards, and requirements in the General Plan and Municipal Code, which would ensure that noise impacts are less than significant.

There is only one project on the cumulative projects list that is within 1,000 feet of the project site, the project immediately north of this project site. That project is currently under construction and will be completed before this project begins construction. Therefore, there would not be an existing cumulative construction noise impact condition.

Because there is not a cumulative significant construction noise impact to existing or planned land uses in the project vicinity, the incremental contribution of project construction noise would not be cumulatively considerable. Therefore, the proposed project would result in a less than significant cumulative impact related to construction noise.

Operational Traffic Noise

If there is an identified cumulative traffic noise impact in the project vicinity, and if the proposed project would result in an incremental contribution to an identified cumulative traffic noise impact, then the project's impact would be cumulatively considerable.

Traffic noise levels along Commerce Boulevard adjacent to the project site do not exceed acceptable noise levels for the adjoining land uses. Therefore, there is not an existing cumulative traffic noise impact condition to which the proposed project could contribute. Because there is not a cumulative significant traffic noise impact along roadway segments to which project trips could contribute, the incremental contribution of project traffic noise would not be cumulatively considerable. Therefore, the proposed project would result in a less than significant cumulative impact related to traffic noise.

Operational Stationary Noise

For stationary operational noise sources, a significant impact would occur if the cumulative projects would cause the L_{dn} at noise-sensitive uses to increase by 3 dB or greater above the City's performance threshold of 65 dBA L_{dn} or exceed the City's exterior noise level criterion of 50 dBA for receiving single-family residential land uses.

As shown in the stationary source noise impact discussion above, project noise levels from project-related mechanical equipment operations would not exceed existing ambient noise levels as measured at the nearest off-site sensitive land uses and, therefore, would not result in any increase in ambient noise levels in the project vicinity and would not contribute to any cumulative stationary

source noise impact condition. Thus, there is a less than significant cumulative impact related to operational stationary noise sources in the project vicinity.

Construction Vibration

The geographic scope of the cumulative construction vibration analysis is the project vicinity, including surrounding sensitive receptors. Construction vibration impacts are very localized; therefore, the area surrounding the project site (approximately 100 feet) would be the area most affected by proposed project construction activities.

There is no cumulative project within 100 feet of the project site, and, therefore, there is no potential for the proposed project to contribute to a cumulative construction-related groundborne vibration impact in the project vicinity. Therefore, there is a less than significant cumulative impact related to construction vibration impacts in the project vicinity.

Operational Vibration

Because operational vibration impacts are very localized, the only potential sources of cumulatively considerable contribution to vibration conditions in the project vicinity would result from introduction of past, present, and reasonably foreseeable future permanent sources of groundborne vibration in the project site vicinity.

Implementation of the proposed project would not include any permanent sources that would expose persons in the project vicinity to groundborne vibration levels that could be perceptible without instruments at any existing sensitive land use in the project vicinity.

Therefore, implementation of the proposed project would not result in a cumulatively considerable contribution to vibration conditions in the project vicinity. This impact would be less than significant.

Level of Cumulative Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.12 - Public Services

3.12.1 - Introductions

This section describes the existing conditions related to public services in the project area, as well as the relevant regulatory framework. This section also evaluates the possible impacts related to public services that could result from implementation of the proposed project. Descriptions and analysis in this section are based on information provided by the City of American Canyon General Plan (General Plan), American Canyon Fire Protection District (ACFPD), and American Canyon Police Department (Police Department).

No public comments pertaining to public services were received in response to the Notice of Preparation (NOP).

3.12.2 - Environmental Setting

Fire Protection and Emergency Medical Services

The ACFPD provides fire protection and Emergency Medical Services (EMS) to the City of American Canyon (City) as well as nearby unincorporated areas of Southern Napa County. The ACFPD's response area encompasses approximately 7 square miles. The ACFPD is headquartered at 911 Donaldson Way East (Station 11). The ACFPD's Board of Directors, comprised of five elected members, oversees the District and the Fire Chief.¹

Stations

The ACFPD operates two fire stations: Station 11 (911 Donaldson Way) and Station 211 (225 James Road).² Station 211 was reopened in June 2020 after being closed for several years. Station 11 is approximately 1.57 miles from the project site. Station 211 is approximately 1.26 miles from the project site.

Organization

The ACFPD is organized into two groups: Administration and Support, and Operations. Operations is the largest division and is responsible for responding to calls for service. Administration is the principal responsibility of the Fire Chief, and this division oversees field operations, policy reviews, and budgeting.

Services Provided

The ACFPD provides emergency operations, fire suppression, wildland firefighting, first-response non-transport EMS, Type 1 urban search and rescue and swiftwater rescue. The ACFPD is also a member of the Napa County HazMat Team, provides public education and prevention programs, and maintains a Community Emergency Response Team.³

¹ American Canyon Fire Protection District (ACFPD). 2022. Long-Range Master Plan. Website: <https://www.cityofamericancanyon.org/home/showpublisheddocument/19513/638084122376770000>. Accessed January 3, 2024.

² Ibid.

³ American Canyon Fire Protection District (ACFPD). 2022. Long-Range Master Plan. Website: <https://www.cityofamericancanyon.org/home/showpublisheddocument/19513/638084122376770000>. Accessed January 3, 2024.

Apparatus

The ACFPD has four six-line apparatus, all but one are in excellent condition. Currently, the ACFPD ladder truck is cross-staffed and located at Station 11. If not initially staffed in response to an incident, a mutual aid ladder truck from Vallejo Station 21 (about 4 miles from the City center) or Napa Station 1 (about 8 miles from the City center) would need to be dispatched. The ACFPD also has air/light/rescue apparatus, command/utility vehicles, inflatable rescue boats, an ambulance, and towable technical rescue equipment trailers.⁴

Staffing

The ACFPD relies on a three-platoon system (A, B, and C shifts) wherein each platoon is scheduled for a 48-hour shift which achieves a minimum staffing level of six personnel. The ACFPD is authorized with 22 emergency personnel to provide fire suppression, rescue, and EMS services. The 22 authorized positions includes six Captains, 10 Firefighters/driver-operators, two probationary Firefighters, and three reserve support staff. The career staffing level for the ACFPD is 0.992 per 1,000 population, which is below the recommended national average of 1.54 per 1,000.⁵

Incidents

The ACFPD responded to over 1,800 incidents in 2021; 62 percent of the emergency medical responses and motor vehicle responses. According to ACFPD data, 10.6 percent of the incidents were recorded as providing mutual aid, most of which went to either unincorporated Napa County or the City of Vallejo.⁶

Response Times

The response time goal for delivering the full Emergency Response Framework (ERF) to a building fire is within 9 minutes, 20 seconds, 90 percent of the time. In 2021, overall response time for all priority incidents was within 5 minutes, 53 seconds, 90 percent of the time.⁷

Insurance Services Office Rating

As of 2014, ACFPD has an Insurance Services Office (ISO) rating of Class 2/2Y on a scale of 1 to 10, with 1 being the best. An ISO rating accounts for factors such as emergency communication, fire department, water supply, divergence, and community risk reduction.⁸

Police Protection

The American Canyon Police Department (Police Department) provides police protection to the City of American Canyon. The Police Department is staffed by the Napa County Sheriff's Office, which provides law enforcement services on a contract basis to the City of American Canyon. The Police Department is headquartered at 911 Donaldson Way East.

⁴ American Canyon Fire Protection District (ACFPD). 2022. Long-Range Master Plan. Website: <https://www.cityofamericancanyon.org/home/showpublisheddocument/19513/638084122376770000>. Accessed January 3, 2024.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

Organization

The Sheriff's Office consists of the following divisions: Operations and Services. The Operations Division includes Patrol, Investigations Bureau, Napa Special Investigations Bureau, Problem-Oriented Policing Program, Animal Services, Special Assignments (including SWAT and Dive Teams), and Team Auxiliaries. The Services Division consists of the Coroner's Bureau, Court Services Bureau, Transportation Bureau, Technical Services Bureau, Administration, Property and Evidence Bureau, and Special Assignments (including Honor Guard).⁹

Staffing

As of the 2023/2024 Fiscal Year, the Police Department was staffed with 27 sworn officers, two police technicians, and one Records Technician. The 27 sworn officers include the Chief, two School Resource Officers, one Community Resource Officer, two K-9 Handlers, five Sergeants, and 16 Patrol Officers.¹⁰

Calls for Service

In 2023 the Police Department received 15,294 calls for service.¹¹

3.12.3 - Regulatory Framework

State

California Building Standards Code

Title 24 of the California Code of Regulations, also known as the California Building Standards Code (CBC), is a compilation of three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards contained in national and international model codes.
- Building standards that have been adopted and adapted from national and international model code standards to meet California conditions.
- Building standards, authorized by the California legislature, which constitute extensive additions not covered by the model codes that have been adopted to address particular California concerns.

The California Fire Code is a component of the CBC and contains fire safety-related building standards.

Local

City of American Canyon

General Plan

The General Plan sets forth the following goals relevant to public services:

⁹ Napa County Sheriff's Office. 2021. 2021 Annual Report. Website: https://www.countyofnapa.org/DocumentCenter/View/25161/2021-NCSO-Annual-Report---Final_Web. Accessed January 3, 2024.

¹⁰ American Canyon Police Department. 2024. 2023 Annual Report. March.

¹¹ Ibid.

- Goal 6A** Maintain a high level of fire protection and emergency services to City/District businesses and residents.
- Goal 6B** Ensure a high level of police protection for the City’s residents, businesses, and visitors.
- Policy 6.7.1** Work with the Sheriff’s Department to ensure that enough personnel are added to the Department to serve the needs of a growing population and a developing City.

Municipal Code Chapter 15.08

Chapter 15.08 of the American Canyon Municipal Code establishes development impact fees for parks and civic facilities fees to defray the actual costs of constructing improvements to mitigate impacts resulting from proposed new development identified in the American Canyon General Plan. As defined in the Municipal Code, ““civic facilities” include, but are not necessarily limited to “ . . . a police station, a corporation yard, a public library, or similar facilities desired to serve the public” Fees are calculated based on a cost per unit (e.g., dwelling unit, square feet, hotel/motel rooms, etc.) as identified in the Ordinance Chapter.

Ordinance 2013-01 Fire Service Fee

Ordinance 2013-01 provides revenue necessary to maintain current fire service levels via the required payment of fees based on a formula that includes structure construction type, fire flow area (in square feet), proximity of other structures, type of occupancy, and presence of fire protection devices.

American Canyon Fire Protection District

Resolution 83-4

ACFPD Resolution 83-4, as amended by Resolution 2023-16, is the “Fire Mitigation Fee,” a one-time assessment to all new development for capital improvements (i.e., a new fire station).

3.12.4 - Methodology

FCS reviewed the General Plan, the South County Region Municipal Service Review and Sphere of Influence Updates, and the City and County’s websites for information about public service providers.

FCS evaluated project impacts on public services through review of the proposed project in relation to the General Plan, ACFPD, and information regarding Police Department services and facilities.

3.12.5 - Thresholds of Significance

The lead agency utilizes the criteria in the California Environmental Quality Act (CEQA) Guidelines Appendix G Environmental Checklist to determine whether impacts to public services and utilities resulting from the implementation of the proposed project would be considered significant if the project would:

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

- a) Fire protection?
- b) Police protection?
- c) Schools? (Refer to Chapter 4, Effects Found not to be Significant)
- d) Parks? (Refer to Chapter 4, Effects Found not to be Significant)
- e) Other public facilities? (Refer to Chapter 4, Effects Found not to be Significant)

3.12.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the proposed project and provides mitigation measures where appropriate.

Fire Protection

Impact PUB-1: The proposed project would not result in a need for new or expanded fire protection facilities that may have physical impacts on the environment.

Impact Analysis

The proposed project would be served with fire protection and EMS provided by the ACFPD. The ACFPD will have the opportunity to review and comment on security measures during the proposed project's plan check review process.

Vehicular access would be taken from one driveway on Commerce Court. Reciprocal access would be provided with the existing wine warehouse (SDG Commerce 330) to the south and the entitled wine warehouse (SDG Commerce 217) to the north. All access points would be accessible to large emergency vehicles such as fire engines. This would comply with California Fire Code requirements for emergency vehicle accessibility.

The project site is located 4.4 miles from Station 11, via Paoli Loop Road and Green Island Road. However, emergency responders have the ability to avoid Paoli Loop Road and make a left turn directly onto Green Island Road from State Route (SR) 29. This route reduces the travel distance to 3.6 miles. Using an average travel speed of 35 miles per hour (mph), it would take a fire engine 6 minutes and 10 seconds to reach the project site when responding from Station 11. This would be outside the ACFPD's 5-minute response time objective. Furthermore, congestion on SR-29 may increase travel time such that it is longer.

The ACFPD indicated in July 2022 that it intends to develop a new fire station in the northern portion of the American Canyon city limits, within the project vicinity. A site has not yet been selected, nor has any facility planning occurred at the time of Draft EIR release. The ACFPD would undertake a separate environmental review process for this new fire station. The ultimate development of a new fire station in the industrial area would significantly improve fire response times in the northern portion of American Canyon, including at the project site.

The proposed project would be required to pay two separate special assessments to fund fire protection and EMS. The first is the “Fire Mitigation Fee,” a one-time assessment to all new development for capital improvements (i.e., a new fire station), per ACFPD Resolution 83-4 as amended by Resolution 2023-16. The second is the “Fire Service Fee” and an annual assessment for each parcel based on a formula that includes structure construction type, fire flow area (in square feet), proximity of other structures, type of occupancy, and presence of fire protection devices, per City of American Canyon Ordinance 2013-01.

In summary, while the proposed project is in an area that does not meet the ACFPD’s response time objective, the ACFPD has plans to build a new “North” fire station that would significantly reduce response time to the project site. This facility would be subject to a separate environmental review process. Furthermore, the proposed project is required to pay a Fire Mitigation Fee and Fire Service Fee to support facility development and calls for service. As such, the proposed project would not create a need for new or expanded fire protection facilities (beyond the new “North” fire station).

Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Police Protection

Impact PUB-2: The proposed project would not result in a need for new or expanded police protection facilities that may have physical impacts on the environment.

Impact Analysis

The proposed project would be served with police protection provided by the American Canyon Police Department. The Police Department is staffed by the Napa County Sheriff’s Office, which provides law enforcement services on a contract basis to the City of American Canyon.

The proposed project would be expected to be staffed from 6:00 a.m. to 6:00 p.m., Monday through Friday and 6:00 a.m. to 12:00 a.m., Monday through Friday during peak seasonal months, typically June through November. Security measures including exterior lighting, alarm systems, and video surveillance would be employed to deter and prevent criminal activity. For these reasons, the proposed project would be expected to generate minimal calls for service and, therefore, would not create a need for new or expanded police facilities. The Police Department will have the opportunity to review and comment on security measures during the plan check review process. Lastly, new developments are required by Chapter 15.08 of the Municipal Code to pay a fair share Park and Civic Facilities Development Impact Fee, which includes funding for police facilities as needed. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.12.7 - Cumulative Impacts

The geographic scope of the cumulative public services analysis is the service area of each of the providers serving the proposed project. Because of differences in the nature of the public service areas, they are discussed separately.

Fire Protection and Emergency Medical Services

The geographic scope of the cumulative fire protection and EMS analysis is the ACFPD service area, which consists of the American Canyon city limits and small portions of unincorporated Napa County.

The proposed project would result in the development of a 219,834-square-foot wine warehouse on the project site. The project site is located within 3.6 miles of the nearest fire station and is within an area and that does not meet the ACFPD's response time objective. However, the ACFPD has plans to build a new "North" fire station which would significantly reduce response time to the project site. This facility would be subject to a separate environmental review process. Furthermore, the proposed project is required to pay a Fire Mitigation Fee and Fire Service Fee to support facility development and calls for service. As such, the proposed project would not create a need for new or expanded fire protection facilities (beyond the new "North" fire station) and would not result in a physical impact on the environment. Additionally, the proposed project would comply with all applicable requirements of the California Fire Code, including provision of adequate emergency access points, and it would be accessible to fire apparatus. Other past, present, and reasonably foreseeable development projects in the ACFPD service area have been and would be reviewed for impacts on fire protection and EMS and have been and would be required to address any potential impact with mitigation and compulsory fee payments. Additionally, the ACFPD plans for service needs consistent with existing demands and growth anticipated in the City planning documents. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable development, would not have a cumulatively significant impact related to fire protection and EMS.

Police Protection

The geographic scope of the cumulative police protection analysis is the service area of the American Canyon Police Department, which consists of the American Canyon city limits.

The proposed project and other past, present, and reasonably foreseeable projects in the police service area have been and would continue to be reviewed for impacts on police services and also have been and would continue to be required to address any potential impact with mitigation. Additionally, the Police Department plans for service needs consistent with existing demands and growth anticipated in the City planning documents. Therefore, the proposed project, in conjunction with other past, present, and reasonably foreseeable development, would not have a cumulatively significant impact related to police protection.

Level of Cumulative Significance Before Mitigation

Fire Protection and Emergency Medical Services: Less than significant impact.

Police Protection: Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.13 - Transportation

3.13.1 - Introduction

This section describes existing conditions related to transportation in the project area as well as the relevant regulatory framework. This section also includes an evaluation of the possible impacts related to transportation that could result from implementation of the project.

The following comments were received during the Environmental Impact Report (EIR) scoping period related to transportation:

- A commenter noted that the proposed project could result in increased daily truck and passenger car trips, which could contribute to increased traffic jams, traffic accidents, and unsafe conditions for pedestrians and bicyclists.
- A commenter provided example measures to reduce traffic impacts, including the enforcement of truck routes, prevention of truck parking in residential neighborhoods, a requirement for the preparation and approval of a truck routing plan, construction of new or improved alternative transit method infrastructure, securing increase public transit service to the project area, designated areas for employee pickup and drop-off, implementing traffic control and safety measures, strategic placement of entrances and exits, construction of roadway improvements, and the preparation of a construction traffic control plan. A commenter requested that parking demand is evaluated.
- A commenter requested that increases in truck traffic in the area are evaluated.
- A commenter requested evidence that a majority of employees at the project site would be local residents.
- A commenter outlines methodology for a Travel Demand Analysis and for Construction-Related Impacts Analysis.

3.13.2 - Environmental Setting

Roadway Network

The following roads provide primary access to the project site:

- **Commerce Court** is a two-lane connector that provides access to the project site from Green Island Road. The southern end of the street is a cul-de-sac, adjacent to the project driveway. The speed limit on Commerce Court is 25 miles per hour (mph).
- **Green Island Road** is a two-lane connector providing access for southbound traffic on State Route (SR) 29 traveling to and from the project area. In 2016, counts indicated that Green Island Road carried 8,200 vehicles per day.
- **Paoli Loop Road** provides access to and from the project area for northbound traffic on SR-29. It is a two-lane connector extending from SR-29 to Green Island Road with a speed limit of 25 mph.

- **SR-29** is the primary north–south route through Napa County, connecting to most of the County’s communities and extending north to Lake County and south to Solano County. It is classified as a regional corridor and, within the project area, is a four-lane divided highway with a 55 mph speed limit. Traffic volumes were estimated by Caltrans to be 35,000 vehicles per day in 2021.

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, pedestrian signal phases, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. Sidewalks are present along Commerce Court on the project frontage as well as the segment of Commerce Court north of the project site, although the sidewalks do not extend to Green Island Road, and Green Island Road also lacks pedestrian facilities between Commerce Court and SR-29. A sidewalk connection is provided at the southern terminus of Commerce Court, extending to the northern terminus of Wetlands Edge Road and connecting to the sidewalk network in the adjacent residential neighborhood. Because of this connection south of the project site, there are continuous pedestrian facilities connecting the project site to Napa Junction Elementary School, nearby residences, and recreational areas in the vicinity, as well as commercial land uses and bus stops over 1 mile from the project site on the SR-29 corridor.

The existing sidewalk gaps along the connecting roadways north of the project impact convenient and continuous access for pedestrians and present safety concerns in those locations where appropriate pedestrian infrastructure would address potential conflicts with vehicle traffic. However, given the industrial character of the area and lack of residential areas, commercial land uses, or bus stops, the pedestrian demand is expected to be low. The pedestrian facilities network south of the project provides access between the site and nearby land uses expected to generate pedestrian trips.

Bicycle Facilities

The *Highway Design Manual* published by the California Department of Transportation (Caltrans) classifies bikeways into four categories:

- Class I Multiuse Path—a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- Class II Bike Lane—a striped and signed lane for one-way bike travel on a street or highway.
- Class III Bike Route—signing only for shared use with motor vehicles within the same travel lane on a street or highway.
- Class IV Bikeway—also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Bike lanes are present along the segment of Commerce Court immediately north of the project site. A Class I path extends from the southern terminus of Commerce Court to the northern terminus of

Wetlands Edge Court, providing access to numerous bicycle facilities in the neighborhood south of the project. This includes a Class I multiuse path that runs along the west side of Wetlands Edge Road from Eucalyptus Drive to Kensington Way. Along all other streets in the project vicinity, bicyclists ride in the roadway and/or on sidewalks. Table 3.13-1 summarizes the existing and planned bicycle facilities in the project vicinity as contained in the City of American Canyon Bicycle Plan.

Table 3.13-1: Bicycle Facility Summary

Status	Facility	Class	Length (miles)	Beginning Point	Ending Point
Existing	Commerce-Wetlands Edge Connector	I	0.12	Commerce Court	Wetlands Edge Court
	Eucalyptus Drive	I	0.17	Wetlands Edge Court	Greenwing Street
	Wetlands Edge Court	I	0.14	Eucalyptus Drive	End
	Wetlands Edge Road	I	1.36	Eucalyptus Drive	Kensington Way
Planned	Broadway	I	2.80	Northern City limit	Southern City limit
	Green Island Road	I	0.33	Vine Trail	Commerce Court
	Hess Road Path	I	0.83	Commerce Court	Lombard Road
	Vine Trail	I	1.62	Middleton Way	Watson Lane
	Commerce Court	II	0.30	Hess Collection Driveway	Green Island Road
	Donaldson Way	II	0.80	Eucalyptus Drive	Benton Way
	Lombard Road	II	0.35	Vine Trail	Napa Junction Road
	Napa Junction Road	II	0.33	Theresa Avenue	End
	Rio del Mar	II	1.00	Wetlands Edge Road	Broadway
	Theresa Avenue	II	0.30	Napa Junction Road	Eucalyptus Drive

Source: W-Trans. 2023.

Transit Facilities

Vine Transit provides fixed route bus service throughout Napa County (County). American Canyon Transit (ACT) operates a local shuttle route within American Canyon (City), but primarily serves as the City’s paratransit service provider, operating an on-demand, door-to-door service for persons with disabilities who cannot independently use regular fixed route transit services. Neither Vine Transit nor ACT maintains stops within an acceptable walking distance of the project site. The nearest bus stop to the project site is located on Rio del Mar near Eucalyptus Drive and serves Vine Transit Route 11, approximately 1.3 miles south of the project site.

On-demand private taxi services are available in the study area 24 hours a day. Taxis can be used for trips in the project vicinity as well as other destinations in Napa County and the Bay Area. Ride-

hailing services, also known as Transportation Network Companies (TNCs), can also be used to provide transportation services near the project and throughout the Bay Area.

3.13.3 - Regulatory Framework

State

California Department of Transportation (Caltrans)

Caltrans builds, operates, and maintains the State highway system, which includes SR-29 through American Canyon. The department's strategic goals include providing a safe transportation system, enhancing and connecting the multimodal transportation network, efficiently managing the use of transportation funding, and advancing equity and livability.

In its 2020 *Vehicle Miles Traveled-Focused Transportation Impact Study Guide (TISG)*, Caltrans developed an approach for evaluating the transportation impacts of land use projects and plans on State highway facilities; this document does not address the impacts of transportation projects. In accordance with current California Environmental Quality Act (CEQA) requirements, the TISG does not consider vehicle delay in its evaluation of transportation impacts, instead focusing on Vehicle Miles Traveled (VMT). The purposes of the TISG include providing guidance to lead agencies regarding when they should analyze potential impacts to the State highway system; aiding Caltrans staff in reviewing projects; and ensuring consistency in the assessment of impacts and identification of non-capacity increasing mitigation measures.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law, supporting previous climate-focused and transportation legislation, including the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the California Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), as well as the Complete Streets Act (AB 1358), which requires local governments to plan for a balanced, multimodal transportation network that meets the needs of all users. SB 743 eliminates the use of automobile delay metrics, such as Level of Service (LOS), as the primary metric to evaluate transportation impacts under CEQA. Instead, VMT has been identified as the most appropriate metric to evaluate a project's transportation impacts, as projects that result in lower-than-average VMT support goals of reducing greenhouse gas (GHG) emissions, while projects that result in higher-than-average levels of vehicle travel contribute to an increasing rate of GHG emissions.

In December 2018, the California Governor's Office of Planning and Research (OPR) issued a final advisory to guide lead agencies in implementing SB 743, *Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory)*.¹ Key guidance includes the following.

- VMT is the most appropriate metric to evaluate a project's transportation impact under CEQA.
- VMT for residential and office projects should generally be assessed using efficiency metrics, i.e., on a "per rate" basis.

¹ California Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*. December. Website: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed October 12, 2023.

- The OPR-recommended threshold of significance for office projects is VMT per employee of 15 percent below the regional average. Applying this threshold, an office project expected to generate VMT per capita that is more than 85 percent of the regional VMT per employee could result in a significant impact. This threshold was developed to support statewide GHG emission reduction targets.
- Lead agencies have the discretion to set or apply their own significance thresholds in lieu of those recommended in the advisory, provided they are based on substantial evidence.
- Cities and counties still have the ability to use metrics such as LOS for other plans, studies, or network monitoring. However, LOS and similar metrics cannot constitute the sole basis for determining CEQA impacts.

As noted in the OPR Technical Advisory, lead agencies have the authority to choose metrics that are appropriate for their jurisdiction to evaluate the potential VMT impacts of land development projects.

Regional

Metropolitan Transportation Commission

The Metropolitan Transportation Commission (MTC) serves as the Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area and is responsible for transportation planning, coordination, and establishment of funding priorities. *Plan Bay Area 2050* is the Bay Area's long-range plan that addresses regional transportation, housing, economic development, and environmental resilience. The plan identifies funding priorities for a \$1.4 trillion vision over a 30-year period, directed toward addressing the Plan's 35 strategies. *Plan Bay Area 2050* was adopted by MTC and the Association of Bay Area Governments in 2021.

Plan Bay Area 2050 includes the following transportation strategies.

- | | |
|-----------|---|
| T1 | Restore, operate and maintain the existing system. Commit to operate and maintain the Bay Area's roads and transit infrastructure while reversing pandemic-related cuts to total transit service hours. |
| T2 | Support community-led transportation enhancements in Equity Priority Communities. Provide direct funding to historically marginalized communities for locally identified transportation needs. |
| T3 | Enable a seamless mobility experience. Eliminate barriers to multi-operator transit trips by transfer hubs. |
| T4 | Reform regional transit fare policy. Streamline fare payment and replace existing operator-specific discounted fare programs with an integrated fare structure across all transit operators. |
| T5 | Implement per-mile tolling on congested freeways with transit alternatives. Apply a per-mile charge on auto travel on select congested freeway corridors where transit |

alternatives exist, with discounts for carpoolers, low-income residents, and off-peak travel; and reinvest excess revenues into transit alternatives in the corridor.

- T6** Improve interchanges and address highway bottlenecks. Rebuild interchanges and widen key highway bottlenecks to achieve short- to medium-term congestion relief.
- T7** Advance other regional programs and local priorities. Fund regional programs like motorist aid and 511 while supporting local transportation investments on arterials and local streets.
- T8** Build a Complete Streets network. Enhance streets to promote walking, biking and other micro-mobility through sidewalk improvements, car-free slow streets, and 10,000 miles of bike lanes or multiuse paths.
- T9** Advance regional Vision Zero policy through street design and reduced speeds. Reduce speed limits to between 20 and 35 miles per hour on local streets and 55 miles per hour on freeways, relying on design elements on local streets and automated speed enforcement on freeways.
- T10** Enhance local transit frequency, capacity and reliability. Improve the quality and availability of local bus and light rail service, with new bus rapid transit lines, South Bay light rail extensions, and frequency increases focused in lower-income communities.
- T11** Expand and modernize the regional rail network. Better connect communities while increasing frequencies by advancing the Link21 new transbay rail crossing, BART to Silicon Valley Phase 2, Valley Link, Caltrain Downtown Rail Extension and Caltrain/High-Speed Rail grade separations, among other projects.
- T12** Build an integrated regional express lanes and express bus network. Complete the buildout of the regional express lanes network to provide uncongested freeway lanes for new and improved express bus services, carpools and toll-paying solo drivers.

County

Napa Valley Transportation Authority

Napa Valley Transportation Authority (NVTa) (formerly known as the Napa County Transportation Planning Authority) oversees countywide transportation planning and programming activities in Napa County, including the establishment of the countywide priorities, development of the countywide transportation plan, and provision of project oversight. *Vision 2045: Advancing Mobility*, adopted in 2021, is the current version of the plan and establishes countywide goals, objectives, and policies for improving mobility on Napa County’s streets, highways, transit systems, and bicycle/pedestrian facilities, as well as strategies to reduce transportation-related impacts. Projects identified in the countywide plan in the project vicinity include a new industrial collector from the

southern terminus of Commerce Drive to Eucalyptus Drive, widening Eucalyptus Drive to a two-lane collector from Theresa to Wetlands Edge Road, and a multimodal transit station.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan (General Plan) sets forth the following guiding and implementing policies relevant to transportation.

Guiding Policy 1.1 Community Priorities. Safe and convenient access to activities in the community is provided by a well-designed local roadway system. That system serves the community’s primary need for mobility and includes a planned hierarchy of roadways to meet that need. The following Community Priorities relate most directly to this Element:

- Encourage and foster a strong sense of community and safety, as well as the “hometown” feeling by creation of a town center through land use and circulation planning.
- Improve a hierarchy of roadway networks to achieve and maintain acceptable traffic LOS and provide a citywide system of bicycle lanes and recreational trails that improve accessibility without the use of an automobile.
- Improve SR-29 so that it serves as a visually attractive gateway into the City while providing access to commercial businesses and serving intra and inter-regional traffic and goods movement.

Guiding Policy 1.2 Implement planned roadway improvements. Use Figure 3: General Plan Circulation System, and Table 3: Major Circulation Improvements, to identify, schedule, and implement roadway and complementary intersection improvements to support General Plan buildout conditions. Planned improvements may be phased as development occurs and need for increased capacity is identified.

Guiding Policy 1.3 Design circulation system to focus regional travel on SR-29. SR-29 is important for both citywide and north–south regional travel. As both City and regional travel grow, design the City circulation system to discourage regional traffic from bypassing SR-29 and impacting City streets. Also, cooperatively work with regional partners, including Caltrans, NCTPA and others explore a Complete Streets approach that will expand the travel capacity of SR-29.

Guiding Policy 1.6 Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak-hours where possible and as long as possible. However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond the control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce

the impact of any development use or density planned for in the Land Use Element of the General Plan.

The following locations that may not achieve or maintain LOS D are as follows and therefore will be exempt from the LOS D policy:

- State Route 29 through the City
- American Canyon Road from SR-29 to Flosden Road–Newell Drive
- Flosden Road south of American Canyon Road

Guiding Policy 1.9 Use of existing facilities. Make efficient use of existing transportation facilities, and improve these facilities as necessary in accordance with the Circulation Map.

Guiding Policy 1.11 Reduce Vehicle Miles Traveled. Through layout of land uses, improved alternate modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by City residents.

Guiding Policy 1.12 Circulation System Enhancements. Achieve, maintain and/or improve mobility in the City by considering circulation system enhancements beyond improvements identified on the Circulation Map, where feasible and appropriate. Improve the circulation system, in accordance with the Circulation Map, at minimum, to support multimodal travel of all users and goods and where feasible, apply creative circulation system enhancements that increase system capacity and that are acceptable to the City and its residents and where applicable, Caltrans.

Implementing Policy 1.14

Work with Caltrans on highway improvements. Continue to work with Caltrans to achieve timely context sensitive design solutions, funding, and construction of programmed highway improvements.

Implementing Policy 1.17

Regional fair-share fee program. Work with Caltrans, NCTPA, Napa County, and other jurisdictions to establish a fair-share fee program for improvements to routes of regional significance and State highways. This fee should reflect traffic generated by individual municipalities/unincorporated communities as well as pass-through traffic.

Implementing Policy 1.24

Impacts of new development. Based upon the findings of a transportation impact analysis, consistent with Guiding Policy 1.26, new development will be responsible for mitigation of transportation-related impacts.

Implementing Policy 1.35

General transit and pedestrian access. In reviewing designs of proposed developments, ensure that provision is made for access to current and future public transit services. In particular, pedestrian access to arterial and collector streets from subdivisions should not be impeded by continuous segments of sound walls.

Guiding Policy 2.1 Promote walking and bicycling. Promote walking and bike riding for transportation, recreation, and improvement of public and environmental health.

Guiding Policy 2.3 Develop a safe and efficient non-motorized circulation system. Provide safe and direct pedestrian routes and bikeways between places.

Implementing Policy 2.7

Universal design. Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts.

Implementing Policy 2.18

Pedestrian connections to employment destinations. Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.

Guiding Policy 3.1 Promote safe, efficient, and convenient public transportation. Promote the use of public transportation for daily trips, including to schools and workplaces, as well as other purposes.

Guiding Policy 4.1 Promote safe and efficient goods movement. Promote the safe and efficient movement of goods via truck and rail with minimum disruptions to residential areas.

Guiding Policy 4.6 Location of industrial development. Continue industrial expansion in the north industrial area to minimize the neighborhood impacts of truck movements.

Guiding Policy 4.7 Secure truck parking. Encourage high-security off-street parking for tractor-trailer rigs in industrial designated areas.

Performance Standards

The General Plan Circulation Element specifies minimum LOS standards for all streets and intersections in the City's jurisdiction. In Section 4.1.6, the City establishes the following performance standards for acceptable LOS for purposes of compliance with its General Plan:

Achieve and maintain a Multimodal LOS D or better for roadways and intersections during peak-hours where possible for as long as possible. However, recognizing that LOS D may not be achievable or cannot be maintained upon full buildout of the General Plan, due to traffic generated from sources beyond control of the City, the City Council shall have the discretion to only require feasible mitigation measures that may not achieve LOS D, but will reduce the impact of any development use or VMT planned for in the Land Use Element of the General Plan.

The locations that may not achieve or maintain LOS D are as follows and will be exempt from the LOS D policy:

- SR-29 through the City
- American Canyon Road from SR-29 to Flosden Road–Newell Drive
- Flosden Road south of American Canyon Road

American Canyon Vehicle Miles Traveled (VMT Policy)

On September 5, 2023, the American Canyon City Council adopted a VMT policy for use in analyzing potential transportation impacts under CEQA. This policy included the following elements:

- The baseline for VMT analysis shall be the citywide average as estimated by the City’s travel demand model. As estimated using the most recent version of the model, the averages are 16.6 miles per resident and 34.1 miles per employee.
- The VMT threshold of significance shall be 19 percent below the citywide average for the appropriate metric. This threshold applies to land development projects of all land use types, transportation projects, as well as General Plan amendments and other long-range plans. This threshold was selected based on the California Air Resource Board (ARB) 2035 target for reduction of GHG emissions of passenger vehicles in comparison with 2005 emissions.
- Projects that are consistent with a Program EIR for which a VMT analysis has been conducted are presumed to have a less than significant VMT impact.

American Canyon Bicycle Plan

The City of American Canyon Bicycle Plan was prepared in conjunction with the Napa Countywide Bicycle Plan and was adopted into the General Plan in 2020. The following policies were adopted for the countywide plan and incorporated into the City’s plan.

- Build and maintain a local and countywide bicycle transportation and recreation network that connects Napa County’s incorporated cities/town and unincorporated communities and provides access to public transportation and community destinations.
- Develop and maintain continuous low Level of Traffic Stress (LTS) bicycle facilities of all types to provide accessible intra-city connections that serve as the framework of the Countywide Bikeway System.

- Prioritize coordination and completion of regionally significant primary bikeways including the Napa Valley Vine Trail, the Bay Trail and the Ridge Trail, and local connections to those facilities.
- Provide secure bicycle parking at public and private destinations throughout Napa County.
- Integrate the bicycle network and bicycle facility amenities into land use decisions and developments.
- Implement projects that improve access for disadvantaged and/or underserved communities, particularly those reliant on walking, biking and transit for transportation.
- Work to reduce the number and severity of bicycle collisions.
- Work to reduce bicycle fatalities to zero by 2035.
- Improve locations that have high incidences of bicycle collisions, and/or impediments or conflicts to bicyclists.
- Implement Complete Streets policies that ensure accommodation and enable safe access for users of all ages and abilities.

Implement appropriate, well-designed bicycle facilities using accepted design standards, including intersection and other crossing improvements.

3.13.4 - Methodology

This analysis assesses impacts to the study area's transportation system as a result of implementation of the project. The potential impacts were identified based on the Checklist questions included in Appendix G of the CEQA Guidelines.

Trip Generation

Typically, the trip generation of a project is estimated based on rates published in the Institute of Transportation Engineers' (ITE) Trip Generation Manual, 11th Edition, 2021. However, the Trip Generation Handbook that complements the Manual notes that locally collected data may be used when available. Counts were collected at six wine warehouse and storage facilities in the City of American Canyon and used for the analysis prepared for the SDG 217 project, which is adjacent to SDG 220.² Given the geographic proximity of these projects to the proposed SDG 220 project and the similarity in land use type, the trip generation rates from those analyses were applied to the current project. Based on the application of these rates, the proposed project would be expected to generate an average of 372 trips per day, including 35 AM peak-hour trips and 27 trips during the PM peak-hour. These results are summarized in Table 3.13-2.

² GHD. 2020. Traffic Impact Analysis Memorandum. SDG 217 Commerce Boulevard Distribution Center Project.

Table 3.13-2: Trip Generation Summary

Land Use	Units	Daily		AM Peak-hour				PM Peak-hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Wine Warehouse	219.834 ksf	1.69	372	0.16	35	21	14	0.125	27	10	17

Notes:
ksf = 1,000 square feet
Source: GHD. 2020. Traffic Impact Analysis Memorandum. SDG 217 Commerce Boulevard Distribution Center Project.

Vehicle Miles Traveled

In accordance with City policy, outputs from the City’s travel demand model were used as the metric for evaluating VMT. Since the proposed project is an employment site, the citywide VMT per employee of 34.1 miles was used as the baseline for evaluating potential VMT impacts associated with the proposed project, and the significance threshold was 19 percent below this level, or 27.6 miles. As noted in the City policy, the 19 percent emissions reduction target established by the ARB that was the basis for this threshold was focused on passenger vehicle emissions. The use of passenger vehicle emissions for VMT analysis is supported by the OPR Technical Advisory, which states that in Section 15064.3 of the CEQA Guidelines, “automobiles” refers to “on-road passenger vehicles, specifically cars and light trucks.” (Technical Advisory, p. 4);³ further, the OPR explicitly notes that VMT does not include consideration of heavy-duty trucks. Accordingly, the appropriate source of VMT to analyze for the proposed project is associated with employee commute trips rather than heavy vehicle trips. Note that while heavy-duty trucks are not the focus of transportation-based VMT analyses, truck VMT is still analyzed under other CEQA discipline areas including GHG emission analyses.

To evaluate the proposed project VMT, it was assumed that the VMT per employee would reflect the citywide average of 34.1 miles. Therefore, for the proposed project to have a less than significant VMT impact, the VMT per employee would need to be reduced by 19 percent to a maximum of 27.6 miles.

Traffic Operations Analysis

A traffic operations analysis was previously conducted for the SDG Commerce 217 project, which is similar to the proposed project and located on the adjacent parcel to the north. Commerce Court, formerly known as Commerce Boulevard, has been truncated and redesigned as a cul-de-sac, preventing vehicle traffic to and from the south. As a result, all vehicles entering the project site must pass through the Green Island Road/Commerce Court intersection. The analysis prepared for the SDG Commerce 217 project found that this intersection would operate acceptably under Cumulative Plus Project conditions. Since the current project is consistent with the City’s General Plan, the proposed project generated trips were presumably included in the future traffic volume

³ California Governor’s Office of Planning and Research (OPR). 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA. December. Website: https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf. Accessed October 12, 2023.

projections. Therefore, it was determined that an operational analysis for the proposed project was not necessary, an assessment with which City staff concurred.

It is noted that a traffic operations analysis does not address a CEQA issue. As a result of the passage of SB 743, since July 2020, lead agencies may no longer measure adverse transportation effects for CEQA purposes in terms of “automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion” (with an exception not relevant here) (Public Resources Code [PRC] § 21099(b)(2)). Even so, many public agencies still require analyses of proposed projects’ potential effects on LOS, but do so under their general police power or General Plan policies, wholly independent of, and separate from, CEQA.

3.13.5 - Thresholds of Significance

Appendix G to the CEQA Guidelines is a sample Initial Study Checklist that includes questions for determining whether impacts related to transportation are significant. These questions reflect the input of planning and environmental professionals at the OPR and the California Natural Resources Agency, based on input from stakeholder groups and experts in various other governmental agencies, nonprofits, and leading environmental consulting firms. As a result, many lead agencies derive their significance criteria from the questions posed in Appendix G. The City has chosen to do so for this project. Thus, the proposed project would have a significant effect related to transportation if the proposed project would:

- a) Conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.
- b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).
- c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- d) Result in inadequate emergency access.

3.13.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the proposed project and provides mitigation measures where necessary.

Impact TRANS-1: The proposed project would not conflict with a program plan, ordinance or policy of the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Impact Analysis

Circulation

General Plan Policy 4.6 indicates that industrial uses should be located in the City’s north industrial area to minimize the impacts of truck traffic on residential neighborhoods. The proposed project is located adjacent to similar warehouse projects, and with the redesign of Commerce Court as a cul-de-sac, the roadway connection to the residential neighborhood to south of the project is not available, and truck traffic would be required to access the site via Green Island Road. As the proposed project would minimize truck traffic impacts on residential neighborhoods, the proposed

project would not conflict with this policy. The impacts of the project with respect to circulation would therefore be less than significant.

Transit

As described above, the nearest bus stop to the project is located on Rio del Mar near Eucalyptus Drive and serves Vine Transit Route 11, approximately 1.3 miles south of the project. An acceptable walking distance to a bus stop is generally considered to be 0.5 mile. Should an employee desire to use transit, they could ride a bicycle along the path at the southern terminus of Commerce Court to Waters Edge Court and proceed along Eucalyptus Drive to the nearest bus stop. General Plan Circulation Element Implementing Policy 1.35 calls for the provision of continuous access to existing and future transit service. As there are continuous sidewalks between the proposed project and the nearest bus stop and a route for bicyclists is available between the project site and the bus stop is available, the proposed project would not conflict with this policy. Impacts would therefore be less than significant with regard to transit facilities.

Bicycles

Existing bicycle facilities, including the Class I path connecting to the southern terminus of Commerce Court and linking to other nearby facilities together with shared use of minor streets provide adequate access for bicyclists in the project vicinity. The planned extension of the Class I facility along Eucalyptus Drive and planned Class II bicycle facilities on Green Island Road, Commerce Court, and other streets near the proposed project would improve bicycle connectivity near the project site. General Plan Circulation Element Guiding Policy 2.1 supports development of a safe and efficient non-motorized circulation system. Since the existing bicycle facilities network provides connections to surrounding neighborhoods and destinations and would be further enhanced by the implementation of planned facilities, the proposed project would not conflict with this policy. For this reason, the impacts to bicycle facilities would be less than significant.

Pedestrian

The project site would be accessible to pedestrians approaching from the south due to the presence of the Class I path at the southern terminus of Commerce Court and the connecting path and sidewalk facilities in the residential neighborhood south of Eucalyptus Drive. Employees would also have access to recreational walking opportunities along the unpaved path at Wetlands Edge Park. It is reasonable to assume that few project employees would desire to walk to the project site from the north, given the industrial character of the surrounding area and the incomplete sidewalk network. As a continuous pedestrian network provides access from the project site to the adjacent neighborhoods, nearest transit options, and the SR-29 corridor, the project would not conflict with General Plan Circulation Element Guiding Policy 2.1. Pedestrian facility impacts would thus be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Conflict with CEQA Guidelines Section 15064.3, Subdivision (b)

Impact TRANS-2: The proposed project would conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

Impact Analysis

The proposed project VMT was evaluated in accordance with the City’s adopted VMT policy as described in Section 3.13.4-Methodology, and in response to direction from City staff. For the project’s VMT impact to be less than significant, the VMT per employee would need to be reduced by at least 19 percent below current levels. It is noted that Napa County uses a similar approach to analyze VMT impacts for wine warehouses in the project vicinity, although the County applies a different threshold. VMT reductions are typically achieved by applying Transportation Demand Management (TDM) measures which provide incentives to encourage use of alternatives to vehicle transportation.

According to the Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity, California Air Pollution Control Officers Association (CAPCOA), 2021 (CAPCOA Handbook), a reduction in the VMT of 15 percent is generally considered the maximum feasible mitigation for suburban environments, such as that of the proposed project. If this level of trip reduction could be achieved, that would mitigate most of the project’s VMT impact, although not to a level that would be less than significant (19 percent). However, given the lack of transit services within an acceptable walking distance of the project, achieving even this level of mitigation is considered infeasible.

Nonetheless, Mitigation Measure (MM) TRANS-2 requires the implementation of a TDM program to reduce VMT to the extent possible. As noted, the nearest bus stop to the project site is 1.3 miles away and serves only limited destinations; therefore, given the land use context of the project area and per the CAPCOA Handbook, a TDM program is estimated to result in a VMT reduction of approximately 4 percent. As such, even with the implementation of mitigation, impacts related to VMT would remain significant and unavoidable.

Level of Significance Before Mitigation

Significant impact.

Mitigation Measure

MM TRANS-2 Transportation Demand Management Program

The proposed project shall develop a Transportation Demand Management (TDM) program to encourage employees to choose non-personal vehicle modes of transportation for commuting. This includes a commute trip reduction marketing initiative, through which the employer would disseminate information about available transportation options. Strategies would include encouraging ride sharing among project employees and linking them to resources to find rideshare partners working nearby, such as through the Napa Valley Transportation Authority (NVTA) V-Commute program or the regional 511.org program. Marketing materials can also

inform employees of resources such as the Guaranteed Ride Home Program, which provides free rides home in emergency situations for employees using non-personal vehicle transportation modes.

Level of Significance After Mitigation

Significant and unavoidable impact.

Hazards

Impact TRANS-3: The proposed project would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Impact Analysis

Site access and sight distance were evaluated for the proposed project.

Site Access

The proposed project would be located between two warehouse facilities, one of which is existing while the second is under construction. The three sites would be connected via internal roadways as shown on the site plan (Chapter 2, Project Description, Exhibit 2-4a and Exhibit 2-4b). Therefore, vehicular access to the project site would be provided via two existing driveways located on adjacent parcels. The internal roadways would need to be designed to current City standards to accommodate heavy vehicles and so can be expected to accommodate the access requirements for both emergency and passenger vehicles. The adequacy of the driveways was assessed as part of the development review process for their respective projects. Impacts with respect to site access would therefore be less than significant.

Sight Distance

A substantially clear line of sight should be maintained between the driver of a vehicle waiting at a driveway and the driver of an approaching vehicle. As noted, access to the proposed project would be provided via two previously approved driveways. The southernmost driveway is at the end of a cul-de-sac, while the second driveway is approximately 500 feet to the north. Approaching vehicle speeds would be slow in this setting. The street is flat with a slight curve that would not impact visibility of approaching vehicles, and it is noted that obstacles would be minimized as on-street parking is prohibited along both sides of the street. As such, there would be a less than significant impact on sight distance.

Parking

Parking is not typically considered a safety issue. However, the lack of adequate parking can result in vehicles being parked in inappropriate and hazardous locations. Given that on-street parking is prohibited along Commerce Court, the adequacy of the proposed parking supply was evaluated. Per Section 19.21.030 of the City's Municipal Code, the required off-street parking for warehouses is one space for the first 20,000 square feet of space plus one space for each additional 2,000 square feet of gross floor area. With a proposed building area of 224,593 square feet, 122 spaces would be

required. As proposed, the project includes 122 spaces; therefore the parking supply meets City requirements and would be adequate to serve the proposed project.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is required.

Emergency Access

Impact TRANS-4: The proposed project would not result in inadequate emergency access.

Impact Analysis

As previously noted, vehicular access to the proposed project would be provided via two driveways to adjacent properties on Commerce Court. The driveways were included as part of previously approved projects, which included project-level review for compliance with emergency access requirements. In addition, based on the analysis of traffic operations at the Green Island Road/Commerce Boulevard intersection conducted for SDG 217, the proposed project would have a negligible impact on delay and the associated emergency vehicle response times. Regarding site design, the internal roadways of the proposed project would need to be designed to current City standards to accommodate heavy vehicles and so can be expected to accommodate the access requirements for both emergency and passenger vehicles. Impacts to emergency access would therefore be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation required.

3.13.7 - Cumulative Impacts

The geographic scope of the cumulative transportation analysis is the nine-county San Francisco Bay Area region. VMT is evaluated and regulated at a regional level and, thus, the San Francisco Bay Area region is an appropriate geographical area.

Impact TRANS-1 concluded that the proposed project would not have a significant impact on the circulation system and, therefore, no mitigation would be necessary. As such, the proposed project would not have a cumulative considerable contribution in this regard.

Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project's location and lack of access to high-quality transit. MM TRANS-2 would reduce project-related VMT but not to a

level below significance. As such, the proposed project would have a cumulatively considerable contribution on VMT.

With respect to Impact TRANS-3, the potential hazards from design features or incompatible uses are specific to the project site (e.g., site access, sight distance, etc.) and would not combine with other projects. The proposed project and other past, present, and reasonably foreseeable future projects have complied and must comply with local standard requirements for transportation-related design features specifically adopted to avoid and reduce hazards from project design or the location of incompatible uses, thereby reducing potential significant cumulative impacts to less than significant levels. Therefore, no significant impacts would result from the proposed project combined with cumulative projects.

With respect to Impact TRANS-4, the provision of adequate emergency access is site specific and would not combine with other projects. The proposed project and other past, present, and reasonably foreseeable future projects must comply with local standard requirements for adequate emergency access specifically adopted to avoid or reduce the potential for inadequate access. Furthermore, as was determined in the operational analysis conducted for SDG Commerce 217, the proposed project and other projects would not have significant impacts on the performance of the Green Island Road/Commerce Boulevard intersection and, therefore, it can be inferred that it would also not impair emergency response to the project vicinity. Therefore, no significant adverse cumulative impacts would result.

Level of Cumulative Significance Before Mitigation

Significant VMT impact.

Mitigation Measures

MM TRANS-2 as described above.

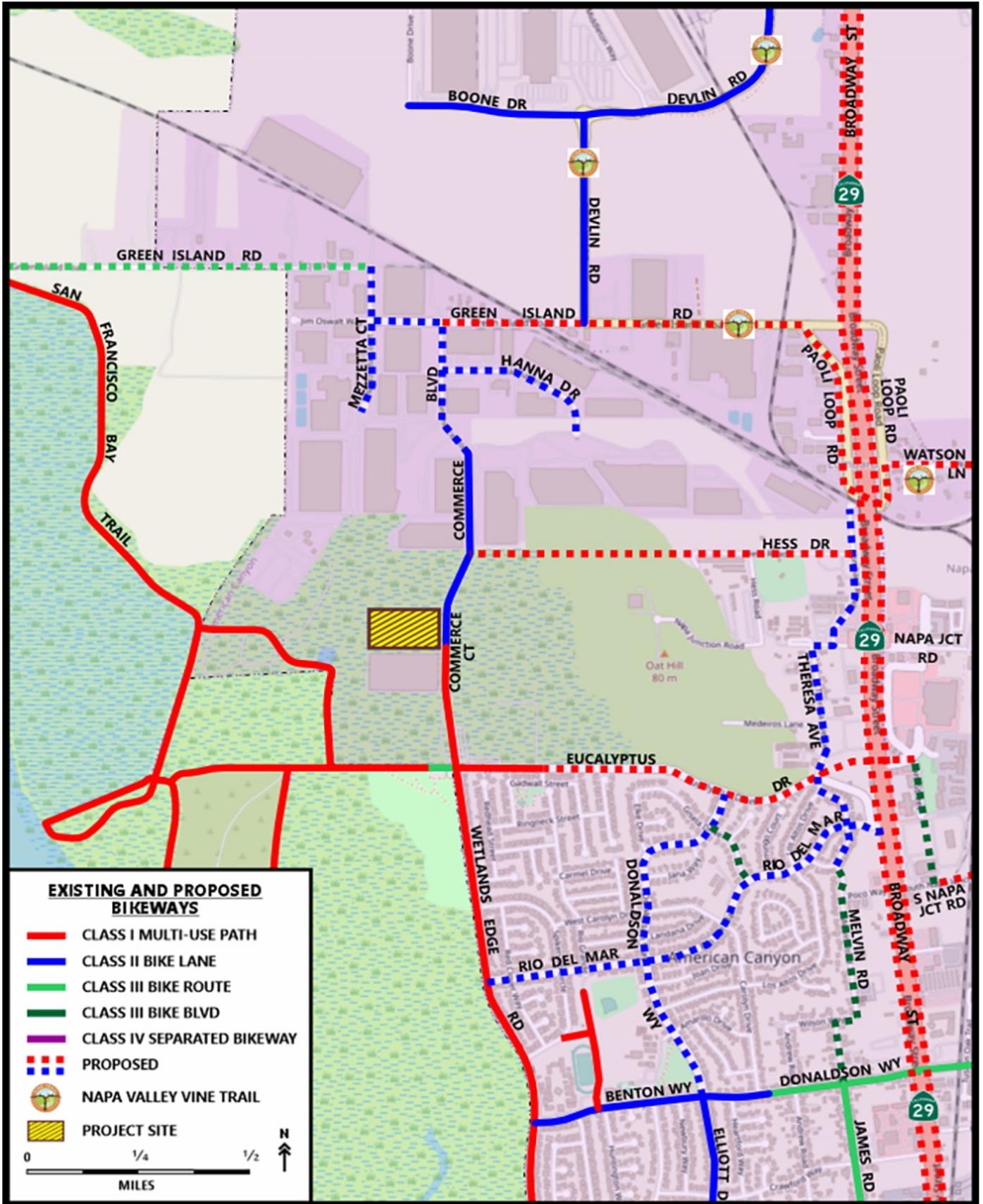
Level of Cumulative Significance After Mitigation

Significant and unavoidable impact.



Source: W-trans.

THIS PAGE INTENTIONALLY LEFT BLANK



Source: W-trans.

THIS PAGE INTENTIONALLY LEFT BLANK

3.14 - Utilities and Service Systems

3.14.1 - Introduction

This section describes the existing conditions related to utilities and service systems (water, wastewater, stormwater, and solid waste) in the City of American Canyon (City) and project area as well as the relevant regulatory framework. This section also evaluates the possible impacts related to such utilities and service systems that could result from implementation of the proposed project. Descriptions and analyses in this section are based, in part, on information provided by the City of American Canyon General Plan, the 2020 Urban Water Management Plan (2020 UWMP), and the City of American Canyon Sewer Master Plan.

No public comments pertaining to utilities or service systems were received in response to the Notice of Preparation (NOP).

3.14.2 - Environmental Setting

Water

The City of American Canyon Public Works Department provides potable and nonpotable water to a service area of approximately 30 square miles. The area encompasses the city limits and its Sphere of Influence (SOI) and extends from the Napa River to the west to the Napa/Solano County line to the east and from the Napa/Solano County line to the south to Soscol Ridge north of the Napa Airport.¹

Water Supply

The City obtains its water supply from a variety of sources, all of which (except for recycled water) are imported from outside of the City. Imported water is mostly sourced from the State Water Project (SWP) and purchased from the Napa County Flood Control and Water Conservation District (FCWCD) and the City of Vallejo. The City’s imported water comes through the North Bay Aqueduct system.² Table 3.14-1 identifies the City’s sources and volume of water used in 2020. Each source is discussed in detail after the table.

Table 3.14-1: 2020 Sources of Water Supply

Source	Actual Volume (Acre-Feet in 2020)
State Water Project “Table A” Water	29
State Water Project Article 21 Water	191
Article 56 Carryover Water	1,819
Table A Exchange Return Water	12
Vallejo Permit Water	500

¹ City of American Canyon. 2022. 2020 Urban Water Management Plan. Website: <https://www.cityofamericancanyon.org/government/maintenance-and-utilities/water> Accessed January 18, 2024.

² Ibid.

Source	Actual Volume (Acre-Feet in 2020)
Vallejo Treated Water	58
Vallejo Emergency Water	0
Recycled Water	208
Total:	2,817
Source: City of American Canyon. 2023. 2020 Urban Water Management Plan, Submittal Table 6-8 Retail: Water Supplies—Actual. Website: https://www.cityofamericancanyon.org/government/maintenance-and-utilities/water . Accessed January 18, 2024.	

State Water Project

A significant portion of the City’s supply is obtained through various indirect contracts for water from the SWP. The Napa County FCWCD is the State Water Contractor with the California Department of Water Resources (DWR), and the City receives its water through subcontracts with the Napa Flood Control and Water Conservation District.

Table A Allocation

In January 1967, the American Canyon County Water Agency³ entered into an agreement with the Napa County FCWCD for SWP water (“Table A” allotments) supply from the North Bay Aqueduct. This contract runs through 2035 with provisions for extension and is anticipated to be extended through 2085. The City’s current “Table A” allotment is 5,200 acre-feet per year (AFY). The actual amount of SWP water available to the City under the “Table A” allocation process (the method used by the DWR to allocate water in the SWP system) varies from year to year due to hydrologic conditions, water demands of other contractors, SWP facility capacity, and environmental/regulatory requirements.

The 2020 UWMP assumes that “Table A” water allotment would be 56 percent, 5 percent, and 27 percent of the full contracted volume (5,200 AFY) for average, single-dry, and 5-consecutive-year drought water types, respectively.⁴

Article 21 Water

In certain years, the City may also receive additional SWP water known as Article 21 water, which is identified in Article 21 of SWP long-term water supply contracts between DWR and each SWP water contractor. The year-to-year availability of Article 21 water supply varies. Article 21 water becomes available only when the following conditions are met:

- Such deliveries do not interfere with SWP “Table A” allocations and SWP operations.
- Excess water is available in the Delta.
- Capacity is not being used for SWP purposes or scheduled SWP deliveries.
- Contractors can use the SWP Article 21 water directly or can store it in their own system (I.e., the water cannot be stored in the SWP system).

³ A predecessor agency to the City of American Canyon, which was not incorporated until 1992.

⁴ City of American Canyon. 2022. 2020 Urban Water Management Plan. Website: <https://www.cityofamericancanyon.org/government/maintenance-and-utilities/water> Accessed January 18, 2024.

The 2020 UWMP assumes that Article 21 water allotment would be 568 AFY, 0 AFY, and 216 AFY for average, single-dry, and 5-consecutive-year drought water types, respectively.⁵

Other State Water Project Sources

Article 56 Carryover Water

DWR's Article 56 Carryover Program allows water that is allocated to an SWP contractor but not used by the end of the year to be used in the next year. This water is exported from the Delta by the Banks Pumping Plant and stored in the San Luis Reservoir.⁶

"Table A" Exchange Return Water

DWR's "Table A" Exchange Return Water Program allows interested SWP contractors to receive a portion of another SWP contractors approved "Table A" allotment in exchange for return of future approved SWP "Table A" water at an established exchange ratio.⁷

City of Vallejo

In 1996, the City of American Canyon entered into an agreement with the City of Vallejo to allow the purchase of additional water supply. Vallejo receives its water from a variety of sources, including SWP water and an appropriative water right. The City's agreement with the City of Vallejo allows for the purchase of Vallejo Permit Water (raw water), Vallejo Treated Water (potable water), and Vallejo Emergency Water (raw water).

Vallejo Permit Water

The City of Vallejo holds an appropriative right for Sacramento Bay-Delta water from the California State Water Resources Control Board (State Water Board) that pre-dates the construction of the SWP. The City of American Canyon has an agreement with the City of Vallejo for delivery of up to 500 AFY under this permit. This source of water is more reliable than the City's Table A supply, but the Vallejo Agreement still allows for reductions. Addendum 2 to the 1996 Vallejo Agreement states that "In the event the State Water Resources Control Board, or any other agency, restricts Vallejo's diversion of water [under the appropriative pre-SWP contract] for any reason whatsoever, American Canyon's diversions will be reduced in the same proportion." Since the City began receiving Vallejo Permit Water, it has received 100 percent of the full contracted volume every year with the exception of a supply reduction in 2015.

The 2020 UWMP predicts that the full contract volume of 500 AFY would be available under average, single-dry, and 5-consecutive-year drought water types.⁸

Vallejo Treated Water

In 1996, the City of American Canyon entered into an agreement with the City of Vallejo to purchase up to 628.6 AFY of Vallejo Treated Water. The water is treated at the City of Vallejo's Flemming Hill Water Treatment Plant and delivered via an intertie connection.

⁵ A predecessor agency to the City of American Canyon, which was not incorporated until 1992.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid.

The 2020 UWMP assumes that the full contracted volume (628.6 AFY) of Vallejo Treated Water would be available for average year water type and would be reduced by 20 percent for single-dry and consecutive dry-year water types.⁹

Vallejo Emergency Water

When the City's "Table A" water allotment is curtailed, the City of American Canyon has the option to purchase up to 500 acre-feet of emergency raw water supply from Vallejo under an agreement amended in 1996.

The 2020 UWMP assumes that the full contracted volume of 500 AFY would be available for single-dry and consecutive dry years 1 to 2; 400 AFY would be available for consecutive dry years 3 to 5; and 0 AFY for average year water type (i.e., not available when the City's "Table A" allotment is not curtailed).¹⁰

Other Sources of Potable Supply

Dry Year Purchase Program

The DWR's Dry Year Water Purchase Program allows SWP contractors to purchase emergency water supplies from Sacramento Valley rice farmers during dry years if supply is made available.

Turn-back Water Pool Program

DWR has a program for interested SWP contractors called the Turn-back Water Pool Program. SWP contractors may choose to sell "Table A" water or purchase turn-back pool water that is available through the program. The City has not purchased water through this program since 2015.

Dry Year Transfer Program

During dry years, varying amounts of additional water may be made available to SWP contractors through DWR's Dry Year Transfer Program, which allows for transfers through a combination of crop idling, groundwater substitution, and changes in reservoir operation. The City has not purchased water through this program since 2015.

Yuba Accord

In 2008, the DWR adopted the Lower Yuba River Accord, an agreement to settle issues related to in-stream flows in the Yuba River and fisheries habitat. As part of that agreement, participating SWP contractors are able to purchase water from the Yuba River Water Agency during dry years. The City has not purchased water through this program since 2015.

City of Napa

The City has an agreement with the City of Napa for the purchase of treated (potable) water under emergency conditions or when the North Bay Aqueduct system or the City's Water Treatment Plant (WTP) is off-line for maintenance or other reasons. This water source would be deducted from the City's "Table A" water allotment. The City has not purchased water through this program since 2014.

⁹ A predecessor agency to the City of American Canyon, which was not incorporated until 1992.

¹⁰ Ibid.

Groundwater, Surface Water, and Stormwater

The City is located over the Napa-Sonoma Valley Lowlands Subbasin. According to the 2020 UWMP, groundwater productivity in and near the City indicated that usable groundwater resources in the City may be limited. The City does not operate groundwater wells for water supply. The City does not have any surface water sources as part of its water supply and has not identified any stormwater recapture opportunities to offset potable water use.

Recycled Water

American Canyon Recycled Water

The City's Water Reclamation Facility (WRF) produces disinfected tertiary recycled water under the General Water Reuse Order (Order No. 96-011) per the recycled water criteria defined by the Division of Drinking Water (DDW), formerly the California Department of Public Health, under California Administrative Code, Division 4, Title 22, California Code of Regulation. The City currently delivers recycled water to meet demand on an as-needed basis to nine private customers for agricultural and landscape irrigation and 21 City-owned facilities for landscape irrigation and as dust control at construction sites.

Wastewater

The City and the Napa Sanitary District (NSD) provide municipal wastewater collection within the City's water service area. The City's wastewater collection system consists of gravity pipelines, two force mains, and pump stations that convey wastewater to the City's WRF located near the Napa River at the City's northwest limits. The NSD collects wastewater from the residents and businesses in the City of Napa, Silverado Country Club, the Napa County Airport, and several adjacent unincorporated areas, including northeastern portions of the City's water service area. The wastewater is conveyed to NSD's Soscol WRF, located outside of the City's water service area. The 2020 wastewater flows from the City's service area consisted of 1,625 AF collected by the City's wastewater collection agency and diverted to the City's WRF and 139 AF collected by the NSD and diverted to the Soscol WRF for a total of 1,764 AF of wastewater. The American Canyon WRF is owned and operated by the City of American Canyon. The treatment plant has an existing design capacity of 2.5 million gallons per day (mgd) at average dry weather conditions and 5.0 mgd at peak weather flow conditions. The City has plans to expand the WRF's treatment capacity to 4.0 mgd.

Storm Drainage

The City of American Canyon Public Works Department oversees municipal storm drainage within the American Canyon City limits. The municipal storm drainage system consists of ditches, inlets, basins, and underground piping that ultimately discharge flows into the Napa River. The City maintains a Storm Drain Master Plan, adopted in 1996, and engineering standards that guide the development of the municipal storm drainage system.

The City requires stormwater discharges to comply with San Francisco Bay Regional Water Quality Control Board (San Francisco Bay RWQCB) permit requirements and establishes non-point source pollution control measures as required by federal and State law. Stormwater pollution prevention measures for new development projects, such as bioswales, detention ponds, erosion, and

sedimentation control, are incorporated in the planning, design, construction, and operation of projects with the potential to create pollutants in stormwater runoff.

Project Site Drainage

The project site does not contain any formal storm drainage facilities. The project site frontage with Commerce Court is currently improved with curb and gutter.

Solid Waste

Recology American Canyon (Recology) provides garbage pickup for all residents and businesses pursuant to a franchise waste hauling agreement with the City of American Canyon. Roll-off service is also available.

Devlin Road Transfer Station

Recology transports solid waste to the Devlin Road Transfer Station within the Napa County Airport Industrial Area. The Transfer Station is owned by the Napa-Vallejo Waste Management Authority (NVWMA), a joint-powers agency consisting of the cities of American Canyon, Napa, and Vallejo and the County of Napa. The Transfer Station accepts municipal solid waste and construction and demolition (C&D) debris and incentivizes such activities through pricing. The NVWMA has plans to construct an enclosed C&D Debris Recycling Facility on a vacant parcel it owns immediately south of the Devlin Road Transfer Station. California Environmental Quality Act (CEQA) documentation has been completed and certified for the new facility, but it has yet to be constructed.

Potrero Hills Landfill

Municipal solid waste and demolition debris from the Devlin Road Transfer Station are landfilled at the Potrero Hills Landfill in Solano County. The Potrero Hills Landfill, located approximately 1 mile southeast of Suisun City, is a regional facility that serves numerous jurisdictions within a 150-mile radius.¹¹ In 2005, the County of Solano approved a 260-acre expansion that increased capacity to 83.1 million cubic yards. In 2010, the San Francisco Bay Conservation and Development Commission (BCDC) issued a permit allowing the expansion to proceed. Following the conclusion of litigation, the expansion was cleared to move forward in 2014. Table 3.14-2 summarizes the Potrero Hills Landfill.

Table 3.14-2: Potrero Hills Landfill Summary

Permitted Area	Permitted Daily Throughput	Permitted Disposal Capacity	Remaining Capacity	Estimated Closure Date
525.7 acres (total)	4,330 tons (single day)	83.1 million cubic yards	13.872 million cubic yards	2/14/2048
340.0 acres (disposal)	4,330 tons (single day)			

¹¹ California Department of Resources Recycling and Recovery (CalRecycle). 2024. Solid Waste Information System (SWIS) Facility/Site Activity Details – Potrero Hills Landfill (48-AA-0075). Website: <https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1194?siteID=3591>. January 18, 2024.

Permitted Area	Permitted Daily Throughput	Permitted Disposal Capacity	Remaining Capacity	Estimated Closure Date
<p>Note: Data obtained from Solid Waste Facility Permit No. 48-AA-0075 Source: California Department of Resources Recycling and Recovery (CalRecycle) 2024. SWIS Facility/Site Activity Details. Website: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1194?siteID=3591. January 18, 2024.</p>				

3.14.3 - Regulatory Framework

Federal

National Pollutant Discharge Elimination System

Pursuant to Section 402 of the Clean Water Act and the Porter-Cologne Water Quality Control Act, municipal stormwater discharges in Suisun City are regulated under the San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, MS4 Order No. 2013-001 (General Permit). In 1987, Congress amended the Clean Water Act to mandate controls on discharges from Municipal Separate Storm Sewer Systems (MS4s). Acting under the federal mandate and the California Water Code, RWQCBs require cities, towns, and counties to regulate activities that can result in pollutants entering their storm drains. All municipalities prohibit non-stormwater discharges to storm drains and require residents and businesses to use Best Management Practices (BMPs) to minimize the amount of pollutants in runoff. The Municipal Regional Permit is overseen by the San Francisco Bay RWQCB. On February 5, 2013, the State Water Board reissued the Phase II Stormwater NPDES Permit for small MS4s. Provision E.12, “Post-Construction Stormwater Management Program,” mandates municipalities to require specified features and facilities—to control pollutant sources, to control runoff volumes, rates, and durations, and to treat runoff before discharge from the site—be included in development plans of projects that create or replace 5,000 square feet or more impervious surface as conditions of issuing approvals and permits. The new requirements continue a progression of increasingly stringent requirements since 1989.

Provision E.12 requires all municipal permittees to implement these requirements by June 30, 2015, to the extent allowed by applicable law. This includes projects requiring discretionary approvals that have not been deemed complete for processing and discretionary permit projects without vesting tentative maps that have not requested and received an extension of previously granted approvals.

In July of 2014, the Bay Area Stormwater Management Agencies Association (BASMAA), through the BASMAA Phase II Committee, created the BASMAA Manual to assist applicants for development approvals to prepare submittals that demonstrate their project complies with the NPDES permit requirements. Applicants who seek development approvals for applicable projects should follow the manual when preparing their submittals. The manual is designed to ensure compliance with the requirements and promote integrated Low Impact Development (LID) design.

Section E.12.c of the General Permit pertains to LID and how it relates to hydromodification management. This permit provision requires that stormwater discharges not cause an increase in the erosion potential of the receiving stream over the existing condition. Increases in runoff flow and

volume must be managed so that the post-project runoff does not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force.

State

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code §§ 10610–10656) requires that all urban water suppliers prepare UWMPs and update them every 5 years. In preparing a UWMP, an urban water supplier must describe or identify the following, among other things (as set forth in Water Code § 10631):

- “The service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier’s water management planning.”
- “Projected population estimates” based on “data from the State, regional, or local service agency population projections within the service area,” in “5-year increments to 20 years or as far as data is available.”
- “Past and current water use” and “projected water use.”
- “Existing and planned sources of water” for each 5-year increment of the 20-year planning period.
- Specific detailed information about groundwater where it is identified as “an existing or planned source of water available to the supplier.”
- “All water supply projects and water supply programs” that may be undertaken to meet “total projected water use,” including “specific projects” and the “increase in water supply” expected from each project.
- An estimate of “the implementation timeline for each project or program.”
- “Plans to supplement or replace” any “water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors” with “alternative sources or water demand management measures, to the extent practicable.”
- “The reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable,” for (i) an “average water year,” (ii) a “single dry water year,” and (iii) “[m]ultiple dry water years.”
- “Opportunities for exchanges or transfers of water on a short-term or long-term basis.”
- “Opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.”
- “Water demand management measures.”

Senate Bill 610: Water Supply Assessments

As revised by Senate Bill (SB) 610 (Stats. 2002, ch. 643), Section 10910, *et seq.* of the California Water Code set forth the circumstances in which CEQA lead agencies must seek preparation of, or prepare themselves, “water supply assessments” for defined proposed “projects.” At the time a lead agency determines that a proposed project requires an Environmental Impact Report (EIR), the lead agency shall identify any “public water system” that would serve the project site and shall request that any such entity prepare a Water Supply Assessment (WSA) for the project. In the absence of such a public water system, the city or county lead agency must prepare its own WSA. SB 610 functions together with CEQA, in that a WSA must be included in “any environmental document” for any “project” subject to SB 610 (Water Code Section 10911(b); see also State CEQA Guidelines Section 15155(e); see also *Id.* Section 15361 [defines “environmental documents” to include “Negative Declarations . . . (and) draft and final EIRs”]).

One of the fundamental tasks of a WSA is to determine whether “total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses, including agricultural and manufacturing uses” (Water Code § 10910 (c)(3), (c)(4)). In making such a determination, the authors of the WSA must address several factors. Specifically, the WSA must contain information regarding existing water supplies, projected water demand, and dry year supply and demand. In *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* (2007) 40 Cal.4th 412, 433 (“*Vineyard*”), the California Supreme Court briefly summarized the key content requirements as follows:

With regard to *existing* supply entitlements and rights, a Water Supply Assessment must include assurances such as written contracts, capital outlay programs and regulatory approvals for facilities construction . . . but as to additional *future* supplies needed to serve the project, the assessment need include only the public water system’s plans for acquiring the additional supplies, including cost and time estimates and regulatory approvals the system anticipates needing (Water Code §§ 10910, subd. (d)(2), and 10911, subd. (a)). (Original italics.)

“Existing” water supplies can be based on different kinds of legal rights or arrangements, including entitlements, water rights, and water service contracts. In many cases, these supplies are likely already described in detail in the supplier’s UWMP (Water Code § 10631(b)). Suppliers are expressly permitted to rely on information contained in the most recently adopted UWMPs, provided that the water needed for proposed development project was accounted for therein (Water Code § 10910(c)(2)).

In preparing a WSA, the public water system must disclose and document the quantity of water received from these various sources. Such supplies must be demonstrated by providing the following:

- (A) Written contracts or other proof of entitlement to an identified water supply.

- (B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.
- (C) Federal, State, and local permits for construction of necessary infrastructure associated with delivering the water supply.
- (D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

(*Id.* subd. (d)(2)).

A finding of insufficiency in a WSA does not require a city or county to deny or downsize a proposed development project. Rather, after identifying a shortfall, the public water system must provide its plans for acquiring “additional supplies” (or what the California Supreme Court called “future” supplies) (Water Code § 10911(a)). These plans should include information concerning the following:

- (1) The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies.
- (2) All federal, State, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.
- (3) Based on the considerations set forth in paragraphs (1) and (2), the estimated timeframes within which the public water system, or the city and county . . . expects to be able to acquire additional water supplies.

These particular Water Code requirements for assessments are action-forcing, in that they require the public water system to lay out a roadmap for obtaining new water supplies once it becomes aware that existing supplies are insufficient for the proposed project together with other foreseeable planned growth.

Regardless of the information provided to a city or county in a WSA, SB 610 stops short of preventing cities and counties from approving the “projects” at issue absent “sufficient” water supplies. But where “existing water supply entitlements, water rights, or water service contracts” are “insufficient” to serve proposed projects, SB 610 does require that, in approving projects in the face of insufficient supplies, cities and counties must “include” in their “findings for the project[s]” their “determination[s]” regarding water supply insufficiency. SB 610 functions together with CEQA, in that a WSA must be included in “any environmental document” for any “project” subject to SB 610. (*Id.* subd. (b); Guidelines, § 15155, subd. (e); see also *id.* § 15361 [defines “environmental documents” to include “Negative Declarations. . . (and) draft and final EIRs”]).

Recycled Water Policy

On February 3, 2009, by Resolution No. 2009-0011, the State Water Board adopted a Recycled Water Policy in an effort to move toward a sustainable water future. The Recycled Water Policy states that “we declare our independence from relying on the vagaries of annual precipitation and move toward sustainable management of surface waters and groundwater, together with enhanced water conservation, water reuse and the use of stormwater.”

The following goals were included in the Recycled Water Policy:

- Increase use of recycled water over 2002 levels by at least 1 million AFY by 2020 and at least 2 million AFY by 2030.
- Increase the use of stormwater over use in 2007 by at least 500,000 AFY by 2020 and at least 1 million AFY by 2030.
- Increase the amount of water conserved in urban and industrial areas by comparison to 2007 by at least 20 percent by 2020.
- Included in these goals is the substitution of as much recycled water for potable water as possible by 2030.

The Recycled Water Policy provides direction to the RWQCBs regarding issuing permits for recycled water projects, addresses the benefits of recycled water, addresses a mandate for use of recycled water, and indicates the State Water Board will exercise its authority to the fullest extent possible to encourage the use of recycled water.

The Recycled Water Policy also indicates that some groundwater basins contain salts and nutrients that exceed or threaten to exceed water quality objectives established in basin plans and states that it is the intent of this Recycled Water Policy that all salts and nutrients be managed on a basin-wide or watershed-wide basis through development of regional or subregional management plans. Finally, the Recycled Water Policy addresses the control of incidental runoff from landscape irrigation projects, recycled water groundwater recharge projects, anti-degradation, control of emerging constituents and chemicals of emerging concern, and incentives for use of recycled water.

In accordance with the provisions of the Recycled Water Policy, a Constituents of Emerging Concerns Advisory Panel was established to address questions about regulating constituents of concern (COCs) with respect to the use of recycled water. The Advisory Panel's primary charge was to provide guidance for developing monitoring programs that assess potential COC threats from various water recycling practices, including groundwater recharge/reuse and urban landscape irrigation. On June 25, 2010, the Advisory Panel provided recommendations to the State Water Board and California Department of Public Health in their Final Report "Monitoring Strategies for Chemicals of Emerging Concern in Recycled Water – Recommendations of a Scientific Advisory Panel." The State Water Board used those recommendations to amend the Recycled Water Policy in 2013 (State Water Board Resolution No. 2013-003).

The April 2013 amendment provides direction to the RWQCBs on monitoring requirements for COCs in recycled water. The monitoring requirements pertain to the production and use of recycled water for groundwater recharge reuse by surface and subsurface application methods and for landscape irrigation. The amendment identifies three classes of constituents to monitor:

- Human health-based COCs: COCs of toxicological relevance to human health.
- Performance indicator COCs: An individual COC used for evaluating removal through treatment of a family of COCs with similar physicochemical or biodegradable characteristics.

- **Surrogates:** A measurable physical or chemical property, such as chlorine residual or electrical conductivity, that provides a direct correlation with the concentration of an indicator compound. Surrogates are used to monitor the efficiency of COC treatment.

Only groundwater recharge reuse facilities would be required to monitor for COCs and surrogates. Surface application and subsurface application facilities would have different mandatory COCs and a different monitoring schedule. Monitoring is not required for recycled water used for landscape irrigation projects that qualify for streamlined permitting unless monitoring is required under the adopted salt and nutrient management plan. Streamlined permitting projects must meet the criteria specified in the policy, including compliance with Title 22, application at agronomic rates, compliance with any applicable salt and nutrient management plan, and appropriate use of fertilizers.

Water Conservation Act of 2009

Requirements regarding per capita water use targets are defined in the Water Conservation Act of 2009, which was signed into law in November 2009 as part of a comprehensive water legislation package. Known as SB X7-7, the legislation sets a goal of achieving a 20 percent reduction in urban per capita water use Statewide by 2020. SB X7-7 required retail water suppliers to define in their 2010 UWMPs the gallons per capita per day targets for 2020, with an interim 2015 target.

Assembly Bill 1881

Assembly Bill (AB) 1881 expanded previous legislation related to landscape water use efficiency. AB 1881, the Water Conservation in Landscaping Act of 2006, enacted landscape efficiency recommendations of the California Urban Water Conservation Council for improving the efficiency of water use in new and existing urban irrigated landscapes in California. AB 1881 required the DWR to update the existing Model Local Water Efficient Landscape Ordinance and local agencies to adopt the updated model ordinance or an equivalent. The law also requires the California Energy Commission (CEC) to adopt performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Assembly Bill 2882

AB 2882 was passed in 2008 and encourages public water agencies throughout California to adopt conservation rate structures that reward consumers who conserve water. AB 2882 clarifies the allocation-based rate structures and establishes standards that protect consumers by ensuring a lower base rate for those who conserve water.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation and land disposal, the State Legislature passed AB 939, the California Integrated Waste Management Act of 1989, effective January 1990. The legislation required each local jurisdiction in the State to set diversion requirements of 25 percent by 1995 and 50 percent by 2000; established a comprehensive Statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and authorized local jurisdictions to impose fees based on the types or amounts of solid

waste generated. In 2007, SB 1016, Wiggins, Statutes of 2008, Chapter 343, introduced a new per capita disposal and goal measurement system that moved the emphasis from an estimated diversion measurement number to an actual disposal measurement number as a per capita disposal rate factor. As such, the new disposal-based indicator (pounds per person per year) uses only two factors: (1) a jurisdiction's population (or in some cases employment) and (2) its disposal as reported by disposal facilities.

Assembly Bill 341 (75 Percent Solid Waste Diversion)

In 2011, the Legislature implemented a new approach to the management of solid waste. AB 341 (Chesbro, Chapter 476, Statutes of 2011) required that the California Department of Resources Recycling and Recovery (CalRecycle) oversee mandatory commercial recycling and established a new Statewide goal of 75 percent recycling through source reduction, recycling, and composting by 2020. This paradigm adds to the policies in AB 939 in several significant ways. First, AB 341 established a Statewide policy goal rather than a jurisdictional mandate. This places the onus for achieving the goal on the State rather than on the cities and counties that are directly responsible for waste disposal and recycling. Under the law, individual jurisdictions are not required to meet the new policy goal.

AB 341 required CalRecycle to issue a report to the Legislature that included strategies and recommendations that would enable the State to divert 75 percent of the solid waste generated in the State from disposal by January 1, 2020, required businesses that meet specified thresholds in the bill to arrange for recycling services by January 1, 2012, and also streamlined various regulatory processes.

California Code of Regulations Title 24

Part 6 (Energy Efficiency Standards for Residential and Nonresidential Buildings)

Title 24, Part 6, of the California Code of Regulations establishes California's Energy Efficiency Standards for Residential and Nonresidential Buildings. The standards were updated in 2013. The 2013 standards set a goal of reducing growth in electricity use by 561.2 gigawatt-hours per year (GWh/y) and growth in natural gas use by 19 million therms per year. The savings attributable to new nonresidential buildings are 151.2 GWh/y of electricity savings and 3.3 million therms. For nonresidential buildings, the standards establish minimum energy efficiency requirements related to building envelope, mechanical systems (e.g., heating, ventilation, and air conditioning [HVAC] and water heating systems), indoor and outdoor lighting, and illuminated signs.

Part 11 (California Green Building Standards Code)

California Code of Regulations Title 24, Part 11, is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect January 1, 2011. The Code is updated on a regular basis, with the most recent update consisting of the 2022 California Green Building Code Standards that became effective January 1, 2023.¹² Local jurisdictions are permitted to adopt more stringent requirements as State law provides methods for local enhancements. The Code recognizes that many jurisdictions have developed existing construction and demolition

¹² California Energy Commission (CEC). 2023. Building Energy Efficiency Standards. Website: <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency>. Accessed April 26, 2024.

ordinances and defers to them as the ruling guidance provided they include a minimum 50 percent diversion requirement. The Code also provides exemptions for areas not served by construction and demolition recycling infrastructure. California Building Standards Code (CBC) provides the minimum standard that buildings need to meet in order to be certified for occupancy, which is generally enforced by the local building official.

Local

City of American Canyon

General Plan

The City of American Canyon General Plan sets forth the following goals and policies relevant to utilities and service systems:

- Goal 5** It shall be the goal of American Canyon to establish and maintain a secure water supply and treatment, distribution and storage system to serve the land uses proposed under the general plan.
- Policy 5.2.5** In the event that sufficient capacity is not available to serve a proposed project, the City shall not approve the project until additional capacity or adequate mitigation is provided.
- Goal 5C** Establish and maintain adequate planning, construction, maintenance, and funding for storm drain and flood control facilities to support permitted land uses and preserve the public safety; upgrading existing deficient systems and expanding, where necessary, to accommodate new permitted development and to protect existing development in the City. Pursue public funding sources (i.e., grants) to reduce fiscal impacts of implementation to the City.
- Policy 5.10.3** Require that adequate storm drain and flood control facilities be constructed coincident with new development.
- Policy 5.10.12** Require that new development be designed to prevent the diversion of floodwaters onto neighboring parcels.
- Policy 5.10.18** Require that development projects maximize the use of pervious surface materials (grass, ground cover, and other) that minimize stormwater runoff.
- Goal 5D** Maintain the quality of surface and subsurface water resources within the City of American Canyon.
- Policy 5.12.2** Incorporate features in new drainage detention facilities which enhance the water quality of discharges from the facility.
- Policy 5.13.1** Require that development activities comply with the State General Storm Water Permit for Construction Activities with measures that protect surface water quality to the maximum extent practicable.

Municipal Code

- Chapter 8.20.030** Requires that commercial businesses shall have separate compost, recycling, and trash containers.
- Chapter 8.20.110** Requires compliance with the model water efficient landscaping ordinance of the CalGreen Building Code including design plan submittal to ensure landscaping water use efficiency.
- Chapter 13.10** New Water and Sewer Connections and Services. Establishes and requires, among other things, capacity fees, service fees, maximum allowable water use, use of no flow or low flow fixtures, and use of recycled water for irrigation.
- Chapter 13.14.065** New or existing non-residential customers whose properties may be served by recycled water are required to connect or convert their property to connect to recycled water for use in irrigation and dual plumbing for toilet flushing.
- Chapter 19.22.070** Recycled Water. Requires the use of recycled water for irrigation systems.

Zero Water Footprint Policy

The City's Zero Water Footprint Policy requires no loss of water service reliability or increase in water rates to the City of American Canyon's existing water service customers due to a requested increase in demand for water within the City's water service area.

3.14.4 - Methodology

FirstCarbon Solutions (FCS) reviewed relevant City documents, including, but not limited to, the City of American Canyon General Plan, the American Canyon Municipal Code, the City of American Canyon Sewer Master Plan, the 2020 UWMP, as well as actual water consumption data on the existing Commerce Court 330 project.

3.14.5 - Thresholds of Significance

The lead agency utilizes the criteria in CEQA Guidelines Appendix G Environmental Checklist to determine whether impacts to utilities and service systems are significant environmental effects. Would the proposed project:

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?
- b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?
- c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

- d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?
- e) Comply with federal, State, and local statutes and regulations related to solid waste?

3.14.6 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Facilities Expansion

Impact UTIL-1: The proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Impact Analysis

The proposed project would connect to existing water (both potable and recycled), wastewater, electricity, and telecommunication infrastructure in Commerce Court. Existing service laterals would extend from Commerce Court lines to the proposed building (a minor distance of less than 10 feet). As discussed in Impact UTIL-2 and Impact UTIL-3, sufficient water supply and wastewater capacity is available to serve the proposed project, and, therefore, new or expanded water or wastewater facilities would not be required beyond those constructed on-site. The proposed project's stormwater runoff would be directed via storm drainpipes into an on-site bioretention pond, the construction of which is considered in this Draft EIR. No off-site stormwater infrastructure would be required. Electricity and telecommunication infrastructure would also be extended on-site from connections in Commerce Court and would not require new or expanded facilities. The project does not contemplate the use of natural gas. In summary, the proposed project would not result in the relocation or construction of new or expanded utilities facilities outside the project boundaries. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Water Supply

Impact UTIL-2: The proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years.

Impact Analysis

Potable water demand for the project was estimated based on actual water consumption from the SDG Commerce 330 project, which is a similarly sized wine distribution warehouse operation located directly adjacent to the project site. Estimates are summarized in Table 3.14-3. Also shown are the

water demands of SDG Commerce 330 as indicated in their approved will-serve letter. As shown, actual water use is far less than the approved will-serve amounts.

Table 3.14-3: SDG Commerce 220 Estimated Water Consumption

Water Type	Estimated Acre-Feet/Year ¹	Will-Serve Acre-Feet/Year ²
Domestic	0.0635	0.31
Reclaimed	0.0537	1.55

¹These estimates are based on actual water use rates for the adjacent SDG Commerce 330 wine distribution warehouse recorded at a rate of 94.07 domestic gallons per 1,000 square feet per year or 0.2577 domestic gallons per 1,000 square feet per day, and 0.0053 reclaimed acre-feet per year (AFY) per acre or approximately 0.0000 reclaimed acre-feet per day per acre.

²These estimates are based on the approved will-serve letter for the SDG Commerce 330 project.

As shown above, the proposed project is estimated to demand between approximately 0.0635 and 0.31 domestic acre-feet and between 0.0537 and 1.55 reclaimed acre-feet of water per year, for a combined total of between 0.1172 and 1.86 AFY. The project would incorporate Demand Management Measures (DMMs) through compliance with water waste prevention ordinances, including the Municipal Code’s Water Waste Prohibitions Ordinance (Section 13.14.060), as well as codes related to water efficient landscaping (Section 16.14 and 19.22).

Tables Table 3.14-4, Table 3.14-5, and Table 3.14-6 demonstrate the City of American Canyon’s estimated normal, single dry year, and multiple dry years supply and demand, as indicated by the UWMP.¹³

Table 3.14-4: Normal Year Supply and Demand Comparison (AFY)

	2025	2030	2035	2040	2045
Supply Totals	4,959	4,959	5,575	5,575	5,575
Demand Totals	3,543	3,785	4,580	4,822	5,075
Difference	1,416	1,174	994	753	500

Source: City of American Canyon. 2023. 2020 Urban Water Management Plan.

As indicated in Table 3.14-4, the City would have a surplus of at least 500 acre-feet of water in normal years through the year 2045. The water demanded by the proposed project is approximately .02 percent of the projected water surplus for the year 2045.¹⁴ As such, the City would be able to serve the proposed project during normal years through the year 2045.

¹³ City of American Canyon. 2023. 2020 Urban Water Management Plan.

¹⁴ $0.1172/500 \times 100 = 0.2344$

Table 3.14-5: Single Dry Year Supply and Demand Comparison (AFY)

	2025	2030	2035	2040	2045
Supply Totals	1,897	1,897	2,132	2,132	2,132
Demand Totals	3,543	3,785	4,580	4,822	5,075
Difference	-1,646	-1,888	-2,448	-2,689	-2,943

Notes:
Demand reductions due to water shortage stage rationing measures are not included in the single dry year demand estimates.
Source: City of American Canyon. 2023. 2020 Urban Water Management Plan.

Table 3.14-6: Multiple Dry Year Supply and Demand Comparison (AFY)

Year	Totals	2025	2030	2035	2040	2045
First Year	Supply Totals	3,359	3,359	3,776	3,776	3,776
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-184	-426	-804	-1,046	-1,299
Second Year	Supply Totals	3,359	3,359	3,776	3,776	3,776
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-184	-426	-804	-1,046	-1,299
Third Year	Supply Totals	3,251	3,251	3,655	3,655	3,655
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-291	-534	-925	-1,167	-1,420
Fourth Year	Supply Totals	3,251	3,251	3,655	3,655	3,655
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-291	-534	-925	-1,167	-1,420
Fifth Year	Supply Totals	3,251	3,251	3,655	3,655	3,655
	Demand Totals	3,543	3,785	4,580	4,822	5,075
	Difference	-291	-534	-925	-1,167	-1,420

Note:
Demand reductions due to water shortage stage rationing measures are not included in the 5-consecutive-year drought demand estimates.
Source: City of American Canyon. 2023. 2020 Urban Water Management Plan.

The Single Dry Year scenario is the year that represents the lowest water supply available to the City. The Multiple Dry Year scenario, in this case, a 5-consecutive-year drought, is the period that represents the driest 5-year historical sequence for the City.

As shown in Tables 3.14-5 and 3.14-6, for the single and multiple dry year scenarios there is a projected water deficit in all years, beginning in the year 2025. However, the City is expanding the use of local water resources and reducing waste through implementation of DMMs.¹⁵ As indicated in the UWMP, demand reductions due to rationing measures are not included in scenario estimates. Therefore, the deficit could be reduced by implementing the DMMs. In addition, the City's UWMP contains a Water Waste Prohibition Ordinance, Metering, Conservation Pricing, Public Outreach and Education, Water Loss Assessment Programs, Water Conservation Program Coordination and Staffing Support, etc. These initiatives are described in greater detail in the City's UWMP and all contribute to the reduced demand for water supply.

The City also has several planned methods to expand recycled water use. The City's Recycled Water Master Plan identifies 15 capital improvement projects to upgrade the City's recycled water system to serve projected buildout demands of nearly 1,000 AFY.¹⁶ This would be sufficient to meet the City's water deficits in multiple dry years through the year 2035.

Lastly, the City can implement additional supply augmentation methods, including purchasing additional water with existing dry-year agreements, decreasing line flushing, increasing water waste patrols, or employing a moratorium or net zero demand increase on new connections. As indicated in the UWMP, the City anticipates it can supply all its water demands through the 2045 planning horizon by purchasing supplemental imported water through existing agreements for all water year scenarios (without accounting for use reduction savings, therefore making this a conservative conclusion). As indicated in Table 7-5 of the UWMP, shortfalls could adequately be met in each multiple dry year.

In sum, the City is able to meet project demand in all years under the normal year scenario. In the dry and multiple dry year scenarios, the City is projected to have a deficit. However, planned increases in recycled water use would increase supplies to be sufficient through 2035, in dry and multiple dry year scenarios. DMMs, supply augmentation methods, recycled water use, and agreements would further reduce water deficits in the dry and multiple dry year scenarios. Finally, the UWMP concluded that predicted water supply constraints could be resolved through the purchase of "supplemental imported water through existing agreements through the planning horizon (2045) for all water year scenarios."¹⁷ Furthermore, water purchases, both temporary and permanent, are commonly used in California to redirect water resources to areas of greatest need, consistent with the legislative policy of the State to facilitate water transfers (see California Water Code § 575.480, *et seq.*).

The City has a Zero Water Footprint Policy, which is defined as "no loss in reliability or increases in water rates for existing water service customers due to requested increased demand for water within the City's water service area." Consistent with the policy, the proposed project's estimated water use would be reviewed. This process would ensure that either the proposed project meets the adopted Zero Water Footprint Policy (projects that either require no additional water demand or projects which offset increased water demand by off-site measures) or requires a Water Supply

¹⁵ City of American Canyon. 2023. 2020 Urban Water Management Plan.

¹⁶ City of American Canyon, 2023. 2020 Urban Water Management Plan.

¹⁷ Ibid.

Report. If a Water Supply Report is required it would determine the proposed project's water demand measures needed to reach a zero water footprint. The remaining water footprint of the proposed project would be offset through a method agreed upon by the City and the developer. The proposed project would offset its water footprint by contributing funding to the City's water projects. In either instance, a zero water footprint would be obtained.

Furthermore, per Municipal Code Section 13.10, the proposed project is limited to an average use of 650 gallons of water per day per acre (measured monthly). For the proposed project's 10.45-acre site, this would equate to 6,792.5 gallons of water per day. As indicated in Table 3.14-3, the proposed project's estimated domestic water consumption would be between 0.0635 and 0.31 acre feet per year or 20,691 to 101,014 gallons per year. This equates to less than 57 to 277 gallons of water per day, far below the allowable amount.

Finally, the proposed project would be consistent with Municipal Code Section 19.22.070 by using recycled water for landscaping irrigation, thus eliminating the use of potable water for landscaping purposes. The proposed project would also be required to submit landscaping plans to the City as part of project applicant and approval process demonstrating compliance with the City's Model Water Efficient Landscape Ordinance (Municipal Code 8.20.110).

In summary, the City's ability to purchase additional water in all dry year scenarios, along with DMMs, the Zero Water Footprint Policy, water use reduction, and use of recycled water, ensures that sufficient water would be available to serve existing, planned, and future buildout, including the proposed project. Furthermore, the proposed project's water demand would be far below average allowable use. Therefore, for the reasons discussed herein, there would be sufficient water supplies available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Wastewater Treatment Capacity

Impact UTIL-3: **The proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

Impact Analysis

The proposed project would be served by the City of American Canyon for wastewater collection and treatment. Table 3.14-7 provides the proposed project's estimated wastewater generation based on estimated water consumption. For the purposes of a conservative analysis, it is assumed that 100 percent of water consumed becomes wastewater. Note that it is standard industry assumption that wastewater represents only 90 percent of water consumption.

Table 3.14-7: Wastewater Generation Estimate

Water Consumption Estimate Source	Anticipated Daily Water Consumption	Wastewater Generation Calculation	Daily Wastewater Generation
SDG Commerce 330—Actual Use	57 gallons ¹	57 gallons x 1	57 gallons (0.000057 mgd)
SDG Commerce 330—Will-Serve Letter	275 gallons ²	275 gallons x 1	275 gallons (.000275 mgd)

Notes:
 MGD = million gallons per day
¹ 0.0635 acre-feet per year (AFY) (as indicated in Table 3.13-3) = 20,691.5349 gallons per year = ~57 gallons per day
² 0.31 acre-feet per year (AFY) (as indicated in Table 3.13-3) = 101,013 gallons per year = ~275 gallons per day
 Source: FirstCarbon Solutions (FCS), 2024; City of American Canyon, 2024.

As shown in Table 3.14-7, the proposed project would produce between approximately 57 and 275 gallons of effluent per day (0.000057 to 0.000275 mgd). The City’s WTP has a maximum capacity of 2.5 mgd at dry weather flow conditions and 5.0 mgd at peak wet weather flow conditions. In the year 2020, the WRF treated 1,625 acre-feet in total, which is approximately 529 million gallons.¹⁸ This is approximately 1.5 mgd per day, meaning there was 1 mgd of additional capacity in the year 2020. The proposed project would produce between 0.000057 and 0.000275 mgd, which is approximately 0.0057 to .0275 percent of the remaining daily capacity of the WTP. As such, existing treatment capacity would be sufficient to serve the proposed project in addition to existing commitments. Impacts would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Solid Waste

Impact UTIL-4: **The proposed project would not generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals.**

Impact Analysis

This impact discussion assesses whether the proposed project would be served by a landfill with adequate capacity or comply with federal, State, and local statutes and regulations related to solid waste. Solid waste would be generated by construction and operational activities. Each is discussed as follows.

¹⁸ City of American Canyon. 2023. 2020 Urban Water Management Plan. Table 6-2 Retail: Wastewater Collected Within Service Area in 2020.

Construction Waste

The proposed project would result in the construction of a 219,834-square-foot wine distribution warehouse. Using a nonresidential construction waste generation rate published by the United States Environmental Protection Agency (EPA), an estimate of the total construction debris generated by the proposed project is provided in Table 3.14-8.

Table 3.14-8: Construction Solid Waste Generation

Waste Generation Rate	Square Feet	Construction Waste Generation	
		Tons	Cubic Yards
3.89 pounds/square foot	219,834	428	599
Notes: 1 ton = 2,000 pounds; 1 ton = approximately 1.4 cubic yards Sources: United States Environmental Protection Agency (EPA). 1998. FirstCarbon Solutions (FCS). 2024.			

Development of the proposed project would generate an estimated 599 cubic yards of construction debris. This waste volume represents less than 0.01 percent of the 13.872 million cubic yards of remaining capacity at the Potrero Hills Landfill. Moreover, the values shown in the table do not adjust construction solid waste generation to account for C&D debris recycling that would serve to divert waste from the landfill. The Napa Valley Waste Management Authority provides C&D debris recycling at the nearby Devlin Road Transfer Station. The proposed project would be required to dispose of C&D debris in compliance with the City’s C&D Ordinance.

Therefore, short-term construction impacts on landfill capacity would be less than significant.

Operational Waste

Table 3.14-9 summarizes the proposed project’s annual operational waste generation based on a rate provided by CalRecycle.

Table 3.14-9: Annual Operational Solid Waste Generation

Waste Generation Rate	Square Feet	Operational Waste Generation	
		Tons	Cubic Yards
4.8 pounds/square foot	219,834	528	739
Notes: 1 ton = 2,000 pounds; 1 ton = 1.4 cubic yards Sources: California Department of Resources Recycling and Recovery (CalRecycle). FirstCarbon Solutions (FCS). 2022.			

The proposed project would generate an estimated 739 cubic yards of operational solid waste on an annual basis at buildout. This waste volume represents less than 0.01 percent of the 13.872 million

cubic yards of remaining capacity at the Potrero Hills Landfill. Moreover, the values shown in the table are conservative because, for example, they do not adjust operational solid waste generation to account for recycling and waste reduction activities that would serve to divert waste from the landfill such as, but not limited to, Section 8.20.030 of the Municipal Code, which requires that commercial business shall have separate compost, recycling, and trash containers. Therefore, long-term operational impacts on landfill capacity would be less than significant.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

3.14.7 - Cumulative Impacts

The cumulative utilities analysis' geographic scope is the service area of each provider serving the proposed project. Because of differences in the nature of the utility topical areas, they are discussed separately.

Water

The geographic scope of the cumulative potable water analysis is the City of American Canyon Public Works Department service area, which encompasses the American Canyon city limits.

Cumulative projects, including those listed in Table 3-1 (refer to Chapter 3, Environmental Impact Analysis, Table 3-1, Cumulative Projects) are located within areas of the City of American Canyon and Napa County. As discussed under Impact UTIL-2, the City has available water supplies to serve the proposed project under normal hydrologic conditions. Furthermore, the City would be able to serve the proposed project during the single dry or multiple dry year scenario with the use of DMMs, recycled water, supply augmentation methods, and agreements with other agencies. The proposed project would be required to comply with the City's Zero Water Footprint Policy, Municipal Code Chapter 13.10 and Section 19.22.070. Developers of other cumulative projects would be required to comply with the Zero Water Footprint Policy as well as Municipal Code requirements related to water usage. Additionally, the proposed project and other pending projects are accounted for in the UWMP and would not create the need for any new or expanded facilities that could have significant cumulative impacts. Therefore, cumulative impacts would be less than significant. Because the proposed project would comply with these requirements as well, the proposed project would not have a cumulatively considerable contribution toward the less than significant cumulative impacts related to water supply.

Wastewater

The geographic scope of the cumulative wastewater analysis is the American Canyon WRF service area, which encompasses the American Canyon City limits and areas within the Napa County Airport Industrial Park south of Fagan Creek. The cumulative projects, including those listed in Table 3-1, located in the City are within the service area and would generate volumes of wastewater conveyed

to the WRF. All future projects that are tributary to the Reclamation Facility would be required to demonstrate that sewer service is available to ensure that adequate sanitation can be provided.

The WRF has an existing design capacity of 2.5 mgd and the City has plans to increase that to 4.0 mgd over time. The proposed project is estimated to generate 57 gallons of wastewater on a daily basis (0.00005 mgd) at buildout. The proposed project's estimated wastewater generation of 0.005 mgd per day would represent about 0.005 percent of the average daily flow treated by the expanded WRF. As such, cumulative impacts would be less than significant.

Additionally, the proposed project's contribution to this less than significant impact would not be cumulatively considerable. Each applicant for individual development proposals in the service area would be required to comply with applicable wastewater requirements. Therefore, the proposed project's contribution to this less than significant impact related to wastewater generation and treatment would not be cumulatively considerable.

Storm Drainage

The City of American Canyon Public Works Department oversees municipal storm drainage within the American Canyon City limits. The municipal storm drainage system consists of ditches, inlets, basins, and underground piping that ultimately discharges flows into the Napa River. The City maintains a Storm Drainage Master Plan and engineering standards that guide development of the municipal storm drainage system.

All future development projects in the City are required to provide storm drainage facilities that collect and detain stormwater. The storm drainage facility shall include provisions for future upstream development and no development shall discharge at a rate that exceeds the capacity of any portion of the existing downstream system. Runoff from storms up to the 100-year return frequency are conveyed through storm facilities and disposed of in a manner that protects public and private improvements from flood hazards.

During project construction, the proposed project would implement standard stormwater pollution prevention measures to ensure downstream water quality impacts are minimized to the greatest extent possible.

As described in Section 3.9, Hydrology, the proposed project would install an on-site storm drainage system consisting of inlets, piping, and a series of detention basins that would result in a net decrease in peak stormwater runoff rates. As such, the proposed project would ensure no net increase in stormwater would leave the project site during a peak storm event and would avoid cumulatively significant stormwater impacts to downstream waterways at times when capacity is most constrained.

Cumulative projects would be required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) for project construction. Cumulative projects would be required to incorporate a stormwater control plan and stormwater collection systems into the development that would reduce the volume of stormwater runoff that cumulative projects would generate. Therefore, cumulative impacts in this regard would be less than significant.

The proposed project would incorporate a detention basin that would reduce runoff at the project site. Therefore, the proposed project's contribution to this less than significant impacts related to storm drainage would not be cumulatively considerable.

Solid Waste

The geographic scope of the cumulative solid waste analysis is the City of American Canyon. Recology provides solid waste and recycling collection services to commercial customers in the City of American Canyon.

Many past and all present and reasonably foreseeable future development projects that have or would generate construction and operational solid waste, depending on the volumes and end uses, have been or would be required to implement recycling and waste reduction measures. The proposed project is anticipated to generate 599 cubic yards of solid waste during construction and 739 cubic yards annually during operations. For comparison purposes, the Potrero Hills Landfill has a remaining capacity of 13.872 million cubic yards. As such, it appears that sufficient capacity would be available to serve the proposed project as well as existing and planned land uses in the City of American Canyon for the foreseeable future.

Additionally, the nearby Devlin Road Transfer Station offers C&D debris recycling and incentivizes such activities through pricing. Thus, it would be expected that some of the projects listed in Chapter 3, Environmental Impact Analysis, Table 3-1 would take advantage of C&D debris recycling, which would divert materials from the solid waste stream and contribute to conserving landfill capacity, thereby extending the operational life of Potrero Hills Landfill. For these reasons, cumulative impacts to solid waste would be less than significant.

The proposed project's construction and operational solid waste generation would represent less than 0.01 percent of the remaining capacity at the Potrero Hills Landfill facility. Therefore, the proposed project, in conjunction with other cumulative projects, would result in a less than significant cumulative impact related to solid waste generation and landfill capacity.

Level of Cumulative Significance Before Mitigation

Water—Less than significant impact.

Wastewater—Less than significant impact.

Storm Drainage—Less than significant impact.

Solid Waste—Less than significant impact.

Mitigation Measures

No mitigation is necessary.

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 4: EFFECTS FOUND NOT TO BE SIGNIFICANT

4.1 - Introduction

This chapter is based on the Notice of Preparation (NOP), dated October 27, 2023, and contained in Appendix A of this EIR. The NOP was prepared to identify the potentially significant effects of the project and was circulated for public review between October 27, 2023 and November 27, 2023. In the course of the NOP evaluation, certain impacts were found to be less than significant because construction and operation of the proposed project would not result in such impacts. This chapter provides a brief description of effects found not to be significant or less than significant, based on the NOP, NOP public comments received, or more detailed analysis conducted as part of the EIR preparation process. Note that a number of impacts that are found to be less than significant are addressed in the various EIR topical sections (Sections 3.1 through 3.14) to provide more comprehensive discussion of why impacts are less than significant, in order to better inform decision-makers and the general public.

4.2 - Environmental Effects Found not to be Significant

4.2.1 - Aesthetics, Light, and Glare

Scenic Vistas

The project site is surrounded by eucalyptus groves (west and east) and existing industrial buildings (north and south). Because of these characteristics, the project site is not visible from a scenic vista. Furthermore, the project site is flat and does not contain any features that would be characterized as a scenic vista (e.g., ridgeline, overlook, etc.). This precludes the possibility of the proposed project having an adverse impact on a scenic vista. No impact would occur.

State Scenic Highways

State Route (SR) 29 is located more than 1 mile to the east of the project site. SR-29 is an “Eligible” State Scenic Highway. SR-29 is not visible from the project site due to the presence of intervening topography and vegetation. No impact would occur.

4.2.2 - Agriculture Resources and Forestry Resources

Loss of Important Farmland

The project site contains undeveloped land and is not used for agricultural land use activities. The California Department of Conservation maps the project site as “Other Land,” which does not fall under the Important Farmland umbrella. No impact would occur.

Williamson Act Contracts or Agricultural Zoning

The project site contains undeveloped land and is not used for agricultural land use activities. The project site is not encumbered by an active Williamson Act Contract. The project site is zoned for industrial use; thus, no conflicts with agricultural zoning would occur. No impact would occur.

Forest Zoning

The project site contains undeveloped land and does not have any commercially harvestable stands of trees. The project site is zoned for commercial recreational and winery use; thus, no conflicts with forest zoning would occur. No impact would occur.

Loss of Forest Land

The project site contains undeveloped land and does not have any commercially harvestable stands of trees. Thus, the proposed project would not convert forestland to non-forest use. No impact would occur.

Pressures to Convert Surrounding Agricultural Land or Forest Land

The California Department of Conservation maps the areas immediately adjacent to the project site as “Other Land.” Furthermore, the eucalyptus groves to the west and east of the project site are not considered commercially harvestable timber. For these reasons, the proposed project would not create pressures to convert surrounding agricultural or forest land to other use. No impact would occur.

4.2.3 - Biological Resources

Sensitive Natural Communities or Riparian Habitat.

Seasonal wetland communities are typically considered sensitive under the California Environmental Quality Act (CEQA). The wetland features on-site would be avoided by the proposed project through the implementation of 25-foot buffers (Section 3.3, Biological Resources, Exhibit 3.3-4). The wetland buffer avoidance area would ensure that construction activities do not impact the on-site jurisdictional wetland features. Upon operation, the project’s stormwater would be directed away from the features, as required by the proposed project’s Storm Water Pollution Prevention Plan (SWPPP). No other sensitive communities occur on-site. Therefore, no impacts on sensitive natural communities would occur.

Conservation Plans

No adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan is applicable to the project site. Therefore, the proposed project would not conflict with the provisions of such a document. No impacts would occur.

4.2.4 - Geology, Soils, and Seismicity

Septic or Alternative Wastewater Disposal Systems

The proposed project would be served with wastewater collection and treatment service provided by the City of American Canyon. No septic or alternative wastewater disposal systems would be employed. No impact would occur.

4.2.5 - Hazards and Hazardous Materials

Wildfires

The project site is located within an urbanized area of the City of American Canyon. The eucalyptus groves to the west and east of the project site are small in size and surrounded by urban uses or marshland, making the susceptibility to wildland fires low. As such, the proposed project would not expose persons or properties to wildland fire hazards. No impact would occur.

4.2.6 - Hydrology and Water Quality

100-Year Flood Hazards

The Napa County Geographic Information System (GIS) online mapping tool indicates that the project site is not within a 100-year flood hazard zone. This condition precludes the possibility of the proposed project being exposed to 100-year food hazards. No impact would occur.

Levee or Dam Failure

The project site is not protected by a levee, a condition that precludes flooding from levee failure. Napa County General Plan Safety Element Figure SAF-5 indicates that the project site is not within a dam failure inundation zone for any impounded bodies of water. No impact would occur.

Seiches, Tsunamis, or Mudflows

The project site is not near any inland bodies of water that may be susceptible to a seiche. The project site is more than 25 miles from the Pacific Ocean. The project site is not with an area of volcanic activity or at the base of any slopes that are susceptible to mudflows. No impact would occur.

4.2.7 - Land Use

Division of an Established Community

The project site is vacant and does not contain any dwelling units or other structures that would constitute an established community. As such, the development of the proposed project would not divide an established community. No impact would occur.

4.2.8 - Mineral Resources

Loss of Mineral Resources of Statewide or Local Importance

The project site contains undeveloped land. No mineral extraction occurs on-site and there are no mineral resources of statewide or local importance at the project site. This precludes the possibility of conflicts in this regard. No impact would occur.

4.2.9 - Population and Housing

Growth Inducement

The proposed project would develop 219,834 square feet of light industrial uses on an undeveloped site. No direct residential growth would occur. The proposed project would employ an estimated 35

full-time employees and 25 part-time employees when fully operational at buildout. The California Employment Development Department (EDD) estimated Napa and Solano County’s combined labor force at 267,800 in November 2022. As such, the local labor force is sufficiently large enough to allow the project’s employment opportunities to be filled locally such that unplanned growth would not occur. Lastly, roadways and infrastructure exists adjacent to the project site and, therefore, no impacts would occur.

Displacement of Persons or Housing

The project site is vacant and does not contain any dwelling units. As such, the development of the proposed project would not displace persons or housing. No impact would occur.

4.2.10 - Public Services and Utilities

Schools

The proposed project would not involve construction of dwelling units and, thus, would not result in direct enrollment growth in public schools. Therefore, no new or expanded school facilities would be required. No impact would occur.

Parks

The proposed project would not involve construction of dwelling units and, thus, would not result in increased demand for parks. Therefore, no new or expanded park facilities would be required. No impact would occur.

Other Public Facilities

The proposed project would not involve construction of dwelling units and, thus, would not result in increased demand for libraries or community facilities. Therefore, no new or expanded libraries or community facilities would be required. No impact would occur.

4.2.11 - Recreation

The proposed project would not involve construction of dwelling units and, thus, would not result in direct population growth. As such, it would not increase use of existing recreational facilities or require construction or expansion of new recreational facilities. No impact would occur.

4.2.12 - Wildfire

Emergency Evacuation

The proposed project would take vehicular access from two driveways on Commerce Court. Accordingly, the proposed project would provide two points of emergency access and, thus, would comply with California Fire Code requirements.

The Commerce Court cul-de-sac has a gated Emergency Vehicle Access connection to Eucalyptus Drive to the south. This would be available for emergency response and evacuation to and from the project site.

For these reasons, the proposed project would enhance access by emergency responders and would not impair emergency response or evacuation in the project vicinity. No impact would occur.

Wildfire Risks

The project site is located within a Local Responsibility Area and is not located in a very high fire hazard severity zone. The project site is flat and located in an urbanized area. The eucalyptus groves to the west and east of the project site are small in size and surrounded by urban uses or marshland, making the susceptibility to wildland fires low. As such, the proposed project would not expose persons or properties to wildland fire hazards. No impact would occur.

Fire Infrastructure

The proposed project would connect to existing utilities infrastructure. The project site is surrounded and has development on two sides and Commerce Court on the east side. No impact would occur.

Post-Fire Hazards

The project site is flat and would not be at risk of a landslide. As explained in Section 3.9, Hydrology and Water Quality, the proposed project would result in a net decrease in peak stormwater runoff rates because of the proposed detention and treatment system. The proposed project would not substantially alter the existing drainage pattern. No impact would occur.

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 5: OTHER CEQA CONSIDERATIONS

5.1 - Significant Unavoidable Impacts

California Environmental Quality Act (CEQA) Guidelines Section 15126.2(a)(c) requires an Environmental Impact Report (EIR) to identify and focus on the significant environmental effects of the proposed project, including effects that cannot be avoided if the proposed project were implemented.

Based on the analyses contained in this Draft EIR, the City of American Canyon (City) has determined that the proposed project in conjunction with other cumulative development in the southeast portion of the City of American Canyon would result in the following a significant and unavoidable impacts:

- **Inconsistency with CEQA Guidelines Section 15064.3, subdivision (b):** The City’s travel demand model establishes 34.1 miles per employee as the baseline for evaluating potential Vehicle Miles Traveled (VMT) impacts associated with the proposed project, and the significance threshold was 19 percent below this level, or 27.6 miles. The 19 percent emissions reduction target established by the California Air Resources Board (ARB) was the basis for this threshold. Given the lack of transit services within an acceptable walking distance of the project, a 19 percent reduction was determined infeasible. Mitigation is proposed to require the preparation and implementation of a transportation demand management program; however, these measures would not sufficiently reduce VMT. Therefore, the significance after mitigation is significant and unavoidable.
- **Cumulative Transportation:** Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project’s location and lack of access to high-quality transit. MM TRANS-2 would reduce project-related VMT but not to a level below significance. As such, the proposed project would also have a cumulatively considerable contribution on VMT.

5.2 - Growth-inducing Impacts

There are two types of growth-inducing impacts that a project may have: direct and indirect. To assess the potential for growth-inducing impacts, the proposed project’s characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated (CEQA Guidelines § 15126.2(e)). CEQA Guidelines, as interpreted by the City, state that a significant growth-inducing impact may result if the project would:

- Induce substantial population growth in an area (for example, by proposing new homes and commercial or industrial businesses beyond the land use density/intensity envisioned in the general plan);

Other CEQA Considerations

- Substantially alter the planned location, distribution, density, or growth rate of the population of an area; or
- Include extensions of roads or other infrastructure not assumed in the general plan or adopted capital improvements project list, when such infrastructure exceeds the needs of the project and could accommodate future developments.

Direct growth-inducing impacts occur when the development of a project imposes new burdens on a community by directly inducing unplanned population growth or by leading to the construction of additional developments in the same area. Also included in this category are projects that remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant with excess capacity that could allow additional development in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, may provide a catalyst for future unrelated development in an area, such as a new residential community that requires additional commercial uses to support residents.

The proposed project does not include residential uses and therefore would not directly induce population growth. As discussed in Chapter 2, Project Description, the proposed project would develop a 219,834-square-foot wine storage and distribution center on a 443,005-square-foot undeveloped project site. The proposed project would employ an estimated 35 full-time employees and 20 part-time employees when fully operational at buildout.

The California Employment Development Department estimated Napa and Solano County's combined labor force at 267,800 in November 2022. As such, the local labor force is sufficiently large enough to allow the project's employment opportunities to be filled locally such that unplanned growth would not occur.

At the time of this writing, no prospective employees have been identified and, thus, it would be speculative to make any statements about where they would reside. Nonetheless, the City of American Canyon has more than 2,400 dwelling units in the pipeline (refer to Table 3-1 in Chapter 3, Environmental Impact Analysis). For comparison purposes, American Canyon's population was estimated to be 20,837. Thus, the addition of more than 2,400 dwelling units to the City's housing inventory would more than offset the employment growth attributable to the proposed project.

The proposed project would be served by connections to existing water, wastewater, storm drainage, and electricity lines that exist in Commerce Court. No extension of infrastructure into unserved areas would be required, and, therefore, no removal of physical barriers to growth would occur.

As such, the proposed project would not indirectly induce substantial population growth. No impacts would occur.

5.3 - Mandatory Findings of Significance

Public Resources Code Section 21083 requires lead agencies to make a finding that a project may have a “significant effect on the environment” if one or more of the following conditions exist:

- 1) A proposed project has the potential to degrade the quality of environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife species to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare, or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.
- 2) The possible effects of a project are individually limited but cumulatively considerable.
- 3) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.

Finding No. 1: Less than significant impact with mitigation incorporated.

The proposed project would develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. As described previously in Section 3.3, Biological Resources, the proposed project would not result in significant impacts to wildlife or plant species with mitigation incorporated. The analysis provides mitigation of pre-construction surveys, construction monitoring, and avoidance measures in order to protect Swainson’s hawk, burrowing owl, nesting birds, roosting bats, western pond turtle, and monarch butterfly.

Additionally, the proposed project includes mitigation and avoidance measures to reduce construction-related impacts to historical and archaeological resources as well as the accidental discovery of human remains. These include required Worker Environmental Awareness Program (WEAP) training, archaeological monitoring, and procedures in the event of accidental discovery of cultural resources and human remains.

Based on the discussion provided above, with implementation of the listed mitigation measures, the proposed project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare of endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

Therefore, impacts would be less than significant with implementation of Mitigation Measure (MM) BIO-1a through MM BIO-1g, MM CUL-1a through MM CUL-1c, and MM CUL-3.

Finding No. 2: Significant and unavoidable impact.

The analysis presented in this Draft EIR includes a review of proposed project’s potential impacts related to air quality, biological resources, cultural resources, noise, and transportation, among other environmental issue areas. As presented throughout this Draft EIR, the proposed project’s

cumulative impacts would either be significant and unavoidable, less than significant with mitigation incorporated, less than significant, or there would be no impact.

The proposed project would develop a 219,834-square-foot wine storage and distribution center on the 443,005-square-foot project site. There would be a less than significant cumulative impact with regard to aesthetics, light, and glare; air quality; energy; hazards and hazardous materials; public services; noise; and utilities and service systems.

Potentially significant impacts related to biological resources, cultural and tribal cultural resources, geology and soils, and hydrology and water quality would be mitigated to less than significant levels with the implementation of MM BIO-1a through MM BIO-1g, MM CUL-1a through MM CUL-1c, MM CUL-3, MM GEO-1, MM GEO-5, and MM HYD-1.

Significant and unavoidable impacts would occur related to transportation. While implementation of MM TRANS-2 would reduce impacts to this topical section, there is no feasible mitigation available that would fully bring these impacts to less than significant levels. Potential cumulative impacts are discussed in detail in each topical section of this Draft EIR.

Finding No. 3: Significant and unavoidable impact.

Potential human-related impacts are discussed and evaluated throughout this Draft EIR. Compliance with and implementation of project-specific mitigation measures and existing regulations would ensure that the proposed project would not result in substantial adverse effects on human beings for direct, indirect, or cumulative impacts related to air quality, seismic and geologic hazards, hazards and hazardous materials, flooding and natural disasters, and noise and vibration. Impacts with respect to these topical areas would be less than significant with mitigation incorporated and application of all relevant regulations.

CHAPTER 6: ALTERNATIVES TO THE PROPOSED PROJECT

6.1 - Introduction

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15126.6, this Draft Environmental Impact Report (Draft EIR) contains a comparative impact assessment of alternatives to the proposed project. The primary purpose of this section is to provide decision makers and the general public with a reasonable number of feasible project alternatives that could attain most of the basic project objectives while avoiding or reducing any of the proposed project's significant adverse environmental effects. Important considerations for these alternatives analyses are noted below (as stated in CEQA Guidelines § 15126.6).

- An EIR need not consider every conceivable alternative to a project.
- An EIR should identify alternatives that were considered by the lead agency but rejected as infeasible during the scoping process.
- Reasons for rejecting an alternative include:
 - Failure to meet most of the basic project objectives;
 - Infeasibility; or
 - Inability to avoid significant environmental effects.

6.1.1 - Significant Unavoidable Impacts

The proposed project would result in the following significant unavoidable impacts:

- **Inconsistency with CEQA Guidelines Section 15064.3, subdivision (b):** The proposed project's VMT was evaluated in accordance with the City's adopted VMT policy. For the project's VMT impact to be less than significant, the VMT per employee would need to be reduced by at least 19 percent below current levels. However, according to the 2021 California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity (CAPCOA Handbook), a reduction in the VMT of 15 percent is generally considered the maximum feasible mitigation for suburban environments such as that of the proposed project. If this level of trip reduction could be achieved, that would mitigate most of the project's VMT impact, although not to a level that would be less than significant (19 percent); however, given the lack of transit services within an acceptable walking distance of the proposed project, achieving this level of mitigation is considered infeasible. Even with implementation of a TDM Plan as required by MM TRANS-2, the significance after mitigation is still significant and unavoidable.
- **Cumulative Transportation:** Impact TRANS-2 concluded that the proposed project would have a significant and unavoidable impact on VMT because the proposed project would be required to reduce VMT by a minimum of 19 percent below the citywide average, which would be challenging given the project's location and lack of access to high-quality transit. MM TRANS-2

would reduce project-related VMT but not to a level below significance. As such, the proposed project would also have a cumulatively considerable contribution on VMT.

6.1.2 - Alternatives to the Proposed Project

The two alternatives to the proposed project analyzed in this section are as follows:

- **No Project Alternative:** The project site would remain undeveloped for the foreseeable future and no development would occur.
- **Reduced Density Alternative:** A 164,875-square-foot wine warehouse would be developed on the project site, which represents a 25 percent reduction in square footage.

Two alternatives to the proposed project are analyzed in the following section. These analyses compare the proposed project and each individual project alternative. In several cases, the description of the impact may be the same under each alternative when compared with the CEQA Thresholds of Significance (i.e., both the proposed project and the alternative would result in a less than significant impact). The actual degree of impact may be slightly different between the proposed project and each alternative, and this relative difference is the basis for a conclusion of greater or lesser impacts.

6.2 - Project Objectives

As stated in Chapter 2, Project Description, the objectives of the proposed project are to:

1. Positively contribute to the local economy through new capital investment, the creation of new jobs, and the expansion of the tax base.
2. Develop land to its highest and best use.
3. Continue the buildout of the City of American Canyon in accordance with the General Plan.
4. Meet regional demand for wine warehouse uses by adding to the inventory of this space.
5. Develop nonresidential uses on the project site that are compatible with the City of American Canyon's Water Reclamation Facility and the Napa County Airport.
6. Maximize the efficient use of land by developing an industrial project at the upper end of the allowable Floor Area Ratio range.
7. Complete the buildout of the SDG Commerce development.
8. Protect North Slough by employing stormwater pollution prevention measures during construction and operation.
9. Provide development fees to the American Canyon Fire Protection District to fund the development of a new fire station.

6.3 - Alternative 1—No Project Alternative

CEQA Guidelines Section 15126.6(e) requires that an EIR evaluate a “No Project Alternative,” which is intended to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. In cases where the proposed project constitutes a land development project, the No Project Alternative is the “circumstance under which the project does not proceed.” For many projects, the No Project Alternative represents a “No Development” scenario, in which the project site remains in its existing condition and no development occurs for the foreseeable future. However, CEQA Guidelines Section 15126.6(e)(3)(B) establishes that “If disapproval of the project under consideration would result in predictable actions by others such as the proposal of some other project, this ‘no project’ consequence should be discussed.”

Because the project site has not been previously entitled for development, the No Project Alternative consists of the project site remaining undeveloped for the foreseeable future.

6.3.1 - Impact Analysis

The project site would remain undeveloped for the foreseeable future. Accordingly, this alternative would avoid all of the proposed project’s significant impacts (including significant and unavoidable impacts), as well as the need to implement any mitigation measures.

6.3.2 - Conclusion

The No Project Alternative would avoid the proposed project’s significant and unavoidable impacts and would avoid any potential impacts related to all environmental topical areas. However, this alternative would not advance any of the project objectives, including those related to facilitating the development of land to its highest and best use; positively contributing to the local economy; and meeting regional demand for wine warehouse uses. Finally, it should be noted that the project site is zoned for wine storage and distribution warehouse use, borders two neighboring wine storage and distribution warehouses, and is currently served with infrastructure suitable for this type of development. Thus, should the proposed project not advance, it would be expected that another industrial development proposal would be submitted, resulting in development similar to what is already being proposed by the proposed project.

6.4 - Alternative 2—Reduced Density Alternative

Under the Reduced Density Alternative, a 164,875 square-foot wine warehouse would be developed on the project site, which represents a 54,958-square-foot reduction (25 percent reduction) in the proposed project’s square footage and buildout potential. The reduction in building square footage would allow for approximately 1.26 additional acres of the site to be assigned to another use, such as a larger wetland buffer. Connectivity to the adjacent warehouses to the north and south would still be constructed.

Aside from the square footage, all other aspects of this alternative would be identical to the proposed project. This includes project boundaries, layout, design, and vehicular access points.

Table 6-1 summarizes the Reduced Density Alternative. The purpose of this alternative is to evaluate a smaller project with end uses identical to the proposed project that may avoid or substantially lessen the severity of significant project impacts.

Table 6-1: Reduced Density Alternative Summary

Scenario	Total Acres	End Use	Square Feet
Proposed Project	10.45	Wine Warehouse	219,834
Reduced Density Alternative	10.45	Wine Warehouse	164,875
Difference	—	—	-54,959

6.4.1 - Impact Analysis

Aesthetics, Light, and Glare

The Reduced Density Alternative consists of a 164,875-square-foot wine warehouse and associated infrastructure on the project site. The building developed under this alternative would retain a similar appearance to the proposed project’s structure and similar exterior light fixtures would be installed, although the 54,958-square-foot reduction in warehouse building space would result in a corresponding reduction in the visual appearance of the project site. Therefore, the Reduced Density Alternative would have slightly less impact on aesthetics, light, and glare than the proposed project.

Air Quality

The Reduced Density Alternative would result in less construction activity and 93 fewer daily vehicle trips, which would correspond to an approximately 25 percent reduction in construction and operational criteria pollutant and toxic air contaminant (TAC) emissions. Implementation of MM AIR-1 would still be required to reduce construction impacts related to fugitive dust. Therefore, this alternative would have slightly reduced potential for impacts to air quality compared to the proposed project.

Biological Resources

The reduction in square footage would allow for up to 1.26 acres to be available for other uses, such as a greater wetland buffer. However, MM BIO-1a through MM BIO-1g would still be required to protect species that have potential to occur on-site. Based on the reduced project footprint, the Reduced Density Alternative would have slightly reduced potential for impacts to biological resources compared to the proposed project.

Cultural Resources

Under the Reduced Density Alternative, there would be a slightly reduced area of ground disturbance due to the increased wetland buffer. However, MM CUL-1a through MM CUL 1c and MM CUL-3 would be still required. Therefore, the Reduced Density Alternative would have slightly reduced potential for impacts to cultural resources relative to the proposed project.

Energy

The Reduced Density Alternative would result in a smaller facility and, as such, would use less electricity and fuel during construction and operation. This alternative would result in 93 fewer daily vehicle trips, which would have a corresponding reduction in energy usage. Therefore, this alternative would have a reduced potential for impacts related to energy compared to the proposed project.

Geology, Soils, and Seismicity

The Reduced Density Alternative would result in a smaller facility, although MM GEO-1a, MM GEO-1b, MM HYD-1a, and MM GEO-5 would still be required to be implemented. Therefore, the Reduced Density Alternative would have similar geology, soils, and seismicity resources impacts as the proposed project.

Greenhouse Gas Emissions

The Reduced Density Alternative would result in less construction activity and 93 fewer daily vehicle trips, which would have a corresponding reduction construction and operational GHG emissions. Therefore, this alternative would have less GHG impacts than the proposed project.

Hazards and Hazardous Material

As with the proposed project, no hazardous conditions exist on-site; therefore, impacts would also be less than significant under this alternative. This alternative would result in a 54,958-square-foot reduction in warehouse development, which would reduce the potential for hazardous material releases during construction and operations. Therefore, this alternative would have less potential for impacts related to hazards and hazardous materials than the proposed project.

Hydrology and Water Quality

The Reduced Density Alternative would result in a smaller facility, although MM HYD-1 would still be required to be implemented. This alternative would create a smaller extent of impervious surfaces, which would result in a slightly reduced potential for impacts related to hydrology and water quality relative to the proposed project.

Land Use

This alternative would develop a similar use as the proposed project; therefore, it would yield similar conclusions related to consistency with the City of American Canyon General Plan, American Canyon Zoning Ordinance, and the Napa County Airport Land Use Compatibility Plan. Therefore, the Reduced Density Alternative would have land use impacts similar to the proposed project.

Noise

The Reduced Density Alternative would result in less construction activity and 93 fewer daily vehicle trips, which would have a corresponding reduction in the severity of construction and operational noise impacts. The reduction in development potential and vehicle trips would slightly reduce the

severity of noise impacts. Therefore, this alternative would have a reduced potential for impacts related to noise than the proposed project.

Public Services

End uses would be similar to the proposed project. Although the proposed project’s public services impacts were found to be less than significant and did not require mitigation, this alternative would result in less demand for fire protection and police protection through the 54,958-square-foot reduction in development potential. Therefore, the Reduced Density Alternative would have less impact on public services than the proposed project.

Transportation

Table 6-2 summarizes the daily and peak-hour trip generation associated with the Reduced Density Alternative. As shown in the table, this alternative would yield a reduction of 93 daily vehicle trips, 9 AM peak-hour vehicle trips, and 7 PM peak-hour vehicle trips.

Table 6-2: Reduced Density Alternative Trip Generation Comparison

Scenario	Daily	AM Peak-hour	PM Peak-hour
Proposed Project	372	35	27
Reduced Density Alternative ¹	279	26	20
Difference	-93	-9	-7

Source: W-Trans. 2023.
¹ Reduced Density Alternative Trip Generation was calculated by FCS by taking 75 percent of Trip Generation numbers calculated by W-Trans.

Despite reducing the number of trips to the project site, this alternative would generate the same VMT per employee of 34.1 miles. While transportation demand management (TDM) measures (MM TRANS-2) could provide approximately a 4 percent reduction in VMT, a 19 percent reduction would be required to bring impacts to a less than significant level. As such, while impacts would be reduced under this alternative, they would remain significant and unavoidable.

Utilities and Service Systems

End uses would be similar to the proposed project. Although the proposed project’s utilities and service system impacts were found to be less than significant and did not require mitigation, this alternative would result in an approximately 25 percent reduction in demand for water and energy and an approximately 25 percent reduction in generation of wastewater and solid waste through the 54,958-square-foot reduction in development potential. Therefore, the Reduced Density Alternative would have less impact on utilities and service systems than the proposed project.

6.4.2 - Conclusion

The Reduced Density Alternative would lessen the severity of, but would not avoid, the significant and unavoidable transportation impacts associated with the proposed project. Additionally, the

Reduced Density Alternative would lessen the severity of several of the significant impacts that can be reduced to a level of less than significant with mitigation (e.g., air quality, biological resources, cultural resources, geology and soils, and hydrology and water quality).

The Reduced Density Alternative would advance several of the project objectives, although several of the objectives would be advanced to a lesser degree than the proposed project. This alternative would not meet the objective to develop the land to its highest and best use and would not maximize the efficient use of land. Furthermore, the reduction in square footage would result in fewer positive economic benefits and, thus, would advance economic benefits to a lesser degree than the proposed project. This includes objectives related to facilitating the development of land planned for business park/industrial uses to its highest and best use; positively contributing to the local economy; providing the City of American Canyon with a high-quality, employment-generating industrial development; and serving local and regional demand for wine warehouse uses.

6.5 - Environmentally Superior Alternative

CEQA Guidelines Section 15126(e)(2) requires identification of an environmentally superior alternative. If the No Project Alternative is environmentally superior, CEQA requires selection of the “environmentally superior alternative other than the No Project Alternative” from among the project and the alternatives evaluated.

The qualitative environmental effects of each alternative in relation to the proposed project are summarized in Table 6-3.

Table 6-3: Summary of Alternatives

Environmental Topic Area	Proposed Project	No Project Alternative	Reduced Density Alternative
Aesthetics, Light, and Glare	Less than significant impact	Less impact	Less impact
Air Quality	Less than significant impact with mitigation incorporated	Less impact	Less impact
Biological Resources	Less than significant impact with mitigation incorporated	Less impact	Less impact
Cultural Resources and Tribal Cultural Resources	Less than significant impact with mitigation incorporated	Less impact	Less impact
Energy	Less than significant impact	Less impact	Less impact
Geology and Soils	Less than significant impact with mitigation incorporated	Less impact	Similar impact

Environmental Topic Area	Proposed Project	No Project Alternative	Reduced Density Alternative
Greenhouse Gas Emissions	Less than significant impact	Less impact	Less impact
Hazards and Hazardous Materials	Less than significant impact	Less impact	Less impact
Hydrology and Water Quality	Less than significant impact with mitigation incorporated	Less impact	Less impact
Land Use	Less than significant impact	Less impact	Similar impact
Noise	Less than significant impact	Less impact	Less impact
Public Services	Less than significant impact	Less impact	Less impact
Transportation	Significant and unavoidable impact	Less impact	Less impact
Utilities and Service Systems	Less than significant impact	Less impact	Less impact

The No Project Alternative reduces impacts on all categories and, thus, would be the environmentally superior alternative. If the No Project Alternative is the environmentally superior alternative, the Draft EIR must also identify an environmentally superior alternative from among the other alternatives.

The Reduced Density Alternative was the only other alternative considered and it reduces impacts on all categories and, thus, would be the environmentally superior alternative. However, as previously noted, the Reduced Density Alternative would not advance the project objectives to the same degree of the proposed project and would not eliminate the significant and unavoidable impacts of the proposed project.

6.6 - Alternatives Rejected From Further Consideration

The following alternatives were initially considered but were rejected from further consideration for the reasons described below.

6.6.1 - Greater Reduced Density

The Greater Reduced Density Alternative would reduce the proposed project’s square footage by 50 percent, resulting in the development of a 109,917-square-foot warehouse. The reduction in square footage would allow for an additional 2.52 additional acres of the site to be assigned to another use, such as a larger wetland buffer.

Aside from the square footage, all other aspects of this alternative would be identical to the proposed project. This includes project boundaries, layout, design, and vehicular access points.

This alternative was considered but ultimately rejected because it would not meet project objectives to develop the land to its highest and best use and to maximize the efficient use of land. Furthermore, it would meet all other objectives to a lesser extent than the Reduced Density Alternative and it would still would not avoid significant transportation impacts.

Therefore, this alternative was not considered feasible and, thus, it was rejected from further consideration.

6.6.2 - Alternative Location

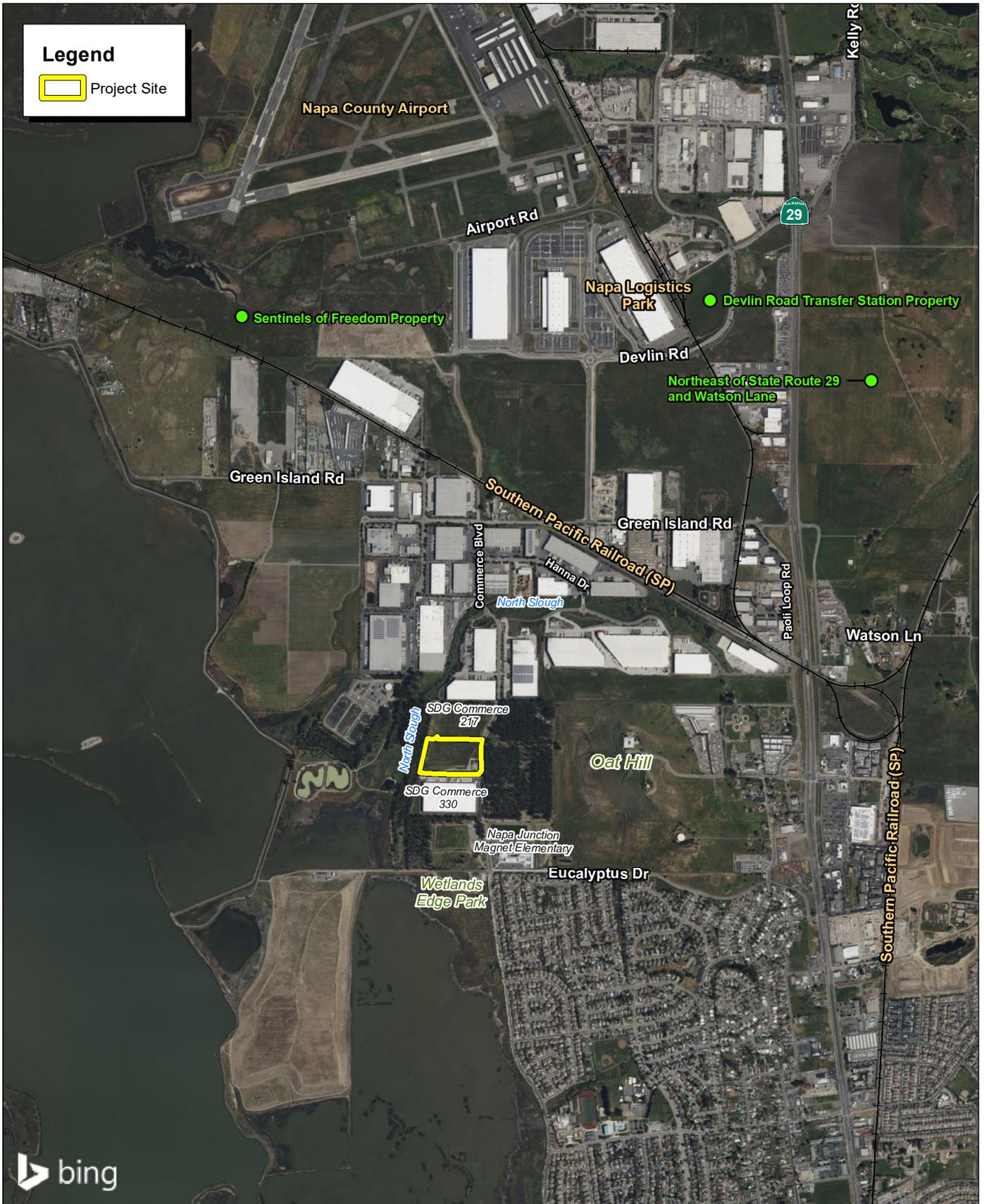
CEQA Guidelines Section 15126.6(f)(2) sets forth considerations to be used in evaluating an alternative location. The section states that the “key question” is whether any of the significant effects of the proposed project would be avoided or substantially lessened by relocating the proposed project. The CEQA Guidelines identify the following factors that may be taken into account when addressing the feasibility of an alternative location:

1. Site suitability
2. Economic viability
3. Availability of infrastructure
4. General Plan consistency
5. Other plans or regulatory limitations
6. Jurisdictional boundaries
7. Whether the project applicant can reasonably acquire, control, or otherwise have access to the alternative site

Here, “General Plan consistency” is an important factor. CEQA case law is clear that EIRs for proposed private projects consistent with governing General Plan designations generally need not address alternative sites, given that such existing General Plan designations embody policy decisions already made by governing city councils and boards of supervisors. “[T]he keystone of regional planning is consistency—between the general plan, its internal elements, subordinate ordinances, and all derivative land use decisions” (*Citizens of Goleta Valley v. Board of Supervisors* [1990] 52 Cal.3d 553, 572). “Case-by-case reconsideration of regional land use policies, in the context of a project-specific EIR, is the very antithesis of that goal.” (*Id.* at p. 573.) “[A]n EIR is not ordinarily an occasion for the reconsideration or overhaul of fundamental land use policy” (*Ibid.*).

Table 6-4 evaluates the feasibility of three alternative locations located within 1.5 miles of the project site in either the City of American Canyon or unincorporated Napa County (Exhibit 6-1). As indicated in Table 6-4, none of the sites would meet CEQA Guidelines criteria for a feasible alternative location. Furthermore, utilization of a different project site would not meet the project objective of building out the SDG Commerce complex. Therefore, this alternative was not considered feasible and, thus, it was rejected from further consideration.

THIS PAGE INTENTIONALLY LEFT BLANK



Legend

 Project Site

Source: Bing Aerial Imagery.



Exhibit 6-1 Alternative Locations

THIS PAGE INTENTIONALLY LEFT BLANK

Table 6-4: Alternative Location Analysis

Name	Description	Analysis
Sentinels of Freedom Property	Approximately 25 acres located west of Napa Logistics Park and south of Napa County Airport in unincorporated Napa County and within the City of American Canyon Sphere of Influence. This site contains undeveloped land, is bisected by No Name Creek, and parts are within a 100-year flood hazard area. This site is designated “Industrial” by the Napa County General Plan and zoned “Business/Industrial” by the Napa County Airport Industrial Area Specific Plan.	Not Feasible: This site is controlled by the Sentinels of Freedom and is not owned, controlled, or otherwise accessible to the project applicant. The Sentinels of Freedom have conceptually proposed developing two warehouses on the property with vehicular access coming from Napa County Airport. Furthermore, this property site is not located closer to any public transit. As such, locating the proposed project at this site would not reduce impacts to a less than significant level.
Devlin Road Transfer Station Property	Approximately 12 acres located east of Napa Logistics Park and south of the Devlin Road Transfer Station. This site contains undeveloped land. This site is designated “Industrial” by the Napa County General Plan and zoned “Business/Industrial” by the Napa County Airport Industrial Area Specific Plan.	Not Feasible: This site is not owned, controlled, or otherwise accessible to the project applicant. The Napa Recycling and Transfer Facility has conceptually proposed developing a construction and demolition debris sorting facility on the property. Furthermore, this property is not located closer to any public transit. As such, locating the proposed project at this site would not reduce impacts to a less than significant level.
Northeast of State Route 29 and Watson Lane	The project site is located in unincorporated Napa County and is designated for agricultural uses in the Napa County General Plan.	Not Feasible: This site is not owned, controlled, or otherwise accessible to the project applicant. It is designated for agricultural uses and the proposed project would not be permitted at the site.

Source: FirstCarbon Solutions (FCS). 2024.

THIS PAGE INTENTIONALLY LEFT BLANK

CHAPTER 7: PERSONS AND ORGANIZATIONS CONSULTED/LIST OF PREPARERS

7.1 - Persons and Organizations Consulted

7.1.1 - Lead Agency - City of American Canyon

Community Development Department

Community Development Director Brent Cooper, AICP
Senior Planner William He, AICP
Administrative Technician..... Nicolle Hall
City Attorney..... Bill Ross

Public Works Department

Public Works Director Erica Ahmann Smithies
Senior Civil Engineer Edison C. Bisnar, Jr. PE

Police Department

Police Chief Rick Greenberg

Fire Protection District

Fire Chief..... Geoff Belyea

7.1.2 - Public Agencies

State Agencies

California Department of Fish and Wildlife

Regional Manager..... Erin Chappell

California Department of Justice

Supervising Deputy Attorney General Christie Vosburg

California Department of Transportation

Branch Chief, Local Development Review Yunsheng Luo

Native American Heritage Commission

Cultural Resources Analyst Cameron Vela

7.1.3 - Private Parties and Organizations

Public Comment Letters

City of Napa Resident Yvonne Baginski
City of American Canyon Resident Jeannette Goyetche

City of American Canyon Resident..... Jerry Hoffman

7.2 - List of Preparers

7.2.1 - City of American Canyon

Community Development Department

Community Development Director..... Brent Cooper, AICP
Senior Planner..... William He, AICP

7.2.2 - Lead Consultant

FirstCarbon Solutions

Project Director..... Mary Bean
Project Manager..... Janna Waligorski
Assistant Project Manager..... Madelyn Dolan
Legal Counsel..... Megan Starr, JD
Biological Resources Manager..... Robert Carroll
Biologist..... Kelly Evans
Biological Resource Analyst..... Hannah Carney
Director of Cultural Resources..... Dana DePietro, PhD, RPA
Cultural Resources Analyst..... Ti Ngo
Director of Noise and Air Quality..... Phil Ault, LEED® AP
Air Quality Analyst..... Marianne Aydil
Air Quality Analyst..... Tsui Lee
Senior Managing Editor..... Susie Harris
Publications Coordinator..... Alec Harris
Document Specialist..... Melissa Ramirez
GIS/Graphics..... Karlee McCracken

7.2.3 - Technical Subconsultants

Cameron Cole

Principal Scientist..... Michael Stephenson
Geologist II..... Amy Robson
Environmental Scientist II..... Angela Mattmiller

W-Trans

President..... Mark Spencer
Principal..... Zack Matley
Senior Planner..... Barry Bergman

Pinecrest Research Corporation

Director..... Chris DiVittorio

Krazan & Associates

Managing Engineer David R. Jarosz, II

RSA⁺

Director Paul S. Warnock

THIS PAGE INTENTIONALLY LEFT BLANK