Brady Vineyard Subdivision Project

SCH# 2019012050

Draft Environmental Impact Report

Volume I of II (Chapters 1-20 & Appendices A & B)

Prepared for

Placer County

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Brady Vineyard Subdivision Project
Draft Environmental Impact Report

SCH# 2019012050

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ACRONYMS AND ABBREVIATIONS

A

AAQS	ambient air quality standards
AB	Assembly Bill
AB 2588	The Air Toxics Hot Spots Information and Assessment Act of 1987
ADOE	Archaeological Determinations of Eligibility
ADT	average daily trips
ADT	average daily traffic
ADUs	Accessory Dwelling Units
ADWF	average dry weather capacity
afy	acre-feet per year
-AG	Combining Agriculture
AHERA	Asbestos Hazard Emergency Response Act
AHM	acutely hazardous material
AJC	Auburn Justice Center
APCD	Air Pollution Control District
APCO	Air Pollution Control Officer
APNs	Assessor's Parcel Numbers
AST	aboveground storage tank
ATCM	Airborne Toxic Control Measure

B

-B	Building Site
BAAQMD	Bay Area Air Quality Management District
Basin Plan	Sacramento and San Joaquin River Basin Plan
BFE	Base Flood Elevation
Bike Lane	Class II Bikeway
Bike Path	Class I Bikeway
Bike Route	Class III Bikeway
BMPs	Best Management Practices
BSC	Building Standards Commission

C

C_2F_6	hexafluoroethane
CAA	California Apartment Association
CAAQS	California ambient air quality standards
cal	calibrated years
CAL FIRE	California Department of Forestry and Fire Protection
CAL-AM	California American Water Company
CalARP	California Accidental Release Program
CalEEMod	California Emissions Estimator Model

Cal-EPA	California EPA
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CARB Handbook	Air Quality and Land Use Handbook: A Community Health Perspective
CASQA	California Stormwater Quality Association
CAT	Climate Act Team
CBC	California Building Code
CBIA case	California Building Industry Association v. Bay Area Air Quality Management District case
CBSC	The California Building Standards Code
CC&Rs	Conditions, Covenants and Restrictions
CCAA	California Clean Air Act
CCC	Civilian Conservation Corps
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CDMG	California Department of Mines and Geology
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CF_4	tetrafluoromethane
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geologic Survey
CH_4	methane
CHHSL	California Human Health Screening Level
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CIP	Capital Improvement Program
CIWMB	California Integrated Waste Management Board
CLOMR	Conditional Letter of Map Revision
CLOMR-F	Conditional Letter of Map Revision based on Fill
CMP	Congestion Management Plan
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
COPC	Contaminants of Potential Concern
CORRACTS	Corrective Actions
CPRR	Central Pacific Railroad
CPUC	California Public Utilities Commission
CRA	Closest Resource Agency
CRHR	California Register of Historic Resources
CRS	Creekview Ranch School
CSA	County Service Area
CTMP	Construction Traffic Management Plan
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency

CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Clean Water Act
CWA	California Waterfowl Association
CY	cubic yards

D

dB	decibel
DBH	diameter at breast height
DCJESD	Dry Creek Joint Elementary School District
DCWCRMP	Dry Creek Watershed Coordinated Resource Management Plan
DCWPCP	Dry Creek-West Placer Community Plan
DCWWTP	Dry Creek Wastewater Treatment Plant
d/D	depth of flow to diameter of pipe ratio
DDW	Division of Drinking Water
DMAs	Drainage Management Areas
DOC	California Department of Conservation
DOT	Department of Transportation
DPM	diesel particulate matter
DPR	Department of Parks and Recreation
-DR	Development Reserve
DRC	Development Review Committee
DTSC	Department of Toxic Substances Control
du/ac	dwelling units per acre
DWR	California Department of Water Resources

E

EDR	Environmental Data Resources
EDU	Equivalent Dwelling Unit
EIR	Environmental Impact Report
EIS/R	Environmental Impact Statement/Environmental Impact Report
EOP	Placer County and Placer Operational Area Emergency Operations Plan
EPCRA	Emergency Planning and Community Right-to-Know Act
ESA	Environmental Site Assessment
ESD	Engineering and Surveying Division
EVA	Emergency Vehicle Access

F

F	Farm
Farmland	Farmland of Statewide Importance
FCAA	Federal Clean Air Act
F-DR	Farm-Development Reserve
FEMA	Federal Emergency Management Agency's
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
FHWA	Federal Highway Administration
FHWA RD-77-108	Highway Traffic Noise Prediction Model

FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FRAP	Fire and Resource Assessment Program
ft	feet

G

gcpd	gallons per capita per day
GHG	greenhouse gas
GIS	Geographic Information System
GLO	Government Land Office
gpd	gallons per day
GPS	global positioning system
GWP	Global Warming Potential

H

H_2S	hydrogen sulfide
HCD	California Department of Housing and Community Development
HCP	Habitat Conservation Plan
HEC	Hydrologic Engineering Center
HEC-HMS	Hydrologic Engineering Center's Hydrologic Modeling System
HEC-RAS	Hydrologic Engineering Center's River Analysis System
HPDF	Historic Property Data File
HRA	health risk assessment
HSWA	Hazardous and Solid Waste Amendments
HUD	U.S. Department of Housing and Urban Development
HVAC	heating, ventilation, and air conditioning
HWCL	Hazardous Waste Control Law

I

I-80	Interstate 80
iADAM	Aerometric Data Analysis and Management
IBC	International Building Code
ICC	International Code Council
in/sec PPV	inches per second peak particle velocity
IPac	USFWS Information for Planning and Conservation
ISA	International Society of Arboriculture
ISO	Insurance Service Organization

L

LAFCo	Local Agency Formation Commission
lbs/day	pounds per day
LCFS	Low Carbon Fuel Standard
L_{dn}	day/night average noise level
LDR	Low Density Residential
L_{eq}	equivalent sound level

License	License Agreement
LID	Low Impact Development
LiDAR	light detection and ranging
LIM	Land Inventory and Monitoring
Local Farmland	Farmland of Local Importance
LOMR	Letter of Map Revision
LOMR-F	Letter of Map Revision based on Fill
LOS	level of service
LRA	Local Responsibility Area
LSAA	Lake and Streambed Alteration Agreement
LUST	leaking underground storage tank

M

MAP	Asbestos Model Accreditation Plan
Master Plan	Placer County Parks and Trails Master Plan
MBTA	Migratory Bird Treaty Act
MDR	Medium Density Residential
MEP	Maximum Extent Practicable
mgd	million gallons per day
MLD	Most Likely Descendent
MMRP	Mitigation Monitoring and Reporting Plan
mpg	miles per gallon
mph	miles per hour
MPOs	metropolitan planning organizations
MOO	Multi-Objective Opportunities
MOU	Memorandum of Understanding
MRF	Material Recovery Facility
MS4	Municipal Separate Storm Sewer System
$MTCO_2e$	metric tons of CO_2 equivalents
MTIP	Metropolitan Transportation Improvement Program
MTP/SCS	2016 Metropolitan Transportation Plan/Sustainable Communities Strategy

N

N_2O	nitrous oxide
NAAQS	federal ambient air quality standards
NAHC	Native American Heritage Commission
NAPOTS	Not a Part of this Subdivision
NCCP	Natural Community Conservation Plan
NCIC	North Central Information Center
NEHRP	National Earthquake Hazards Reduction Program
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NIH	National Institute of Health
NIOSH	National Institute for Occupational Safety and Health
NO_2	nitrogen dioxide
NOA	naturally occurring asbestos
NOI	Notice of Intent

NOP	Notice of Preparation
NOT	Notice of Termination
NO_x	oxides of nitrogen
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places

O

O	Open Space
OCPs	Organochlorine Pesticides
OES	Office of Emergency Services
OHWM	Ordinary High Water Mark
OPR	Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Ozone Attainment Plan	Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan

P

PCAPCD	Placer County Air Pollution Control District
PCBs	polychlorinated biphenyls
PCCP	Placer County Conservation Program
PC/Cr	Placer County/City of Roseville
PCEHD	Placer County Environmental Health Department
PCF	Placer County Fire Department
PCFCWCD	Placer County Flood Control and Water Conservation District
PCSO	Placer County Sheriff's Office
PCTPA	Placer County Transportation Planning Agency
PCWA	Placer County Water Agency
PERP	Portable Equipment Registration Program
PFE	Pacific Fruit Express Company
PG&E	Pacific Gas & Electric
PHHWCF	Permanent Household Hazardous Waste Collection Facility
Placer Legacy Program	Placer Legacy Open Space and Agricultural Conservation Program
PM	particulate matter
PM_{10}	Respirable Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
$PM_{2.5-10}$	Inhalable coarse particles
POTW	Publicly Owned Treatment Works
PRC	Public Resources Code
PTO	Permit to Operate
PVC	polyvinyl chloride
PVSP	Placer Vineyards Specific Plan
PWS	Public Water System
PWWF	peak wet-weather flow

Q

Qm	Modesto Formation
Qr	Riverbank Formation
QSP	Qualified SWPPP Practitioner
Qts	Turlock Lake Formation

R

RACM	reasonably available control measures
RACT	reasonably available control technology
RCRA	Resource Conservation and Recovery Act
RDI/I	Rainfall dependent inflow and infiltration
RECs	Recognized Environmental Conditions
RFE	RFE Engineering, Inc.
RHNA	Regional Housing Needs Allocation
RJUHSD	Roseville Joint Union High School District
RLDR	Rural Low Density Residential
RoadMod	Roadway Construction Emissions Model
ROG	reactive organic gases
RPS	Renewable Portfolio Standard
RS	Residential Single Family
RS-AG-B-20	Residential Single Family, combining Agriculture, minimum Building Site of 20,000 square feet
RS-B-3	Residential Single Family, minimum Building Site of 3,000 square feet
RS-B-4	Residential Single Family, minimum Building Site of 4,000 square feet
RS/DS	Small Lot Residential/Design Standards
RWQCB	Regional Water Quality Control Board

S

SACOG	Sacramento Area Council of Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCH	State Clearinghouse
SCR 93	County's Highway Deficiencies Report
SCS	Sustainable Communities Strategy
SDMs	Site Design Measures
SDWA	Safe Drinking Water Act
sec/veh	seconds per vehicle
Separated Bikeway	Class IV Bikeway
Scoping Plan	*Climate Change Scoping Plan,* by CARB
sf	square feet
SF_6	sulfur hexafluoride
SGMA	Sustainable Groundwater Management Act
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SLIC	Spills, Leaks, Investigations, and Cleanups

SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARTS	Stormwater Multiple Application & Reports Tracking System
SO_2	sulfur dioxide
SPRR	Southern Pacific Railroad
SPRTA	South Placer Regional Transportation Authority
SPWA	South Placer Wastewater Authority
SR	State Route
SRA	State Responsibility Area
SSC	Species of Special Concern
Staff Report	Staff Report Regarding Mitigation for Impacts to Swainson's Hawk (*Buteo swainsoni*) in the Central Valley of California
Statewide Farmland	Farmland of Statewide Importance
SVAB	Sacramento Valley Air Basin
SWANCC	Solid Waste Agency of Northern Cook County
SWMM	Stormwater Management Manual
SWPPP	stormwater pollution prevention plan
SWQP	Storm Water Quality Plan
SWRCB	State Water Resources Control Board

T

TACs	Toxic Air Contaminants
TCM	transportation control measures
TMDL	Total Maximum Daily Load
TRO	Trip Reduction Ordinance
TSCA	Toxic Substances Control Act
TWLT	two-way left-turn

U

UAIC	United Auburn Indian Community
UBC	Uniform Building Code
UCMP	University of California Museum of Paleontology
UFP	ultrafine particles
Urban Land	Urban and Built-up Land
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	United States Fish and Wildlife Service
USTs	underground storage tanks
UWMP	California American Water Company's Northern Division Sacramento District 2015 Urban Water Management Plan

V

VCM	vinyl chloride
veh/sec	vehicles per second
VES	Vapor Encroachment Screen
VHFHSZ	Very High Fire Hazard Severity Zone

VIILF	Voluntary Interim In Lieu Fee Program
Vision Plan	The Dry Creek Greenway Regional Vision
VMT	vehicle miles travelled
vpl	vehicle trips per lane

W

WBWG	Western Bat Working Group
WELO	Water Efficient Landscape Ordinance
WPA	Works Progress Administration
WPGSA	West Placer Groundwater Sustainability Agency
WPWMA	Western Placer Waste Management Authority
WRSL	Western Regional Sanitary Landfill
WSAs	Water Supply Assessments
WSE	water surface elevation
WWTP	Wastewater Treatment Plant

Remaining

2013 Ozone Attainment Plan	2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan
2017 Scoping Plan	2017 Climate Change Scoping Plan Update

1. Introduction

1. INTRODUCTION

1.1 TYPE AND PURPOSE OF THE EIR

The Brady Vineyard Subdivision Project Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, Pub. Res. Code §§ 21000-21178, as amended, and the Guidelines for Implementation of the California Environmental Quality Act, Cal. Code Regs. Title 14, §§ 15000-15387 (CEQA Guidelines). Placer County is the lead agency for the environmental review of the Brady Vineyard Subdivision Project (proposed project) evaluated herein and has the principal responsibility for approving the project. The applicant for the proposed project is identified as Cook Development Consulting Services, LLC. As required by Section 15121 of the CEQA Guidelines, this EIR will (a) inform public agency decision-makers, and the public generally, of the environmental consequences of approving the proposed project, (b) identify possible ways to minimize the significant adverse environmental effects, and (c) describe reasonable and feasible project alternatives which reduce environmental effects. The public agency shall consider the information in the EIR along with other information that may be presented to the agency.

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

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

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a *project-level EIR* pursuant to CEQA Guidelines Section 15161, which is an analysis that examines the environmental impacts of a specific development project. A *project-level EIR* focuses primarily on the changes in the environment that would result from the development of the project, and examines all phases of the project including planning, construction, and operation.

1.2 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

“Responsible agency” means a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purpose of CEQA, the term responsible agency includes all California public agencies other than the lead

agency that have discretionary approval power over the project or an aspect of the project. The Central Valley Regional Water Quality Control Board (RWQCB) and Placer County Air Pollution Control District are identified as potential responsible agencies.

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

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

1.3 PROJECT SUMMARY

The project site consists of approximately 35 acres located at the northwest corner of Vineyard Road and Brady Lane in Placer County, California (see Figures 3-1 and 3-2 in Chapter 3, Project Description, of this EIR). The site is located adjacent to the City of Roseville limits, within the Dry Creek-West Placer Community Plan (DCWPCP) area and identified by Assessor's Parcel Numbers (APNs) 473-020-002 and -013. The southwestern-most three acres of the project site are "not a part of this subdivision" (NAPOTS) and would become a separate parcel created by a boundary line adjustment.

Currently, the project site consists primarily of ruderal grasses, and is absent of structures or other indications of prior development. The western portion of the site contains an unnamed tributary that flows southward to Dry Creek. One seasonal swale and one drainage ditch within the site drain to the tributary. Existing oak trees line both sides of the tributary, and scattered almond trees are located along the drainage ditch. A two-acre rectangular-shaped parcel fronting Vineyard Road extends approximately 700 feet north (roughly halfway) into the project site and is currently developed with a house and associated outbuildings under separate ownership. The existing on-site tributary flows through a culvert crossing under Vineyard Road near the south/center of the two-acre parcel.

The project site has current DCWPCP land use designations as follows: Low Density Residential (LDR 1-2 du/ac) on the eastern 24.1 acres; Greenbelt and Open Space (O) along the central-western 6.1 acres; and Rural Low Density Residential (RLDR 1-2.3 ac min) on the western 1.8 acres. The current zoning designations for the site include: Residential Single-Family, combining Agriculture, minimum Building Site of 20,000 square feet (RS-AG-B-20) (eastern 24.1 acres); Open Space (O) (central-western 6.1 acres); and 1.8 acres of Farm-Development Reserve (F-DR) (western portion of site). The three-acre NAPOTS area in the southwestern portion of the site is currently designated RLDR 1-2.3 ac min per the DCWPCP, and zoned F-DR.

The proposed project would include subdivision of the project site to develop a total of 119 single-family lots and various associated improvements, including, but not limited to, parks, trails, landscaping, and utility installation. Circulation system improvements would include a new gated

entry at Brady Lane, which would connect to an internal system of private roadways. In addition, the project would include widening of Brady Lane and Vineyard Road along the project frontages. The project would require County approval of the following: General Plan/Community Plan Amendment; Rezone; Vesting Tentative Subdivision Map; Conditional Use Permit (CUP); Variance; Minor Boundary Line Adjustment; Design Exception Request; Annexation into the Dry Creek Fire Zone of Benefit; and annexation into Placer County Service Area 28, Zone 173. In addition, the project would require the following approvals/permits from other responsible agencies: Section 404 Nationwide Permit (or Letter of Permission) from the USACE; a Section 401 Water Quality Certification from the Central Valley RWQCB; and potentially a CDFW 1600 Lake and Streambed Alteration Agreement (LSAA).

It should be noted that in addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order to meet the County's affordable housing requirements. Where applicable, discussion of such Accessory Dwelling Units is provided in the technical chapters of this EIR. However, given that the inclusion of the total number of residential lots would remain unchanged, as would the overall disturbance area associated with the project, the County has determined that for some of the issue areas evaluated in this EIR, discussion of the Accessory Dwelling Units is not warranted.

1.4 EIR PROCESS

The EIR process begins with the decision by the lead agency to prepare an EIR, either during a preliminary review of a project or at the conclusion of an Initial Study. Once the decision is made to prepare an EIR, the lead agency sends a Notice of Preparation (NOP) to appropriate government agencies and, when required, to the State Clearinghouse (SCH) in the Office of Planning and Research (OPR), which will ensure that responsible and trustee State agencies reply within the required time. The SCH assigns an identification number to the project, which then becomes the identification number for all subsequent environmental documents on the project. Commenting agencies have 30 days to respond to the NOP and provide information regarding alternatives and mitigation measures they wish to have explored in the Draft EIR and to provide notification regarding whether the agency will be a responsible agency or a trustee agency for the project.

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

A Final EIR will be prepared, containing public comments on the Draft EIR and written responses to those comments, as well as a list of changes to the Draft EIR text necessitated by public comments, as warranted. Before approving a project, the lead agency shall certify that the EIR (consisting of the Draft EIR and Final EIR) has been completed in compliance with CEQA, and

that the EIR has been presented to the decision-making body of the lead agency, which has reviewed and considered the EIR. The lead agency shall also certify that the EIR reflects the lead agency's independent judgment and analysis.

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

1.5 SCOPE OF THE EIR

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

- Aesthetics;
- Air Quality and Greenhouse Gas (GHG) Emissions;
- Biological Resources;
- Cultural Resources (including Tribal Cultural Resources);
- Geology and Soils (including Mineral Resources);
- Hazards and Hazardous Materials (including Wildfire);
- Hydrology and Water Quality;
- Land Use and Planning/Population and Housing/Agricultural Resources;
- Noise;
- Public Services and Recreation;
- Transportation and Circulation;
- Utilities and Service Systems; and
- Statutorily Required Sections (including Energy).

In addition to the foregoing resource areas, Chapter 16, Effects Not Found to be Significant, has been prepared to present information regarding resource areas that the project has been found not to have the potential to affect.

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4 through 15 of the EIR. Each chapter is divided into the following four sections: Introduction, Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures. Impacts that are determined to be significant in Chapters 4 through 15, and for which feasible mitigation measures are not available to reduce those impacts to a less-than-significant level, are identified as *significant and unavoidable*. Chapter 17 of the EIR presents a discussion of growth-inducing impacts, summary of cumulative impacts, energy impacts, and significant irreversible environmental changes associated with the project. Alternatives to the proposed project are discussed in Chapter 18 of the EIR.

1.6 DEFINITION OF BASELINE

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a project-level EIR pursuant to CEQA Guidelines Section 15161, which is an analysis that examines the environmental impacts of a specific

development project. A project-level EIR focuses primarily on the changes in the environment that would result from the development of the project, and examines all phases of the project including planning, construction, and operation.

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

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

Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for the proposed project was published on January 30, 2019. Therefore, conditions existing at that time are considered to be the baseline against which changes that would result from the proposed project are evaluated. Impacts could include both direct and indirect physical changes to the baseline condition. The baseline condition for the proposed project site is described in Chapter 3, Project Description, of this EIR. The baseline conditions pertaining to each resource area are described in the "Existing Environmental Setting" section of the respective chapters of this EIR.

1.7 SIGNIFICANCE CRITERIA

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

As presented in Section 1.12 below, the level of significance of an impact prior to mitigation is included at the end of each impact discussion throughout the technical chapters of this EIR. The following levels of significance prior to mitigation are used in this EIR:

1) Less-than-Significant: Impacts that are adverse, but that do not exceed the specified thresholds of significance;

2) Significant: Impacts that exceed the defined standards of significance and require mitigation;

3) Less than Cumulatively Considerable: Where cumulative impacts have been identified, but the project's incremental contribution towards the cumulative impacts would not be considered significant; and

4) Cumulatively Considerable: Where cumulative impacts have been identified and the project's incremental contribution towards the cumulative impacts would be considered significant.

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

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

Each environmental area of analysis uses a distinct set of significance criteria. Where measurable and explicit quantification of significance is identified, such as violation of an ambient noise level standard, this measurement is used to assess the level of significance of a particular impact in this EIR. If criteria for determining significance relative to a specific environmental resource impact are not identified in the CEQA Guidelines, criteria were developed for this Draft EIR.

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

1.8 NOTICE OF PREPARATION AND SCOPING

In accordance with CEQA Guidelines Section 15082, an NOP was circulated to the public, local, State and federal agencies, and other known interested parties for a 30-day public and agency review period on January 30, 2019 (included as Appendix A). The purpose of the NOP was to provide notification that an EIR for the proposed project was being prepared and to solicit public input on the scope and content of the document.

An NOP for the proposed project was prepared and circulated to agencies and the public from January 30, 2019 to February 28, 2019. In addition, pursuant to CEQA Guidelines Section 15082, Placer County held an NOP scoping meeting during the 30-day review period, on February 21, 2019, for the purpose of receiving comments on the scope of the environmental analysis to be prepared for the proposed project. Agencies and members of the public were invited to attend and provide input on the scope of the EIR. A total of 30 comment letters were received during the NOP public review period and two comment letters were received after the NOP public review period. The comment letters are provided as Appendix B to this EIR. All comments were taken into consideration during the preparation of this Draft EIR. A summary of the NOP comments received is provided in Section 1.9 below.

1.9 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

During the NOP public review period from January 30, 2019 to February 28, 2019, Placer County received 30 comment letters. An additional two (2) letters were received after the close of the public review period, for a total of 32 comment letters. In addition, verbal comments were received at the public scoping meeting held on February 21, 2019. A copy of each letter, as well as a summary of the verbal scoping meeting comments, is provided in Appendix B of this EIR. The comment letters received during the NOP public review period were authored by the following representatives of public agencies and groups, as well as individual members of the general public:

Public Agencies

- California Department of Transportation (Caltrans) – Kevin Yount;
- California Department of Fish and Wildlife – Jeff Drongesen;
- Central Valley Regional Water Quality Control Board – Jordan Hensley;
- City of Roseville – Terri Shirhall;
- Native American Heritage Commission – Sharaya Souza;
- Pacific Gas and Electric Company – Jose Antonio Lopez, Jr; and
- Placer County Air Pollution Control District – Ann Hobbs.

Groups

- Dry Creek Neighbors.

Individuals

- Laura Ball;
- Shawn Bates;
- George Brown;
- Mark T. Brune;
- Laura Bullard;
- Brandon Crawford;
- Kathy Fields;
- Davis Hanjiev;
- Tiffany Latino (2);
- Guowei Li;
- Sarah Little;
- Vanessa Luna;
- Paul Mocny;
- Mark Mossawir;
- Joe Osella;
- Bob Raetz;
- Tejindar Randhawa;
- Connie Roberts;
- Matt Russell (2);
- John Schaefer;
- Laura Smith; and
- Sean Smith.

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

Aesthetics *(c.f. Chapter 4)*	Concerns related to: • The project's effects on the unique rural feel of the area. • The project's effects on views of open spaces from surrounding residential areas. • Increases in light and glare within surrounding residential areas due to project implementation.
Air Quality and GHG Emissions *(c.f. Chapter 5)*	Concerns related to: • Increased air pollution as a result of increased traffic. • Odors associated with increased vehicle traffic.
Biological Resources *(c.f. Chapter 6)*	Concerns related to: • Loss of wildlife habitat. • Loss of plant habitat.
Cultural Resources *(c.f. Chapter 7)*	Concerns related to: • Cultural, historical, or tribal resources at the project site.
Geology and Soils *(c.f. Chapter 8)*	Concerns related to: • Increased stormwater runoff causing soil erosion.
Hydrology and Water Quality *(c.f. Chapter 10)*	Concerns related to: • Increased water runoff/potential flooding at surrounding properties. • Increased erosion due to stormwater runoff from the proposed project. • Increased pollution in area waterways.
Land Use and Planning / Population and Housing / Agricultural Resources *(c.f. Chapter 11)*	Concerns related to: • Comparatively high density of the proposed development. • Redesignation of agricultural zoning to residential.
Noise *(c.f. Chapter 12)*	Concerns related to: • Increase in noise levels to surrounding residential areas. • Noise effects on wild and domestic animals.
Public Services and Recreation *(c.f. Chapter 13)*	Concerns related to: • Community parks or playground not included in the proposed project. • Increased need for fire protection. • Increased litter. • Lack of public access to proposed trails. • Increased student enrollment at area schools.
Transportation and Circulation *(c.f. Chapter 14)*	Concerns related to: • Traffic increases in the project vicinity. • Lack of bicycle trails providing access to the elementary school. • Cumulative traffic impacts on the local and regional transportation system. • Safety for pedestrians and cyclists on Vineyard Road. • Increased traffic at area schools.
Utilities and Service Systems *(c.f. Chapter 15)*	Concerns related to: • City of Roseville wastewater service to the project. • Adequate conveyance capacity of utility infrastructure to support the increased demands associated with the proposed project.

	• Wastewater Treatment Plant capacity to serve the increase in demand associated with the proposed project.

All of these issues are addressed in this EIR, in the relevant sections identified in the first column.

1.10 PROJECT CHANGES SINCE PUBLICATION OF THE NOP

Since the NOP was published, relatively minor changes to the proposed project have been made, including the following:

- Changes to the requested Rezone to zone a greater portion of the site as O and rezone the remainder of the site to RS-B-4 instead of RS-B-5;
- Change to the site layout to provide a bus pullout along the project frontage at Brady Lane;
- Reorganization of residential lots within the western and central portions of the site; and
- Modification of the project to potentially include up to 12 Accessory Dwelling Units (ADUs) in order to comply with the County's affordable housing requirements.

The above changes have been evaluated throughout this EIR.

1.11 DRAFT EIR AND PUBLIC REVIEW

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and agencies can submit comments to the Lead Agency on the Draft EIR's accuracy and completeness. Release of the Draft EIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The public can review the Draft EIR at the County's website at:

http://www.placer.ca.gov/departments/communitydevelopment/envcoordsvcs/eir

or at following address during normal business hours:

Placer County, Community Development Resource Center
3091 County Center Drive
Auburn, CA 95603

Comments may be submitted both in written form and/or orally at the public hearing on the Draft EIR. Notice of the time and location of the hearing will be published in local newspapers, mailed to property owners and residents surrounding the project, emailed to residents that have requested to be placed on the project's email notification list, posted on the County's website, and posted at and adjacent to the site prior to the hearing.
All comments or questions regarding the Draft EIR should be addressed to:

Placer County, Community Development Resource Agency
Environmental Coordination Services
3091 County Center Drive, Suite 190
Auburn, CA 95603
(530) 745-3132
fax (530) 745-3080
cdraecs@placer.ca.gov

1.11 ORGANIZATION OF THE DRAFT EIR

The EIR is organized into the following sections:

Chapter 1 – Introduction

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

Chapter 2 – Executive Summary

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

Chapter 3 – Project Description

Provides a detailed description of the proposed project, including the project's location, background information, objectives, and technical characteristics.

Chapter 4 – Aesthetics

The Aesthetics chapter of the EIR describes existing aesthetic resources for the project area and the region, and evaluates potential aesthetic impacts of the project. In addition, the DCWPCP goals and policies pertaining to aesthetics are described. According to CEQA, the concept of aesthetic resources refers to scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a State Scenic Highway), the existing visual character or quality of the project area, and light and glare impacts.

Chapter 5 – Air Quality and GHG Emissions

The Air Quality and GHG Emissions chapter of the EIR describes the impacts of construction and operation of the proposed project related to air quality and global climate change. The chapter was prepared using methodologies and assumptions recommended within the CEQA Air Quality Handbook of the Placer County Air Pollution Control District.

Chapter 6 – Biological Resources

The Biological Resources chapter of the EIR evaluates the biological resources known to occur or potentially occur within the proposed project area. The chapter describes potential impacts to those resources and identifies measures to eliminate or substantially reduce those impacts to the maximum extent feasible.

Chapter 7 – Cultural Resources

The Cultural Resources chapter of the EIR evaluates archaeological, historical, and tribal resources known to be located within the proposed project area. The chapter summarizes the existing setting with respect to the aforementioned resources, identifies thresholds of significance and project impacts to such resources, and sets forth mitigation measures that would be necessary to reduce impacts to the maximum extent feasible.

Chapter 8 – Geology and Soils

The Geology and Soils chapter of the EIR describes the geologic and soil characteristics of the project site and evaluates the extent to which implementation of the proposed project could be

affected by seismic hazards such as ground shaking, liquefaction, and expansive soil characteristics. In addition, the chapter evaluates known mineral resources on the project site, evaluates any potential adverse effects of the proposed project on the availability of such resources and presents an analysis related to paleontological resources.

Chapter 9 – Hazards and Hazardous Materials

The Hazards and Hazardous Materials chapter of the EIR describes existing and potential hazards and hazardous materials within the project area, in addition to discussing wildfire hazards. The chapter discusses potential impacts posed by these hazards to the environment, as well as to workers, visitors, and residents within and adjacent to the project area.

Chapter 10 – Hydrology and Water Quality

The Hydrology and Water Quality chapter of the EIR describes existing drainage and stormwater conditions for the project site, as well as current stormwater flows and stormwater infrastructure, and potential for flooding. The chapter evaluates potential impacts of the proposed project with respect to increases in impervious surface area and associated stormwater flows, degradation of water quality, groundwater recharge, and on- and off-site flooding.

Chapter 11 – Land Use and Planning/Population and Housing/Agricultural Resources

The Land Use and Planning/Population and Housing/Agricultural Resources chapter of the EIR examines the proposed project's compatibility with existing and planned land uses in the area, current General Plan and DCWPCP policies, and zoning designations. The chapter further evaluates the potential of the proposed project to induce substantial population growth within the area, either directly or indirectly. In addition, the chapter summarizes the status of the existing agricultural resources within the boundaries of the proposed project site, including identification of any Prime/Unique Farmland or Farmland of Statewide Importance within the project boundaries, and the extent to which the project will convert important Farmland.

Chapter 12 – Noise

The Noise chapter of the EIR describes the existing noise environment in the project vicinity and identifies potential impacts and mitigation measures related to the construction and operation of the proposed project. The method by which the potential impacts are analyzed is discussed, followed by the identification of potential impacts and the recommended mitigation measures designed to reduce significant impacts to the maximum extent feasible.

Chapter 13 – Public Services and Recreation

The Public Services and Recreation chapter of the EIR describes the public service systems and facilities within the project area and the associated potential impacts resulting from the proposed project. This section will address fire and law enforcement services, schools, parks and recreation facilities, and other public facilities such as libraries.

Chapter 14 – Transportation and Circulation

The Transportation and Circulation chapter of the EIR discusses existing transportation and circulation conditions within the project area and the effects to the roadway network as a result of the proposed project and future, projected growth. The analysis includes consideration of automobile traffic impacts on roadway capacity, transit impacts, bicycle impacts, and pedestrian impacts.

Chapter 15 – Utilities and Service Systems

The Utilities and Service Systems chapter of the EIR summarizes the setting information and identifies potential new demands resulting from the proposed project related to water supply, wastewater systems, and solid waste disposal.

Chapter 16 – Effects Not Found to be Significant

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

Chapter 17 – Statutorily Required Sections

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

Chapter 18 – Alternatives Analysis

The Alternatives Analysis chapter of the EIR describes and evaluates the alternatives to the proposed project. It should be noted that the alternatives will be analyzed at a level of detail less than that of the proposed project; however, the analyses will include sufficient detail to allow for a meaningful comparison of impacts.

Chapter 19 – References

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

Chapter 20 – EIR Authors and Persons Consulted

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

Appendices

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

1.12 TECHNICAL CHAPTER FORMAT

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

x-1 Statement of Impact.

Discussion of impact for the proposed project in paragraph format.

Statement of ***level of significance*** of impact prior to mitigation is included at the end of each impact discussion. If an impact is determined to be significant, mitigation will be included in order to reduce the specific impact to the maximum extent feasible.

Mitigation Measure(s)
Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures. If reduction of the specific impact to a less-than-significant level is not feasible, the impact is considered significant and unavoidable.

X-1(a) *Required mitigation measure(s) presented in italics and numbered in consecutive order.*

X-1(b) *Required additional mitigation measure(s), if necessary.*

1.13 FINAL EIR AND EIR CERTIFICATION

Upon completion of the public review period, a Final EIR will be prepared that will include written comments on the Draft EIR received during the public review period and responses to those comments. The Final EIR will also include the Mitigation Monitoring and Reporting Plan (MMRP) prepared in accordance with Section 21081.6 of the Public Resource Code. The Final EIR will include any revisions to the Draft EIR made in response to public comments. The Draft EIR and Final EIR together will comprise the EIR for the proposed project. Before the County can consider approval of the project, it must first certify that the EIR has been completed in compliance with CEQA, that the County Board of Supervisors has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the County. The County will also be required to adopt Findings of Fact, and, for any impacts determined to be significant and unavoidable, adopt a Statement of Overriding Considerations.

2. Executive Summary

2. EXECUTIVE SUMMARY

2.1 INTRODUCTION

The Executive Summary chapter of the EIR provides an overview of the proposed project (see Chapter 3, Project Description, for further details) and provides a table summary of the conclusions of the environmental analysis provided in Chapters 4 through 16. This chapter also summarizes the alternatives to the proposed project that are described in Chapter 18, Alternatives Analysis, and identifies the Environmentally Superior Alternative. Table 2-1 contains the environmental impacts associated with the proposed project, the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The project site consists of two parcels, totaling approximately 35 acres, located at the northwest corner of Vineyard Road and Brady Lane in Placer County, California. The site is located to the west of the City of Roseville limits and is within the Dry Creek-West Placer Community Plan (DCWPCP) area. The southwestern-most three acres of the project site are “not a part of this subdivision” (NAPOTS) and would become a separate parcel created by a boundary line adjustment. The project site is identified by Assessor’s Parcel Numbers (APNs) 473-020-002 and -013.

The project site is currently undeveloped and includes an unnamed tributary that flows southward to Dry Creek. The existing tributary and majority of associated sensitive habitat would be retained with implementation of the proposed project. The site has current DCWPCP land use designations as follows: Low Density Residential (LDR 1-2 du/ac) on the eastern 24.1 acres; Greenbelt and Open Space (O) along the central-western 6.1 acres; and Rural Low Density Residential (RLDR 1-2.3 ac min) on the western 1.8 acres. The current zoning designations for the site include: Residential Single-Family, combining Agriculture, minimum Building Site of 20,000 square feet (RS-AG-B-20) (eastern 24.1 acres); Open Space (O) (central-western 6.1 acres); and 1.8 acres of Farm-Development Reserve (F-DR) (western portion of site). The three-acre NAPOTS area in the southwestern portion of the site is currently designated RLDR 1-2.3 ac minimum per the DCWPCP, and zoned F-DR.

The proposed project would include a Vesting Tentative Subdivision Map (see Figure 3-3 in Chapter 3) to subdivide the project site into 119 single-family residential lots. Approximately 27.2 acres would be developed with single-family homes and up to 12 Accessory Dwelling Units (ADUs) on the project site. The project has been designed in two residential villages (Northwest and Southeast); the Northwest Village would include a total of 80 lots and the Southeast Village would include 39 lots. Residential lots in the Southeast Village would generally be larger, with an average lot size of approximately 7,600 square feet (sf), ranging from 6,600 sf to 11,538 sf. Residential lots in the Northwest Village would be smaller, with an average lot size of approximately 5,600 sf, ranging from 5,000 sf to 8,604 sf. A total of 7.78 acres, or 22 percent of the project site, including the tributary and the majority of its associated riparian area, would be retained as open space. The open space corridor on the western portion of the site would include three linear parks and a meandering public pedestrian/bike path located along the riparian

corridor. Access to the site would be from a gated entryway off of Brady Lane. An Emergency Vehicle Access would be constructed in the southwest corner of the project site off of Vineyard Road. A sewer lift station would be constructed in this area also. Frontage improvements including widening along both Brady Lane and Vineyard Road, landscaping, and pedestrian walkways are proposed.

The proposed project would also include off-site improvements involving construction of a new sewer line within Vineyard Road, and widening of portions of Brady Lane and Vineyard Road. In addition, the proposed project would comply with Placer County's affordable housing requirements. While multiple options are available to meet the County's current affordable housing requirements, and a specific approach to meeting the affordable housing requirement has not been selected at this time for the proposed project, this EIR evaluates the potential for up to 12 ADUs to be constructed on-site, in addition to the proposed 119 single-family residential units. The construction of up to 12 ADUs, which may or may not be deed restricted as affordable, would result in a maximum of 131 units on-site.

The proposed project would require County approval of the following:

- General Plan/Community Plan Amendment (DCWPCP) from LDR 1-2 du/ac (24.1 acres), O (6.1 acres), and RLDR 1-2.3 ac min (1.8 acres) to MDR (25.5 acres) and O (6.5 acres). The existing DCWPCP land use designation for the NAPOTS area would not be altered;
- Rezone from RS-AG-B-20 (24.1 acres), O (6.1 acres), and F-DR (1.8 acres) to RS-B-4 (25.9 acres)[1] and O (6.5 acres). The existing zoning designation for the NAPOTS area would not be altered;
- Vesting Tentative Subdivision Map for the subdivision of a 35-acre site into a 119-lot residential single-family subdivision;
- CUP to allow the proposed on-site tot lot within the O zoning district;
- Variance to increase allowable building coverage on residential lots from the maximum 40 percent to 50 percent for one-story units;
- Minor Boundary Line Adjustment to create the NAPOTS parcel;
- Design Exception Request for private internal roadways (Administrative Approval);
- Annexation into the Dry Creek Fire Zone of Benefit (County Service Area 28, Zone of Benefit 165) for provision of fire protection services (Placer County Board of Supervisors Approval); and
- Annexation into Placer County Service Area 28, Zone 173, for sanitary sewer service (Placer County Board of Supervisors Approval).
- Annexation into Placer County Service Area 28, Zone of Benefit 169 for the purposes of generating funds for the maintenance of public park and open space facilities in the Dry Creek area.

In addition, the project would require the following approvals/permits from other responsible and trustee agencies:

- Section 404 Nationwide Permit (or Letter of Permission) (USACE);
- Section 401 Water Quality Certification (RWQCB – Central Valley Region);

[1] It is important to note that the applicant proposes to set the minimum lot size for the RS-B-4 zoned portion of the site at 5,000 square feet, and the County will include a Condition of Approval on the Vesting Tentative Subdivision Map requiring said minimum lot size.

- Authority to Construct and Permit to Operate the proposed sewer lift station backup generator (Placer County Air Pollution Control District); and
- Potential Section 1600Lake or Streambed Alteration Agreement (CDFW).

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

2.3 ENVIRONMENTAL IMPACTS AND PROPOSED AND RECOMMENDED MITIGATION

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

A summary of the identified impacts in the technical chapters of the EIR is presented in Table 2-1. In Table 2-1, the proposed project impacts are identified for each technical chapter (Chapters 4 through 15) of the EIR. In addition, Table 2-1 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

2.4 SUMMARY OF PROJECT ALTERNATIVES

The following section presents a summary of the evaluation of the alternatives considered for the proposed project, which include the following:

- No Project (No Build) Alternative;
- Buildout Pursuant to Existing Zoning Alternative; and
- Reduced Density Alternative.

For a more thorough discussion of project alternatives, please refer to Chapter 18, Alternatives Analysis.

No Project (No Build) Alternative

The No Project (No Build) Alternative assumes that the proposed project site would remain in its current condition and would not be developed. As described in this EIR, the project site consists primarily of ruderal grasses and is absent of structures. The No Project (No Build) Alternative would not meet any of the project objectives.

Buildout Pursuant to Existing Zoning Alternative

The Buildout Pursuant to Existing Zoning Alternative would consist of buildout of the project site per the current Placer County zoning designations at the maximum allowable density. The current zoning designations for the site include: Residential Single-Family, combining Agriculture,

minimum Building Site of 20,000 square feet (RS-AG-B-20) (eastern 24.1 acres); Open Space (O) (central-western 6.1 acres); and 1.8 acres of Farm-Development Reserve (F-DR) (western portion of site).

Under the Buildout Pursuant to Existing Zoning Alternative, 8.60 acres of the project site would be retained as open space, an increase of 2.26 acres compared to the proposed project. A total of 23.44 acres would be developed with residential lots, streets, a sewer lift station, an emergency vehicle access (EVA), and landscaping improvements. In total, the Alternative would allow for development of 30 single-family homes. Off-site improvements required under the Buildout Pursuant to Existing Zoning Alternative, including widening portions of Brady Lane and Vineyard Road and sewer system improvements, would be essentially the same as the proposed project.

Because the Buildout Pursuant to Existing Zoning Alternative would include development of the project site with residential uses, consistent with the County's General Plan and DCWPCP, Objective #1 would be met. Most of the remaining project objectives would be partially met, as the Alternative would provide single-family residential lot sizes with the minimum lot size of 20,000 sf and would minimize encroachment into the 100-year floodplain and the sensitive environmental habitat associated with the Dry Creek tributary on the western portion of the site. However, because average lot sizes would be substantially increased relative to the proposed project, the Buildout Pursuant to Existing Zoning Alternative would result in a less efficient use of land and would require a greater amount of energy and water resources per capita. In addition, because the Alternative would only include 30 single-family units compared to the 119 units included in the proposed project, the Alternative would not provide a sufficient number of residential units to support necessary improvements to local and regional public service facilities (e.g., sewer lift station). Thus, Objective #11 would not be met.

Reduced Density Alternative

Under the Reduced Density Alternative, 10.88 acres of the project site would be retained as open space, an increase of 4.54 acres compared to the proposed project. A total of 21.16 acres would be developed with residential lots, streets, a sewer lift station, an EVA, and landscaping improvements. In total, the Alternative would allow for development of 83 single-family homes. At a density of 2.37 units/acre, the Alternative would involve a slightly reduced lot density compared to the 3.4 units/acre included in the proposed project. Off-site improvements required under the Reduced Density Alternative, including widening portions of Brady Lane and Vineyard Road and sewer system improvements, would be essentially the same as the proposed project.

Because the Reduced Density Alternative would include development of the project site with residential uses, consistent with the type of development anticipated in the County's General Plan and the DCWPCP, Objective #1 would be met. Most of the remaining project objectives would be partially met, as the Alternative would provide for a range of single-family residential lot sizes and would minimize encroachment into the 100-year floodplain and the sensitive environmental habitat associated with the Dry Creek tributary on the western portion of the site. However, because the Alternative would only include 83 single-family units compared to the 119 units included in the proposed project, the Alternative would not provide a sufficient number of residential units to support necessary improvements to local and regional public service facilities. Thus, Objective #11 would not be met.

Environmentally Superior Alternative

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

As discussed throughout the Alternatives Analysis chapter, both the Buildout Pursuant to Existing Zoning Alternative and the Reduced Density Alternative would result in fewer impacts than the proposed project related to seven of the eight issue areas for which project impacts were identified. However, the Buildout Pursuant to Existing Zoning Alternative would result in substantially fewer vehicle trips during operations. In addition, operational ROG emissions would be substantially reduced. Thus, impacts related to Air Quality and Greenhouse Gas Emissions and Transportation and Circulation would be fewer under the Buildout Pursuant to Existing Zoning Alternative compared to the Reduced Density Alternative. It should be noted that despite the above, the Reduced Density Alternative would include a smaller overall disturbance area and a greater number of residential units; thus, the Reduced Density Alternative would be more economically feasible than the Buildout Pursuant to Existing Zoning Alternative.

The development of the Buildout Pursuant to Existing Zoning Alternative would partially satisfy the project objectives and would result in similar or reduced impacts compared to the proposed project in eight resource areas. Because fewer vehicle trips would be generated by the Buildout Pursuant to Existing Zoning Alternative, the intensity of traffic-related impacts, including impacts to study intersections, would be reduced compared to the proposed project. However, the Alternative would add traffic to study intersections for which improvements have not been identified in the County's Capital Improvement Program (CIP), or which are located outside of the County's jurisdiction. In order to determine whether the additional traffic occurring as a result of the Alternative would exceed the applicable significance thresholds for impacted intersections, a detailed traffic impact study would be required. While a conclusive determination cannot be reached without a quantitative analysis, the impacts to study intersections under Existing Plus Project and Cumulative Plus Project conditions would be anticipated to remain significant and unavoidable.

While the Buildout Pursuant to Existing Zoning Alternative would result in fewer impacts than the Reduced Density Alternative, the Buildout Pursuant to Existing Zoning Alternative technically qualifies as a 'no project' alternative and cannot be considered the environmentally superior alternative. Therefore, the Reduced Density Alternative would be considered the environmentally superior alternative to the proposed project.

2.5 AREAS OF KNOWN CONTROVERSY

Areas of controversy that were identified in NOP comment letters, and are otherwise known for the project area, include the following:

- Maintaining the rural aesthetic of the area;
- Increases in light and glare within surrounding residential areas;
- Increases in air quality emissions and impacts to climate change;

- Biological impacts associated with wildlife and plant habitats;
- Increased stormwater runoff causing soil erosion, flooding, or pollution;
- Increased residential density being proposed;
- Conversion of agricultural land;
- Noise increases;
- Ability of fire, police, school, and park resources to accommodate the proposed project;
- Traffic increases along existing surrounding roadways;
- Pedestrian safety;
- Water supply and distribution systems;
- Wastewater facility impacts; and
- Increased utility service demand.

Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures		Level of Significance After Mitigation
4. Aesthetics					
4-1	**In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality.**	LS	*None required.*		N/A
4-2	**Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**	S	*4-2*	*Prior to Improvement Plan approval, the project applicant shall submit a lighting plan for the project to the Placer County Design Review Committee (DRC) for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association. The lighting plan shall include, but not necessarily be limited to, the following provisions:* • *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;* • *Place and shield or screen flood and area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas and passing motorists;*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			• *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash;* • *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, earth-toned colored paint and roofing materials), shielded or screened lighting, and appropriate signage to prevent light and glare from adversely affecting motorists on nearby roadways.*	
4-3	**Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the DCWPCP.**	LCC	*None required.*	N/A
4-4	**Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the DCWPCP.**	LS	*None required.*	N/A
5. Air Quality and Greenhouse Gas Emissions				
5-1	**Conflict with or obstruct implementation of the applicable air quality plan during project construction.**	S	*5-1(a)* *Prior to approval of any Improvement Plans, the project applicant shall submit to the Placer County Air Pollution Control District (PCAPCD) a comprehensive equipment inventory (e.g., make,*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		model, year, emission rating) of all off-road diesel-powered equipment over 50 horsepower (including owned, leased, and subcontractor equipment). With submittal of the equipment inventory, the contractor shall provide a written calculation to the PCAPCD for approval demonstrating that the heavy-duty off-road vehicles over 50 horsepower to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet-average of 20 percent of NO_X and 45 percent of DPM reduction as compared to California Air Resources Board (CARB) statewide fleet average emissions. Acceptable options for reducing emissions may include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. If any new equipment is added after submission of the inventory, the contractor shall contact the PCAPCD prior to the new equipment being utilized. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the PCAPCD with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman. In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications.	

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Summary of Impacts and Mitigation Measures

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		Portable equipment over 50 horsepower must have either a valid District Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB. *Idling shall be limited to five minutes or less for all on-road related and/or delivery trucks in accordance with CARB's On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation. Clear Signage regarding idling restrictions should be placed at the entrances to the construction site.* *5-1(b) The project applicant must comply with one of the following options:* *1. If any portion of on-site and off-site construction is to occur simultaneously, prior to approval of any Improvement Plans, the project applicant shall show on the Improvement Plan via notation that the contractor shall ensure that all off-road diesel-powered equipment over 25 horsepower to be used in off-site construction activity related to the Vineyard Road and Brady Lane road widening and sewer pipeline improvements (including owned, leased, and subcontractor equipment) shall meet California Air Resources Board (CARB) Tier 4 emissions standards or cleaner. The plans shall be*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		submitted for review and approval to the Placer County Community Development Resource Agency. *2. If any portion of on-site and off-site construction is to occur simultaneously, prior to approval of any Improvement Plans, the project applicant shall show on the Improvement Plans via notation that the contractor shall ensure that all off-road diesel-powered equipment over 25 horsepower to be used in on-site construction activity (including owned, leased, and subcontractor equipment) shall meet California Air Resources Board (CARB) Tier 4 emissions standards or cleaner. The plans shall be submitted for review and approval to the Placer County Community Development Resource Agency.*	
5-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation.	S	*5-2 Wood-burning fireplaces, woodstoves, or similar wood-burning devices shall be prohibited throughout the proposed project plan area. Homes may be fitted with the applicable regulation-compliant natural gas burning appliances if desired. The prohibition shall be included on any project plans submitted prior to issuance of building permits, subject to review and approval by the Placer County Community Development Resource Agency.*	LS
5-3 Expose sensitive receptors to substantial pollutant concentrations.	LS	*None required.*	N/A

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5-4	**Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**	LS	*None required.*		N/A
5-5	**Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**	CC	*5-5*	*Implement Mitigation Measure 5-2.*	LCC
5-6	**Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.**	LCC	*None required.*		N/A
6. Biological Resources					
6-1	**Impacts to special-status plant species either directly (e.g., threaten to eliminate a plant community) or through substantial habitat modifications.**	S	*6-1*	*Protocol-level special-status plant surveys were conducted within the Project Area in May and July of 2018, and no special-status plant species were identified. Survey results are valid for three years. If construction does not commence before Spring of 2021, then new focused plant surveys shall be*	LS

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Summary of Impacts and Mitigation Measures

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		performed according to CDFW and CNPS protocol, as generally described below. If special-status plant species are not found during appropriately timed focused surveys, then further mitigation is not necessary. The results of the new surveys shall be submitted to the Placer County Community Development Resource Agency. *Prior to Improvement Plan approval for each phase of the project, focused surveys shall be performed by a qualified botanist in order to determine the presence or absence of the following special-status plant species known to potentially occur on-site: big-scale balsamroot, dwarf downingia, Bogg's Lake hedge-hyssop, Ahart's dwarf rush, legenere, pincushion navarretia, slender Orcutt grass, Sacramento Orcutt grass, and Sanford's arrowhead. Furthermore, should additional plants having the potential to occur on-site be given special-status in the future, the qualified botanist shall also determine the presence/absence of such species. The survey(s) shall be conducted on-site as well as in any off-site improvement areas, as applicable for each phase, during the identification periods (bloom periods) for all of the special-status plant species listed above. If the special-status plant species are not found to be present during the focused survey(s), then no further action is required. The results of the focused surveys shall be submitted to the Placer County Community Development Resource Agency.*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		If any special-status plant species are found, a mitigation plan shall be prepared in consultation with the Placer County Community Development Resource Agency. The plan shall detail the various mitigation approaches to ensure no net loss of the special-status plant(s). Mitigation could include, but would not be limited to, avoidance of the plant species, salvage of plant materials where possible, acquisition of credits at an approved mitigation bank, or acquisition and preservation of property that supports the plant species.	
6-2 Impacts to special-status vernal pool branchiopods either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.	LS	*None required.*	N/A
6-3 Impacts to special-status amphibian species either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications.	LS	*None required.*	N/A

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
6-4 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on burrowing owl.	S	*6-4 A pre-construction survey for burrowing owl shall be conducted between 14 days and 30 days prior to commencement of construction and/or maintenance activities of any phase of the proposed project. The survey area shall include an approximately 500-foot (150-meter) buffer around suitable grassland habitats, where access is permitted. If the results of the survey are negative, a letter report documenting the results of the survey shall be provided to the Placer County Community Development Resource Agency, and additional protective measures are not required.* *If active burrows are observed, an impact assessment should be prepared and submitted to CDFW in accordance with the 2012 CDFW Staff Report on Burrowing Owl Mitigation. If project activities could result in impacts to nesting, occupied, and satellite burrows and/or burrowing owl habitat, the project applicant shall delay commencement of construction activities until a qualified biologist determines that the burrowing owls have fledged and the burrow is no longer occupied. If delay of construction activities is infeasible, the project applicant shall consult with CDFW and develop a detailed mitigation plan such that the habitat acreage and number of burrows impacted are replaced. The mitigation plan shall be based on the requirements set forth in Appendix A of the 2012 Staff Report.*	LS

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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Construction shall not commence until CDFW has approved the mitigation plan. Mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of an active burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the CDFW Staff Report on Burrowing Owl Mitigation, and may be accomplished within qualifying Swainson's hawk foraging habitat mitigation area if burrowing owls have been documented using the Swainson's hawk foraging habitat mitigation area, or if the Project biologist, the County, and CDFW collectively determine that the area is suitable. *During the non-breeding season (late September through the end of January), the project applicant may choose to have a qualified biologist conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance, exclude any burrowing owls observed, and collapse any burrows or remove the debris in accordance with the methodology outlined in the CDFW Staff Report on Burrowing Owl Mitigation and in coordination with CDFW.* *In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the*	

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-4 may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.	
6-5 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on Swainson's hawk.	S	*6-5(a)* *Within 14 days prior to the commencement of construction and/or maintenance activities during the nesting season for Swainson's hawk (between February 15 and September 1) a targeted Swainson's hawk nest survey shall be conducted of all accessible areas within 0.25 mile of the proposed construction area. If active Swainson's hawk nests are found within 0.25 mile of a construction site, construction shall cease within 0.25 mile of the nest until a qualified biologist determines that the young have fledged or the determination is made that the nesting attempt has failed. If the applicant desires to work within 0.25 mile of the nest, the applicant shall consult with CDFW and the County to determine if the nest buffer can be reduced. The project*	LS

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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		applicant, the project biologist, the County, and CDFW shall collectively determine the nest avoidance buffer, and what (if any) nest monitoring is necessary. If an active Swainson's hawk nest is found within the project site prior to construction and is in a tree that is proposed for removal, then the project applicant shall either wait until fledging is complete (with agreed-upon construction buffers in place) or obtain an Incidental Take Permit. The results of the survey shall be submitted to the Placer County Community Development Resource Agency and CDFW. *In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-5(a) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.*	

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		6-5(b) *Prior to initiation of ground disturbing activity for the project, a qualified biologist shall conduct a review of Swainson's hawk nest data available in the CNDDB and contact the CDFW to determine the most up-to-date Swainson's hawk nesting information for the project area. If desired by the project applicant, the biologist may further conduct a survey of the identified nests to determine the presence or absence of Swainson's hawks. The biologist shall provide the County with a summary of findings of Swainson's hawk nesting activity within 10 miles of the Project Area. If the biologist determines that the project site is within 10 miles of an active Swainson's hawk nest (where an active nest is defined as a nest with documented Swainson's hawk uses within the past five years), the applicant shall mitigate for the loss of suitable Swainson's hawk foraging habitat by implementing one of the following measures as applicable:* • *If an active nest is identified within one mile of the project site: One acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County.* • *If an active nest is identified within five miles (but greater than one mile) of the project site:*	

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		0.75 acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County. • *If an active nest is identified within 10 miles (but greater than five miles) of the project site: 0.5 acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County.* *Results of the nesting survey, as well as proof of purchase of mitigation credits as required per the above mitigation options, shall be provided to the Placer County Community Development Resource Agency for review and approval prior to initiation of ground disturbance for any portion of the project site.* *In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-5(b) may be*	

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		replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.	
6-6 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on other special-status birds or birds protected under the MBTA.	S	*6-6 Prior to initiation of ground-disturbing activities for any phase of project construction, if construction is expected to occur during the raptor nesting season (February 15 to September 1), a qualified biologist shall conduct a preconstruction survey prior to vegetation removal. The pre-construction survey shall be conducted within 3 days prior to commencement of ground-disturbing activities. The survey shall be conducted within all areas of proposed disturbance and all accessible areas within 250 feet of proposed disturbance. If the pre-construction survey does not show evidence of active nests, a letter report documenting the results of the survey shall be provided to the Placer County Community Development Resource Agency, and additional measures are not required. If construction does not commence within 3 days of the pre-construction survey, or halts for more than 14 days,*	LS

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		an additional pre-construction survey shall be required. *If any active nests are located within the Project Area, an appropriate buffer zone shall be established around the nests, as determined by the project biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 500 feet for raptor nests and/or tricolored blackbird nesting colonies. If active nests are found within the project footprint, a qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. Guidance from CDFW shall be required if establishing the typical buffer zone is impractical. If construction activities cause the nesting bird(s) to vocalize, make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased, as determined by the qualified biologist, such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the young have fledged or as otherwise determined by a qualified biologist.* *In the event the Placer County Conservation Program is adopted prior to submittal of*	

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				improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-6 may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.	
6-7	**Have a substantial adverse effect, either directly or through substantial habitat modifications, on special-status bat species.**	S	*6-7*	*Pre-construction roosting bat surveys shall be conducted by a qualified biologist within 14 days prior to any tree removal occurring during the bat breeding season (April through October) and/or on days with temperatures in excess of 50 degrees Fahrenheit from January through March. Methods may include evening emergence surveys, acoustic surveys, inspecting potential roosting habitat with a fiberoptic camera, or a combination thereof. If pre-construction surveys indicate that roosts of special-status bats are not present, or that roosts are inactive or potential habitat is unoccupied, further mitigation is not required. The results of the bat surveys shall be submitted to the Placer County*		LS

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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Community Development Resource Agency and CDFW. *If roosting bats are found, exclusion shall be conducted as recommended by the qualified biologist in coordination with CDFW. If cavity roosting bats are found within any of the trees planned for removal, or if presence is assumed, trees should be removed outside of pup season only on days with temperatures in excess of 50 degrees Fahrenheit. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of the qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree. A letter report summarizing the survey results should be submitted to the Placer County Community Development Resource Agency within 30 days following the final monitoring event.* *In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-7 may be replaced with the PCCP's mitigation fees and*	

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		conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.	
6-8 Have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	S	*6-8(a)* *Prior to initiation of ground-disturbing activities, high visibility and silt fencing shall be established at the edge of the construction/maintenance footprint, to the satisfaction of the Placer County Community Development Resource Agency, if work is anticipated to occur within 50 feet of potentially jurisdictional features and riparian areas that are proposed for avoidance. A biological monitor shall be present during the fence installation and during any initial grading or vegetation clearing activities within 50 feet of potentially jurisdictional features and riparian areas which are proposed for avoidance.* *6-8(b)* *To the extent feasible, the project shall be designed to avoid and minimize adverse effects to waters of the U.S. or jurisdictional waters of the State of California within the project area. Prior to Improvement Plan approval for the project, a Section 404 permit for fill of jurisdictional wetlands shall be acquired, and mitigation for impacts to jurisdictional*	LS

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		waters that cannot be avoided shall conform with the USACE "no-net-loss" policy. Mitigation for impacts to both federal and State jurisdictional waters shall be addressed using these guidelines. *The applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA). Written verification of the Section 404 permit and the Section 401 water quality certification shall be submitted to the Placer County Community Development Resource Agency.* *In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-8(b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.*	

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		Alternatively, if the project proceeds before adoption of the PCCP or if the PCCP is not approved, the applicant may choose to utilize the Western Placer County Voluntary Interim In Lieu Fee Program (VIILF) to satisfy USACE and RWQCB mitigation requirements for the project's impacts to aquatic resources. The applicant shall be required to enter into both a Western Placer County In Lieu Fee Program Credit Transfer Agreement and an Interim Fee Credit Agreement with the County. If the VIILF is chosen, then Mitigation Measure 6-8(b) may be replaced with the payment of the interim fee.	
		6-8(c) *Prior to Improvement Plan approval, the applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW. The information provided shall include a description of all of the activities associated with the proposed project, not just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this EIR (see Table 6-3, Table 6-4, and Figure 6-8). Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Information regarding project-specific drainage and hydrology changes resulting from*	

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		project implementation shall be provided as well as a description of storm water treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs. Mitigation may include restoration or enhancement of resources on- or off-site, purchase habitat credits from an agency-approved mitigation/conservation bank, off-site, working with a local land trust to preserve land, or any other method acceptable to CDFW. Written verification of the Section 1600 Lake or Streambed Alteration Agreement shall be submitted to the Placer County Community Development Resource Agency. *In the event the Placer County Conservation Program is adopted prior to submittal of Improvement Plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-8(c) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.	
6-9 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	LS	*None required.*	N/A
6-10 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or have a substantial adverse effect on the environment by converting oak woodlands.	S	*6-10(a) Prior to any removal of significant trees (equal to, or greater than, six inches DBH or 10 inches DBH aggregate for multi-trunked trees), the project applicant shall obtain a tree removal permit from Placer County. In conjunction with submittal of a tree removal permit application, the applicant shall submit a site plan showing all protected trees proposed for removal. In accordance with Chapter 12.16.080 of the Placer County Code, the applicant shall comply with any conditions required by the Planning Services Division, which shall include payment of in-lieu fees. In-lieu fees shall be paid into the Placer County Tree Preservation Fund at $100 per DBH removed or impacted.*	LS

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Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project, then Mitigation Measure 6-10(a) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.	
		6-10(b) *The Improvement Plans shall include a note and show placement of Temporary Construction Fencing. The applicant shall install a four foot tall, brightly colored (usually yellow or orange), synthetic mesh material fence (or an equivalent approved by the Development Review Committee) at the following locations prior to any construction equipment being moved on-site or any construction activities taking place:* *A. Adjacent to any and all open space preserve areas that are within 50 feet of any proposed construction activity;* *B. At the limits of construction, outside the critical root zone of all trees six (6) inches DBH (diameter at breast height), or 10 inches DBH*	

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		aggregate for multi-trunk trees, within 50 feet of any grading, road improvements, underground utilities, or other development activity, or as otherwise shown on the Tentative Subdivision Map; or, *C. Around any and all "special protection" areas such as open space parcels and wetland features.*	
6-11 Cumulative loss of habitat for special-status species.	CC	*6-11 Implement Mitigation Measures 6-1, 6-4, 6-5(a) and 6-5(b), 6-6, 6-7, 6-8(a) through 6-8(c), and 6-10(a) and (b).*	LCC
7. Cultural Resources			
7-1 Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5.	LS	*None required.*	N/A
7-2 Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5.	S	*7-2 If potential archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during construction activities, all work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources). Examples of potential cultural materials include midden soil, artifacts, chipped stone, exotic (non-native) rock, or unusual amounts of baked clay, shell, or bone.* *A qualified cultural resources specialist and Native American Representative from the traditionally and*	LS

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		culturally affiliated Native American Tribe(s) will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, construction monitoring of further construction activities by Tribal representatives of the traditionally and culturally affiliated Native American Tribe, and/or returning objects to a location within the project area where they will not be subject to future impacts. *If articulated or disarticulated human remains are discovered during construction activities, the County Coroner and Native American Heritage Commission shall be contacted immediately. Upon determination by the County Coroner that the find is Native American in origin, the Native American Heritage Commission will assign the Most Likely Descendant(s) who will work with the project proponent to define appropriate treatment and disposition of the burials.* *Following a review of the find and consultation with appropriate experts, the authority to proceed may be accompanied by the addition of development*	

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		requirements which provide for protection of the site and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative will be documented in the project record. Any recommendations made by these experts that are not implemented, must be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the Placer County Community Development Resource Agency following coordination with cultural resources experts and tribal representatives as appropriate.	
7-3 Disturb any human remains, including those interred outside of dedicated cemeteries.	S	*7-3 If articulated or disarticulated human remains are encountered on the proposed project site during construction activities, all work within 100 feet of the find must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The Placer County Coroner shall be immediately notified. If the Coroner determines the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall determine and notify a Most Likely Descendant (MLD). Further actions shall be determined, in part, by the desires of the MLD. The MLD shall be afforded 48 hours to make recommendations regarding the disposition of*	LS

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		the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendant may request mediation by the NAHC.	
7-4 Have the potential to cause a physical change which would affect unique cultural values, restrict existing religious or sacred uses within the potential impact area, or cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code, Section 21074.	S	*7-4(a)* *Implement Mitigation Measures 7-2 and 7-3.* *7-4(b)* *Prior to initiation of ground-disturbing activities, a consultant and construction worker cultural resources awareness brochure and training program for all personnel involved in project implementation shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training shall be conducted in coordination with qualified cultural resources specialists and Native American Representatives from culturally affiliated Native American Tribes prior to ground-disturbing or construction activities on the project site. The program shall include relevant information regarding sensitive tribal cultural laws and regulations. The worker cultural resources awareness program shall describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential archeological resources or artifacts*	LS

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		are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native American and for behavior consistent with Native American Tribal values. A copy of the cultural resources awareness brochure and written verification of completion of the training program shall be submitted to the Placer County Community Development Resource Agency. *7-4(c) The UAIC shall be notified by the applicant at least seven days prior to the start of ground-disturbing activities in the event that the UAIC would like to provide a Tribal representative to inspect the project site area within the first five days of ground-breaking activity. The representative shall provide information to on-site construction personnel regarding tribal cultural resources. Proof of notification shall be submitted to the Placer County Community Development Resource Agency.*	
7-5 Cause a cumulative loss of cultural resources.	LS	*None required.*	N/A
8. Geology and Soils			
8-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground	LS	*None required.*	N/A

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shaking, seismic-related ground failure, including liquefaction, and landslides.			
8-2 Result in substantial soil erosion or the loss of topsoil.	S	*8-2(a)* *The Improvement Plans shall show water quality treatment facilities/Best Management Practices (BMPs) designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development/ Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and Surveying Division (ESD).* *Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, filters, etc. for entrapment of sediment, debris and oils/greases or other identified pollutants, as approved by the ESD. BMPs shall be designed in accordance with the West Placer Storm Water Quality Design Manual for sizing of permanent post-construction Best Management Practices for stormwater quality protection. No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.*	LS

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		All permanent BMPs shall be maintained as required to ensure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. Proof of on-going maintenance, such as contractual evidence, shall be provided to ESD upon request. The project owners/permittees shall provide maintenance of these facilities and annually report a certification of completed maintenance to the County DPW Stormwater Coordinator, unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. Prior to Improvement Plan approval or Final Subdivision Map recordation, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance.	
		8-2(b) *Prior to construction commencing, the applicant shall provide evidence to the ESD of a WDID number generated from the State Regional Water Quality Control Board's Stormwater Multiple Application & Reports Tracking System (SMARTS). This serves as the Regional Water Quality Control Board approval or permit under the National Pollutant Discharge Elimination System (NPDES) construction stormwater quality permit.*	
		8-2(c) *The applicant shall prepare and submit Improvement Plans, specifications and cost estimates (per the*	

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		requirements of Section II of the Land Development Manual [LDM] that are in effect at the time of submittal) to the ESD for review and approval of each project phase. The plans shall show all physical improvements as required by the conditions for the project as well as pertinent topographical features both on and off site. All existing and proposed utilities and easements, on site and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public easements), or landscaping within sight distance areas at intersections, shall be included in the Improvement Plans. The applicant shall pay plan check and inspection fees and, if applicable, Placer County Fire Department improvement plan review and inspection fees, with the 1st Improvement Plan submittal. (NOTE: Prior to plan approval, all applicable recording and reproduction costs shall be paid). The cost of the above-noted landscape and irrigation facilities shall be included in the estimates used to determine these fees. It is the applicant's responsibility to obtain all required agency signatures on the plans and to secure department approvals. If the Design/Site Review process and/or Development Review Committee (DRC) review is required as a condition of approval for the project, said review process shall be completed prior to submittal of Improvement Plans. Record drawings	

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		shall be prepared and signed by a California Registered Civil Engineer at the applicant's expense and shall be submitted to the ESD in both hard copy and electronic versions in a format to be approved by the ESD prior to acceptance by the County of site improvements. *Conceptual landscape plans submitted prior to project approval may require modification during the Improvement Plan process to resolve issues of drainage and traffic safety.* *Any Building Permits associated with this project shall not be issued until, at a minimum, the Improvement Plans are approved by the ESD.* *8-2(d) The Improvement Plans shall show all proposed grading, drainage improvements, vegetation and tree removal and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee (DRC). All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils*	

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		report supports a steeper slope and the ESD concurs with said recommendation. *The applicant shall revegetate all disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is the applicant's responsibility to ensure proper installation and maintenance of erosion control/winterization before, during, and after project construction. Soil stockpiling or borrow areas, shall have proper erosion control measures applied for the duration of the construction as specified in the Improvement Plans. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the ESD.* *The applicant shall submit to the ESD a letter of credit or cash deposit in the amount of 110 percent of an approved engineer's estimate for winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. One year after the County's acceptance of improvements as complete, if there are no erosion or runoff issues to be corrected, unused portions of said deposit shall be refunded to the project applicant or authorized agent.*	

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		If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the DRC/ESD for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the DRC/ESD to make a determination of substantial conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.	
8-3 Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code.	S	*8-3* *The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for Engineering and Surveying Division (ESD) review and approval. The report shall address and make recommendations on the following:* *A. Road, pavement, and parking area design;* *B. Structural foundations, including retaining wall design (if applicable);* *C. Grading practices;* *D. Erosion/winterization;*	LS

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		E. Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, potential for smectite clays etc.); and *F. Slope stability.* *Once approved by the ESD, two copies of the final report shall be provided to the ESD and one copy to the Building Services Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.* *If the geotechnical engineering report indicates the presence of critically expansive or other soil problems that, if not corrected, could lead to structural defects, a certification of completion of the requirements of the soils report shall be required for subdivisions, prior to issuance of Building Permits. This certification may be completed on a lot- by-lot basis or on a Tract basis. This shall be so noted on the Improvement Plans, in the Development Notebook (if required), in the Conditions, Covenants and Restrictions (CC&Rs), and on the Informational Sheet filed with the Final Subdivision Map(s).*	
8-4 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	S	*8-4 Should paleontological resources be discovered during ground disturbing activities, work shall be halted in the area within 50 feet of the find. The applicant shall notify the Placer County Community*	LS

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				Development Resources Agency and retain a qualified paleontologist to inspect the discovery. If deemed significant under criteria established by the Society for Vertebrate Paleontology with respect to authenticity, completeness, preservation, and identification, the resource(s) shall then be salvaged and deposited in an accredited and permanent scientific institution (e.g., University of California Museum of Paleontology [UCMP] or Sierra College), where the discovery would be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any future grading plans, utility plans, and improvement plans approved by the Placer County Engineering and Surveying Division for the proposed project, where excavation work would be required. Construction may continue in areas outside of the buffer zone.	
8-5	**Result in significant disruptions, displacements, compaction or overcrowding of the soil, or substantial change in topography or ground surface relief features.**	S	*8-5*	*Implement Mitigation Measures 8-2(c), 8-2(d), and 8-3.*	LS
8-6	**Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or of a locally important**	LS	*None required.*		N/A

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	mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.			
8-7	**Cumulative increase in the potential for geological related impacts and hazards.**	LS	*None required.*	N/A
	9. Hazards and Hazardous Materials			
9-1	**Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**	LS	*None required.*	N/A
9-2	**Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.**	LS	*None required.*	N/A
9-3	**Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.**	LS	*None required.*	N/A
9-4	**Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires, or be**	LS	*None required.*	N/A

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	located in or near state responsibility areas or lands classified as very high fire hazard severity zones.				
9-5	**Cumulative exposure to potential hazards, including wildfire, and increases in the transport, storage, and use of hazardous materials.**	LS	*None required.*		N/A
	10. Hydrology and Water Quality				
10-1	**Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.**	S	*10-1*	*Implement Mitigation Measures 8-2(a) through 8-2(d).*	LS
10-2	**Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations.**	S	*10-2(a)* *10-2(b)*	*Implement Mitigation Measure 8-2(a), 8-2(c), and 8-2(d).* *The Improvement Plans shall include the message details, placement, and locations showing that all storm drain inlets and bio-retention planters within the project area shall be permanently marked/embossed with prohibitive language such as "No Dumping! Flows to Creek." or other language and/or graphical icons to discourage illegal dumping as approved by the Engineering and Surveying Division (ESD). ESD-approved signs and prohibitive language and/or graphical icons, which prohibit*	LS

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		illegal dumping, shall be posted at public access points along channels and creeks within the project area. The Property Owners' association is responsible for maintaining the legibility of stamped messages and signs.	
		10-2(c) *This project is located within the permit area covered by Placer County's Small Municipal Separate Storm Sewer System (MS4) Permit (State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES)). Project-related storm water discharges are subject to all applicable requirements of said permit.* *The project shall implement permanent and operational source control measures as applicable. Source control measures shall be designed for pollutant generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and shall be shown on the Improvement Plans.* *The project is also required to implement Low Impact Development (LID) standards designed to reduce runoff, treat storm water, and provide baseline hydromodification management as outlined in the West Placer Storm Water Quality Design Manual.*	

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		10-2(d) *Per the State of California NPDES Phase II MS4 Permit, this project is a Regulated Project that creates and/or replaces 5,000 square feet or more of impervious surface. A final Stormwater Quality Plan (SWQP) shall be submitted, either within the final Drainage Report or as a separate document that identifies how this project will meet the Phase II MS4 permit obligations. Site design measures, source control measures, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the Improvement Plans. In addition, per the Phase II MS4 permit, projects creating and/or replacing one acre or more of impervious surface are also required to demonstrate hydromodification management of stormwater such that post-project runoff is maintained to equal or below pre-project flow rates for the 2 year, 24-hour storm event, generally by way of infiltration, rooftop and impervious area disconnection, bio-retention, and other LID measures that result in post-project flows that mimic pre-project conditions.*	
10-3 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or	LS	*None required.*	N/A

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	conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.				
10-4	**Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff either during construction or in the post-construction condition.**	S	*10-4(a)*	*As part of the Improvement Plan submittal process, the preliminary Drainage Report provided during environmental review shall be submitted in final format. The final Drainage Report may require more detail than that provided in the preliminary report, and will be reviewed in concert with the Improvement Plans to confirm conformity between the two. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing conditions, the effects of the proposed improvements, all appropriate calculations, watershed maps, changes in flows and patterns, and proposed on- and off-site improvements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used during construction, as well as long-term post-construction water quality measures. The final Drainage Report shall be prepared in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of Improvement Plan submittal.*	LS

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Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		10-4(b) *This project is subject to the one-time payment of drainage improvement and flood control fees pursuant to the "Dry Creek Watershed Interim Drainage Improvement Ordinance" (Ref. Article 15.32, Placer County Code). The current estimated development fee is $26,656 ($224 per single family residential unit), payable to the Engineering and Surveying Division prior to Building Permit issuance. The fees to be paid shall be based on the fee program in effect at the time that the application is deemed complete.*	
		10-4(c) *This project is subject to payment of annual drainage improvement and flood control fees pursuant to the "Dry Creek Watershed Interim Drainage Improvement Ordinance" (Ref. Chapter 15, Article 15.32, Placer County Code). Prior to Building Permit issuance, the applicant shall cause the subject property to become a participant in the existing Dry Creek Watershed County Service Area for purposes of collecting such annual assessments. The current estimated annual fee is $4,165 ($35 per single family residential unit).*	
		10-4(d) *On the Improvement Plans and Informational Sheet(s) filed with the Final Subdivision Map(s), show the limits of the future, unmitigated, fully developed, 100-year flood plain (after grading) for the Dry Creek Vineyard Road tributary (western drainageway) and the FEMA floodplain and*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures		Level of Significance After Mitigation
			designate same as a building setback line unless greater setbacks are required by other conditions contained herein.	
		10-4(e)	*On the Improvement Plans and Informational Sheet(s) filed with the Final Subdivision Map(s), show that finished house pad elevations for all Lot's along the floodplain shall be a minimum of two feet above the 100-year flood plain line (or finished floor -three feet above the 100-year floodplain line). The final pad elevation shall be certified by a California registered civil engineer or licensed land surveyor and submitted to the Engineering and Surveying Division. This certification shall be done prior to construction of the foundation or at the completion of final grading, whichever comes first. No building construction is allowed until the certification has been received by the Engineering and Surveying Division and approved by the floodplain manager. Benchmark elevation and location shall be shown on the Improvement Plans and Informational Sheet (s) to the satisfaction of Development Review Committee.*	
10-5 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious	S	*10-5*	*Prior to Improvement Plan approval, the applicant shall obtain from the Federal Emergency Management Agency (FEMA), a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Revision based on Fill (CLOMR-F) for fill within a Special Flood Hazard Area, if required. A copy of*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	surfaces, in a manner which would impede or redirect flood flows or expose people or structures to risk of loss, injury or death involving flooding through the placement of housing in a flood hazard area.		*the letter shall be provided to the Engineering and Surveying Division. A Letter of Map Revision (LOMR), or a Letter of Map Revision based on Fill (LOMR-F) from FEMA shall be provided to the Engineering and Surveying Division prior to acceptance of project improvements as complete.*	
10-6	**In a flood hazard zone, risk release of pollutants due to project inundation.**	LS	*None required.*	N/A
10-7	**Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns.**	LCC	*None required*	N/A
	11. Land Use and Planning / Population and Housing / Agricultural Resources			
11-1	**Physically divide an established community.**	LS	*None required.*	N/A
11-2	**Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, result in the development of incompatible**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	uses and/or the creation of land use conflicts, or conflict with General Plan or other policies regarding land use buffers for agricultural operations.			
11-3	**Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure).**	LS	*None required.*	N/A
11-4	**Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use, or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use.**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
11-5	**Conflict with existing zoning for agricultural use, a Williamson Act contract, or a Right-to-Farm Policy.**	LS	*None required.*	N/A
11-6	**Cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**	LS	*None required.*	N/A
11-7	**Cumulative unplanned population growth.**	LS	*None required.*	N/A
11-8	**Involve changes in the existing environment which, due to their location or nature, could cumulatively result in loss of Farmland to non-agricultural use.**	LCC	*None required.*	N/A
			12. Noise	
12-1	**Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**	S	*12-1 The following criteria shall be included in the Improvement Plans. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the Community Development Resource Agency Director.* • *Noise-generating construction activities (e.g. construction, alteration or repair activities), including truck traffic coming to and from the*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		project site for any purpose, shall be limited to the hours outlined in Placer County Board of Supervisors Minute Order 90-08; specifically, a) Monday through Friday, 6:00 AM to 8:00 PM (during daylight savings); b) Monday through Friday, 7:00 AM to 8:00 PM (during standard time); and c) Saturdays, 8:00 AM to 6:00 PM. • *Off-site construction activities occurring within the City of Roseville shall be limited to the following time periods: a) Monday through Friday, 7:00 AM to 7:00 PM; and b) weekends/State and federal holidays, 8:00 AM to 8:00 PM.* • *Project construction activities should be limited to daytime hours unless conditions warrant that certain construction activities occur during evening or early morning hours (i.e., extreme heat).* • *All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		are readily available for that type of equipment. • *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, State, or local agency shall comply with such regulations while in the course of project activity.* • *Electrically powered equipment shall be used instead of pneumatic or internal combustion-powered equipment, where feasible.* • *Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.* • *Construction site and access road speed limits shall be established and enforced during the construction period.* • *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.* • *Project-related public address or music systems shall not be audible at any adjacent receptor.* • *As a means of avoiding the potential for annoyance, haul trucks shall be restricted along the local roadways to the same hours as construction activities are allowed unless a request is made for the County to allow*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			greater flexibility in order to minimize potential AM peak hour traffic conflicts.	
12-2	**Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**	LS	*None required.*	N/A
12-3	**Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.**	LS	*None required.*	N/A
12-4	**Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the DCWPCP.**	LCC	*None required.*	N/A
13. Public Services and Recreation				
13-1	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services.			
13-2	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services.**	LS	*None required.*	N/A
13-3	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times,**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	or performance objectives for schools.			
13-4	**Result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.**	LS	*None required.*	N/A
13-5	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of public**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation		Mitigation Measures	Level of Significance After Mitigation
	facilities, including roads, or for other government services.				
13-6	**Cumulative impacts to public services.**	LS	*None required.*		N/A
	14. Transportation and Circulation				
14-1	**Conflict with a program, plan, ordinance, or policy addressing the circulation system, substantially increase traffic in relation to the existing traffic load and capacity of the roadway system, or exceed an established LOS standard during construction activities.**	S	*14-1*	*The Improvement Plans shall include a striping and signing plan and shall include all on- and off-site traffic control devices. Prior to the commencement of construction, a construction signing and traffic control plan shall be provided to the Engineering and Surveying Division for review and approval. The construction signing and traffic control plan shall include (but not be limited to) items such as:* • *Guidance on the number and size of trucks per day entering and leaving the project site;* • *Identification of arrival/departure times that would minimize traffic impacts;* • *Approved truck circulation patterns;* • *Locations of staging areas;* • *Locations of employee parking and methods to encourage carpooling and use of alternative transportation;* • *Methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);* • *Criteria for use of flaggers and other traffic controls;*	LS

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• *Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;* • *Monitoring for roadbed damage and timing for completing repairs;* • *Limitations on construction activity during peak/holiday weekends and special events;* • *Preservation of emergency vehicle access;* • *Coordination of construction activities with construction of other projects that occur concurrently in the DCWPCP to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences if similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs);* • *Removing traffic obstructions during emergency evacuation events; and* • *Providing a point of contact for DCWPCP residents and guests to obtain construction information, have questions answered, and convey complaints.* *The construction signing and traffic control plan shall be developed such that the following minimum set of performance standards is achieved throughout project construction. It is anticipated that additional*	

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		performance standards would be developed once details of project construction are better known. • *All construction employees shall park in designated lots owned by the project applicant or on private lots otherwise arranged for by the project applicant.* • *Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.*	
14-2 Conflict with a program, plan, ordinance or policy addressing study intersections, substantially increase traffic in relation to the existing traffic load and capacity of the study intersections, or exceed an established LOS standard under Existing Plus Project conditions.	S	*None feasible.*	SU
14-3 Conflict with a program, plan, ordinance or policy addressing study roadway segments, substantially increase traffic in relation to the existing traffic load and capacity of the study roadway segments, or exceed an established LOS standard	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	under Existing Plus Project conditions.			
14-4	**Conflict with a program, plan, ordinance or policy addressing transit, bicycle and pedestrian facilities.**	LS	*None required.*	N/A
14-5	**Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**	LS	*None required.*	N/A
14-6	**Result in inadequate emergency access or access to nearby uses.**	LS	*None required.*	N/A
14-7	**Conflict with a program, plan, ordinance or policy addressing study intersections, substantially increase traffic in relation to the planned future year traffic load and capacity of the study intersections, or exceed an established LOS standard under Cumulative Plus Project conditions.**	CC	*14-7(a)* *Prior to issuance of any Building Permits, this project shall be subject to the payment of traffic impact fees that are in effect in this area (Dry Creek), pursuant to applicable Ordinances and Resolutions. The applicant is notified that the following traffic mitigation fee(s) shall be required and shall be paid to Placer County DPWF:* *A. County Wide Traffic Limitation Zone: Article 15.28.010, Placer County Code;* *B. South Placer Regional Transportation Authority (SPRTA);* *C. "Bizz Johnson" Highway Interchange Joint Powers Authority; and*	SU

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Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		D. Placer County / City of Roseville JPA (PC/CR). *The current total combined estimated fee is $593,810 (based on $4,877 per single family residential dwelling unit). An additional amount of $37,125.60 (based on $3,093.80 per accessory dwelling unit) would be added to the total fee if the additional 12 secondary units are included with the project. The fees were calculated using the information supplied. If either the use or the number of units changes, then the fees will change. The fees to be paid shall be based on the fee program in effect at the time the application is deemed complete.* *14-7(b)* *Prior to Improvement Plan approval, the applicant shall pay their fair share contribution toward the cost of constructing a future one-lane roundabout at the intersection of Brady Lane and Vineyard Road. The applicant shall develop an engineer's cost estimate for said improvement and submit the estimate to the ESD/DPW for review and approval in order to determine the total dollar amount owed. The applicant's fair share has been identified as 6.9 percent.* *If the Placer County CIP is updated to include the one-lane roundabout improvement at the intersection of Brady Lane and Vineyard Road, then the payment of the Countywide Traffic Mitigation Fee*	

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			at Building Permit issuance, as required in Mitigation Measure 14-7(a) will satisfy this fair share contribution requirement.	
14-8	**Conflict with a program, plan, ordinance or policy addressing study roadway segments, substantially increase traffic in relation to the planned future year traffic load and capacity of the study roadway segments, or exceed an established LOS standard under Cumulative Plus Project conditions.**	LCC	*None required.*	N/A
	15. Utilities and Service Systems			
15-1	**Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**	LS	*None required.*	N/A
15-2	**Have sufficient water supplies available to serve the project and reasonably foreseeable future development during**	LS	*None required.*	N/A

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Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	normal, dry, and multiple dry years.			
15-3	**Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**	LS	*None required.*	N/A
15-4	**Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste.**	LS	*None required.*	N/A
15-5	**Increase in demand for utilities and service systems associated with the proposed project, in combination with future buildout in the DCWPCP area.**	LCC	*None required.*	N/A

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3. Project Description

3. PROJECT DESCRIPTION

3.1 INTRODUCTION

The Project Description chapter of the EIR provides a comprehensive description of the Brady Vineyard Subdivision Project (proposed project) in accordance with CEQA Guidelines Section 15124. A detailed description of the project location, project setting and surrounding uses, project objectives, project components, and required project approvals is presented below.

3.2 PROJECT LOCATION

The project site consists of approximately 35 acres located at the northwest corner of Vineyard Road and Brady Lane in Placer County, California (see Figure 3-1and Figure 3-2). The site is located to the west of the City of Roseville limits and is within the Dry Creek-West Placer Community Plan (DCWPCP) area. The site is identified by Assessor's Parcel Numbers (APNs) 473-020-002 and -013. The southwestern-most three acres of the project site are "not a part of this subdivision" (NAPOTS) and would become a separate parcel created by a boundary line adjustment.

3.3 PROJECT SETTING AND SURROUNDING LAND USES

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

The following sections describe the existing setting of the project site and the surrounding land uses in the project vicinity. Please note that detailed discussions of the existing setting in compliance with CEQA Guidelines Section 15125, specific to each environmental resource area, are included in each corresponding technical chapter of this EIR.

Site Characteristics

Currently, the project site consists primarily of ruderal grasses and is absent of structures or other indications of prior development. The site appears to have supported row crops and other agricultural uses up until the 1940's, as indicated in aerial photos dating back to 1947, but does not appear to have supported any active farming since that time. Per the U.S. Department of Agricultural Farmland Mapping and Monitoring Program (FMMP), the site is characterized as Grazing Land and Farmland of Local Importance.

The western portion of the site contains an unnamed tributary that flows southward to Dry Creek. One seasonal swale and one drainage ditch within the site drain to the tributary. Approximately 3.26 acres of the site are located within the 100-year floodplain of the tributary. After accounting for this and the 1.57 acres of right-of-way dedication outside of the floodplain, the total net buildable acres equate to approximately 27.21 acres.

Figure 3-1
Regional Location

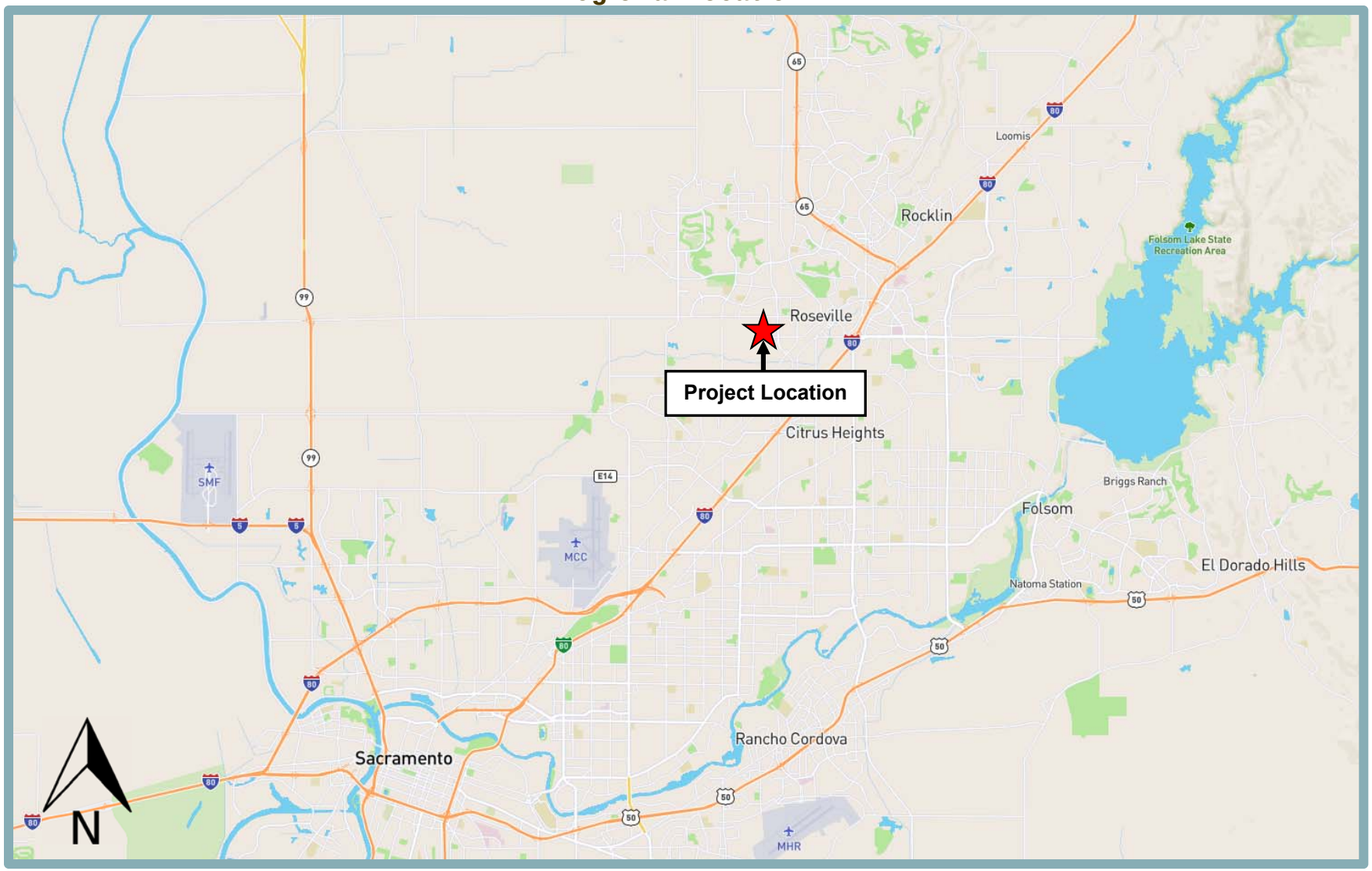
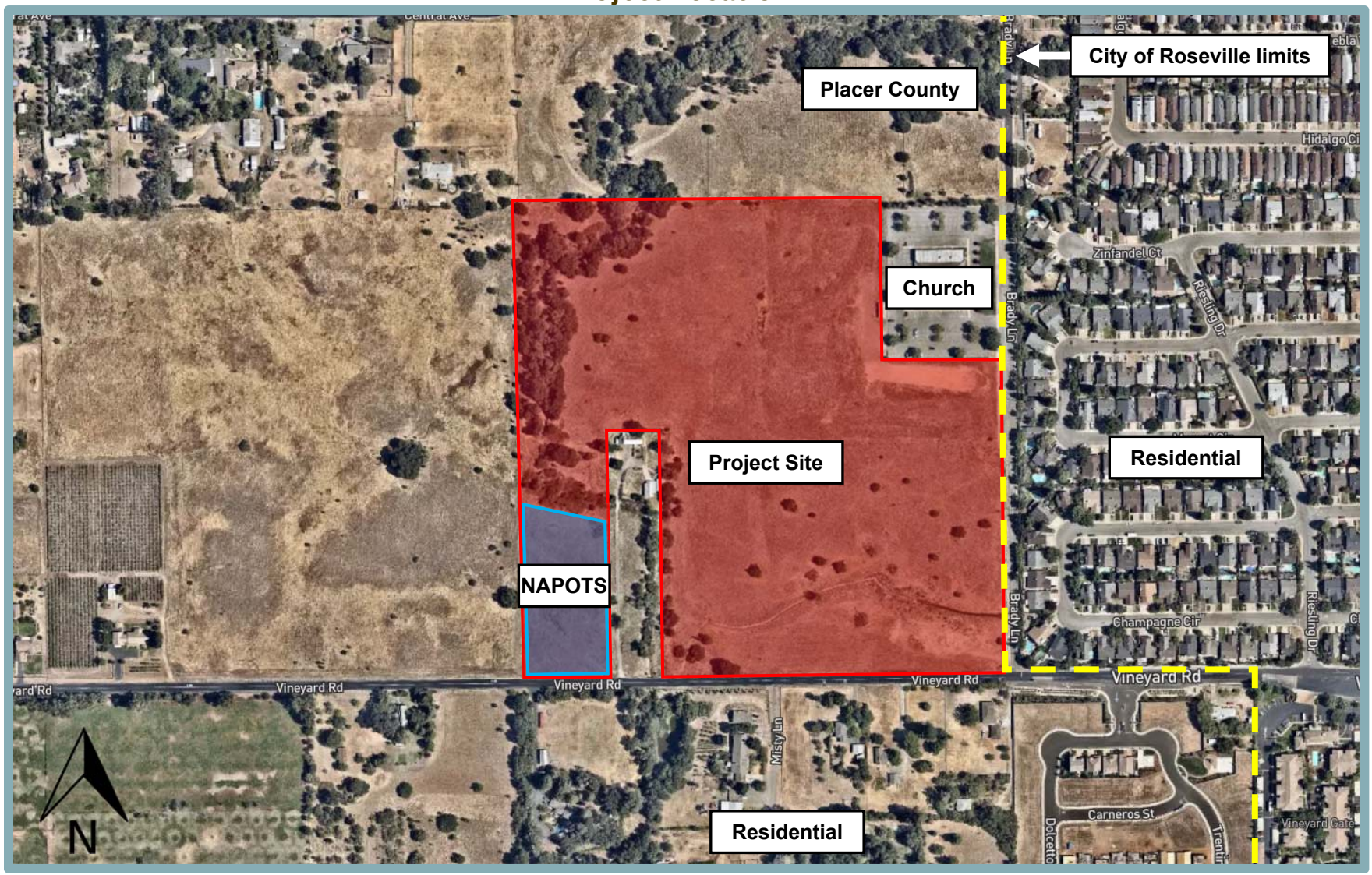


Figure 3-2
Project Location



Existing oak trees line both sides of the tributary, and scattered almond trees are located along the drainage ditch. The topography of the site is gently undulating, with elevations ranging from a low of approximately 122.5 feet at the western portion of the site adjacent to Vineyard Road to a high of approximately 151.4 feet at the eastern portion of the site adjacent to Brady Lane. A small knoll, with an elevation of approximately 145.7 feet, is located near the northwest portion of the site.

The project site has current DCWPCP land use designations as follows: Low Density Residential (LDR 1-2 du/ac) on the eastern 24.1 acres; Greenbelt and Open Space (O) along the central-western 6.1 acres; and Rural Low Density Residential (RLDR 1-2.3 ac min) on the western 1.8 acres. The current zoning designations for the site include: Residential Single-Family, combining Agriculture, minimum Building Site of 20,000 square feet (RS-AG-B-20) (eastern 24.1 acres); Open Space (O) (central-western 6.1 acres); and 1.8 acres of Farm-Development Reserve (F-DR) (western portion of site). The three-acre NAPOTS area in the southwestern portion of the site is currently designated RLDR 1-2.3 ac min per the DCWPCP, and zoned F-DR.

Surrounding Land Uses

The 30-acre parcel immediately west of the project site is vacant and zoned F-DR, similar to the western portion of the project site. The nearest home to the west of the site is approximately 1,000 feet from the site boundary. Immediately north of the project site is a church (Father's House) fronting Brady Lane, located on a three-acre parcel which, prior to a boundary line adjustment with the project site, was a 10-acre parcel. Other properties immediately to the north of the project site are generally vacant, with the exception of one single-family home located approximately 360 feet north of the site on a parcel north of the church. Such properties have the same zoning designation, RS-AG-B-20, as the project site, as do the four properties located on the south side of Vineyard Road, east of the tributary, where the closest house is situated 80 feet from the southern boundary of the project site. To the southeast, the American Vineyard Villages (AKA The Vineyard) consists of 139 single-family lots on approximately 19.2 acres. The subdivision is zoned RS-B-3 (Residential Single-family, minimum Building Site of 3,000 square feet) with lot sizes ranging from 3,298 sf to 10,953 sf.

Neighboring uses to the east of the site include Vineyard Estates, a single-family residential subdivision located across Brady Lane, within the City of Roseville limits. The subdivision includes 5,000-square foot (sf) minimum lots with single-family homes that are typically located approximately 20 feet from the eastern edge of pavement along Brady Lane, and are screened from the road with mature landscaping and masonry walls.

A two-acre rectangular-shaped parcel fronting Vineyard Road extends approximately 700 feet north (roughly halfway) into the project site. Currently, the parcel is developed with a house and associated outbuildings, located approximately 25 feet from the parcel's northern property line and 15 feet from its eastern property line. The existing on-site tributary flows through a culvert crossing under Vineyard Road near the south/center of the two-acre parcel.

3.4 PROJECT OBJECTIVES

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

1. Implement the County's General Plan and DCWPCP, which designate the proposed project area for residential development;

2. Provide a well-designed residential community with neighborhood identity in close proximity to jobs and services in Placer and Sacramento counties;
3. Provide for medium residential densities in areas planned for residential uses and development with accessible infrastructure, maximizing new housing opportunities while being consistent with current area-wide infrastructure plans and growth policies;
4. Add to the diversity of housing choices that can support a wider range of lifestyles in the DCWPCP Area;
5. Reduce growth pressures on outlying areas of Placer County by efficiently utilizing the project site to accommodate residential growth and development;
6. Create a high-quality neighborhood environment containing a mix of residential, open-space, and recreational land uses;
7. Provide for variable lot sizes and increased lot coverage to promote the efficient use of land, energy and water resources within a residential community;
8. Design a project that minimizes encroachment into the existing 100-year floodplain on the site while balancing the housing needs and densities and the character of the local community;
9. Provide a comprehensively planned project that protects sensitive environmental habitat and resources, including existing riparian and oak woodland habitat on the project site, within a permanent greenbelt area providing a significant public benefit;
10. Provide a planned infrastructure system with all public facilities and services necessary to meet the needs of development of the project site; and
11. Provide a number of residential units within the project site sufficient to support necessary improvements to local and regional public service facilities.

3.5 PROJECT COMPONENTS

The proposed project would include subdivision of the project site to develop a total of 119 single-family lots, up to 12 Accessory Dwelling Units (ADUs), and various associated improvements (see Figure 3-3), including, but not limited to, parks, trails, landscaping, circulation improvements, and utility installation. The project would require County approval of the following: General Plan/Community Plan Amendment; Rezone; Vesting Tentative Subdivision Map; Conditional Use Permit (CUP); Variance; Minor Boundary Line Adjustment; Design Exception Request; Annexation into the Dry Creek Fire Zone of Benefit and the parks/trail Zone of Benefit; and Annexation into Placer County Service Area 28, Zone 173 for sewer. The details of the proposed project, including required approvals, are described in further detail below.

General Plan/Community Plan Amendment and Rezone

As noted previously, the project site is currently designated LDR 1-2 du/ac (24.1 acres), O (6.1 acres), and RLDR 1-2.3 ac min (1.8 acres). The project would include a General Plan/DCWPCP Amendment to change the site's land use designations to Medium Density Residential (MDR) (25.5 acres) and O (6.5 acres) (see Figure 3-5). In addition, the project would include a rezone to change the site's zoning designations from RS-AG-B-20 (24.1 acres), O (6.1 acres), and F-DR (1.8 acres) to Residential Single Family, combining minimum Building Site of 4,000 square feet (RS-B-4) (25.5 acres) and O (6.5 acres) (see Figure 3-6). It is important to note that the applicant proposes to set the minimum lot size for the RS-B-4 zoned portion of the site at 5,000 square feet. However, because a Residential Single Family, combining minimum Building Site of 5,000 square feet does not exist, the project would include rezone to RS-B-4, and the County will include a Condition of Approval on the Vesting Tentative Subdivision Map requiring said minimum 5,000 square feet lot size. The existing DCWPCP land use and zoning designations for the three-acre NAPOTS area within the southwestern portion of the site would not be altered.

Vesting Tentative Subdivision Map

The proposed project would include a Vesting Tentative Subdivision Map (see Figure 3-3) to subdivide the project site into 119 single-family residential lots. The project has been designed in two residential villages (Northwest and Southeast); the Northwest Village would include a total of 80 lots and the Southeast Village would include 39 lots (see Figure 3-4).

The proposed project would provide for a transition of lot sizes from east to west, with residential densities transitioning from larger lots in the Southeast Village (average size of approximately 7,600 sf, ranging from 6,600 to 11,538 sf) to smaller lots in the Northwest Village (average size of approximately 5,600 sf, ranging from 5,000 to 8,604 sf).

Building setbacks are proposed to be 20 feet in front, 7.5 feet on the sides for two-story homes, and five feet for single-story homes. Two-story homes are anticipated to have 20-foot rear yard setbacks, with 10-foot rear yard setbacks for single-story homes. Approximately 50 percent of the homes backing onto Vineyard Road and Brady Lane would be limited to single-story homes. As noted previously, the three-acre NAPOTS area at the southwestern portion of the project site would become a separate parcel created by a boundary line adjustment.

It should be noted that the proposed site plan previously included three single-family lots within the northwestern portion of the site along the east side of the proposed “A” Court. However, based on input during the CEQA process, the applicant decided to revise the site plan to shift the three lots away from the on-site tributary and associated sensitive habitat.

Affordable Housing

The project would comply with Placer County’s affordable housing requirements. Per the County’s current requirements, an applicant may build the units at the affordability guidelines, pay an in-lieu fee, as determined by the Board of Supervisors, or provide a comparable affordable housing measure that is deemed acceptable by the County. While a specific approach to meeting the affordable housing requirement has not been selected at this time, this EIR assumes that the proposed project would employ one of the four options listed below:

A. Constructing and deed restricting 12 lots/units as affordable (No change to total number of units proposed).
B. Constructing a primary dwelling along with an Accessory Dwelling Unit on six of the lots and deed restricting all 12 units as affordable (Increase the number of proposed dwelling units by six, for a total of 125).
C. Along with Option B, providing buyers of up to six additional lots the option to construct a primary dwelling and an Accessory Dwelling Unit (Increase the number of proposed dwelling units by 12, for a total of 131). The additional six units would not be required to be deed restricted as affordable.
D. Payment of an in-lieu fee, as determined by the Board of Supervisors, and none of the units within the project would be deed restricted (No change to total number of units proposed).

Based on the above, the number of single-family residential units included in the proposed project could range from a minimum of 119 units up to a maximum of 131 units (119 primary units, six deed-restricted Accessory Dwelling units, and six non-deed-restricted Accessory Dwelling Units). Where applicable, this EIR evaluates the most intensive project scenario in which all 131 units are developed on-site.

Figure 3-3
Vesting Tentative Subdivision Map

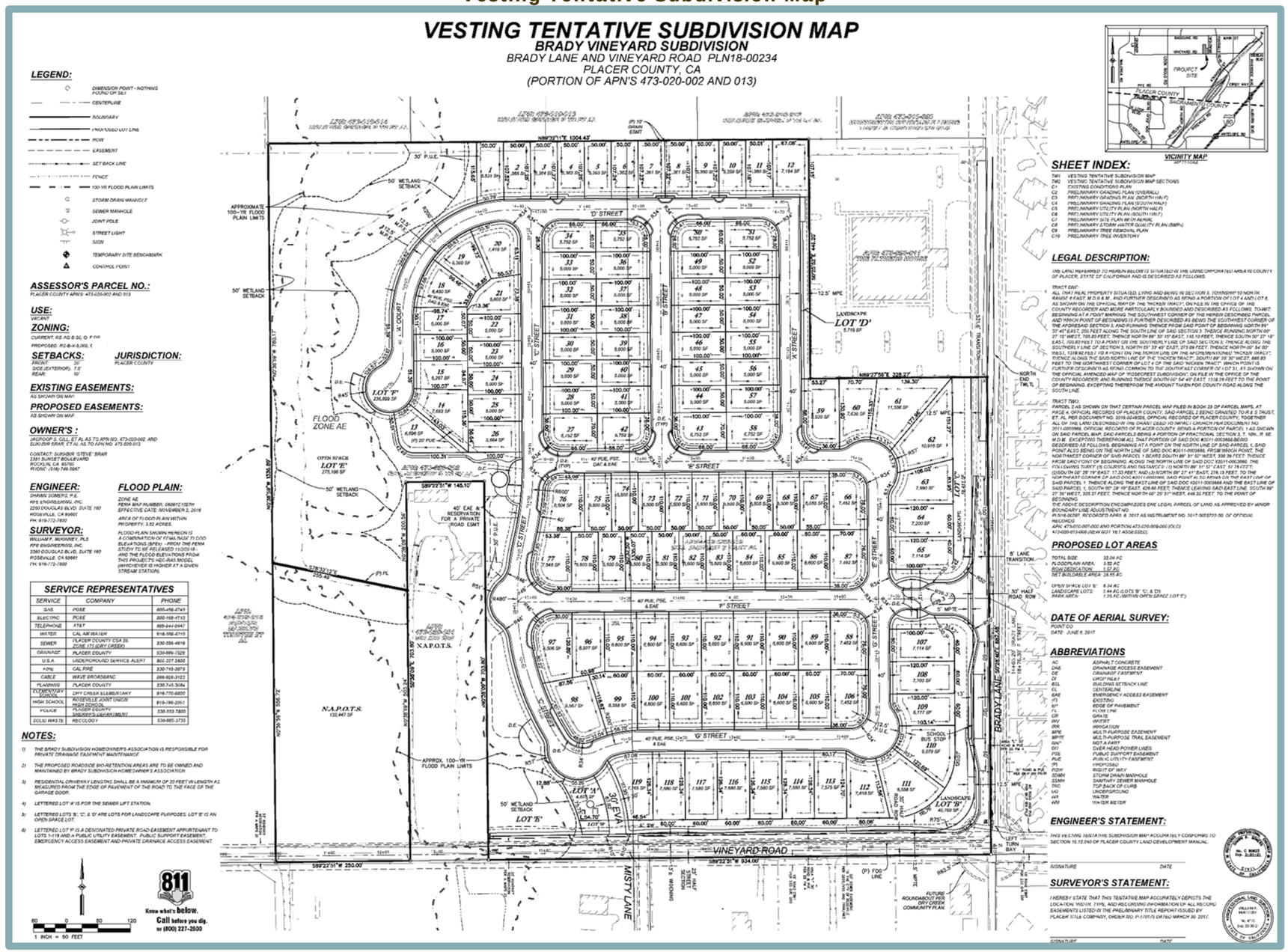


Figure 3-4
Proposed Village Areas

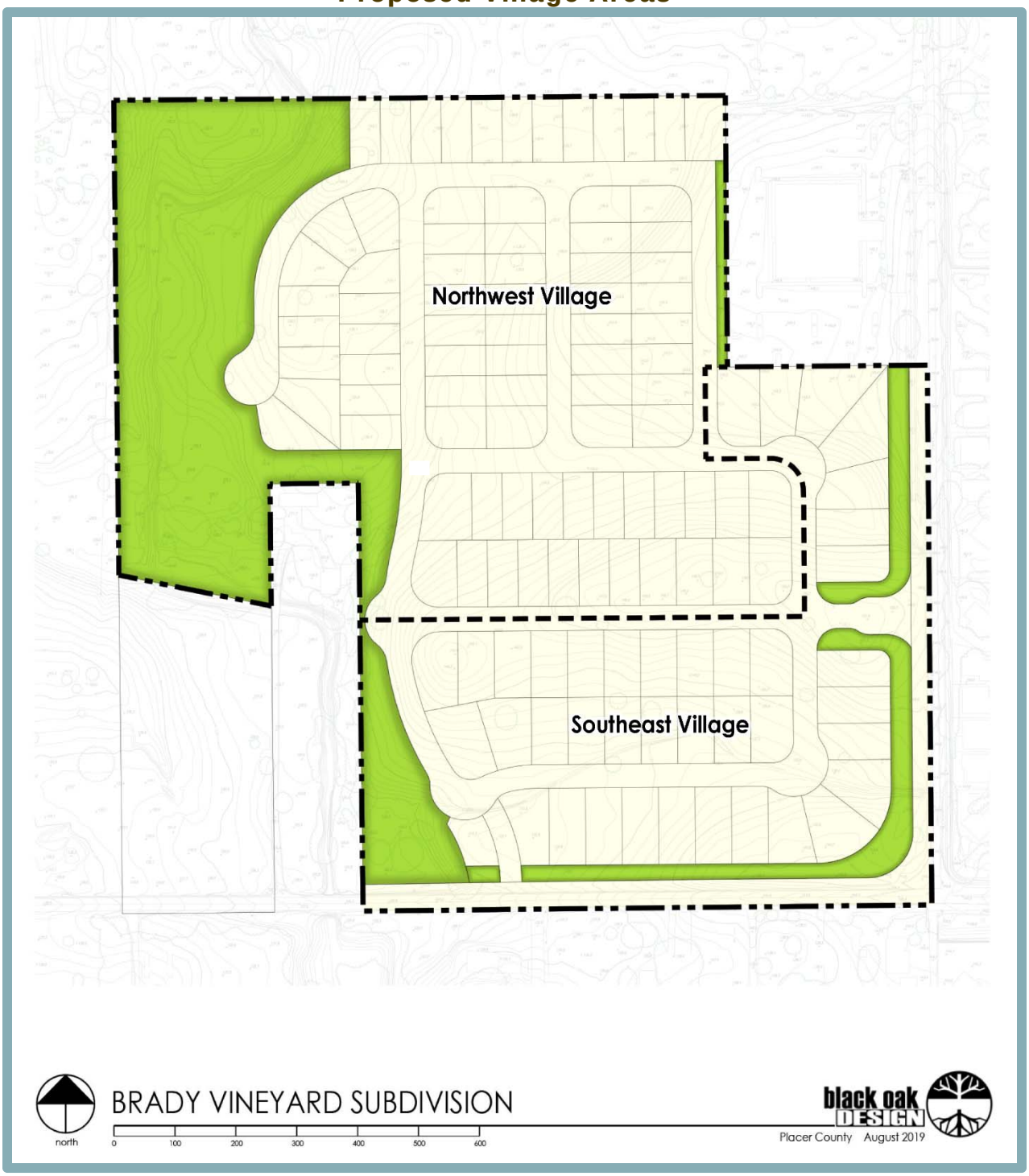


Figure 3-5
Existing and Proposed Land Use Designations

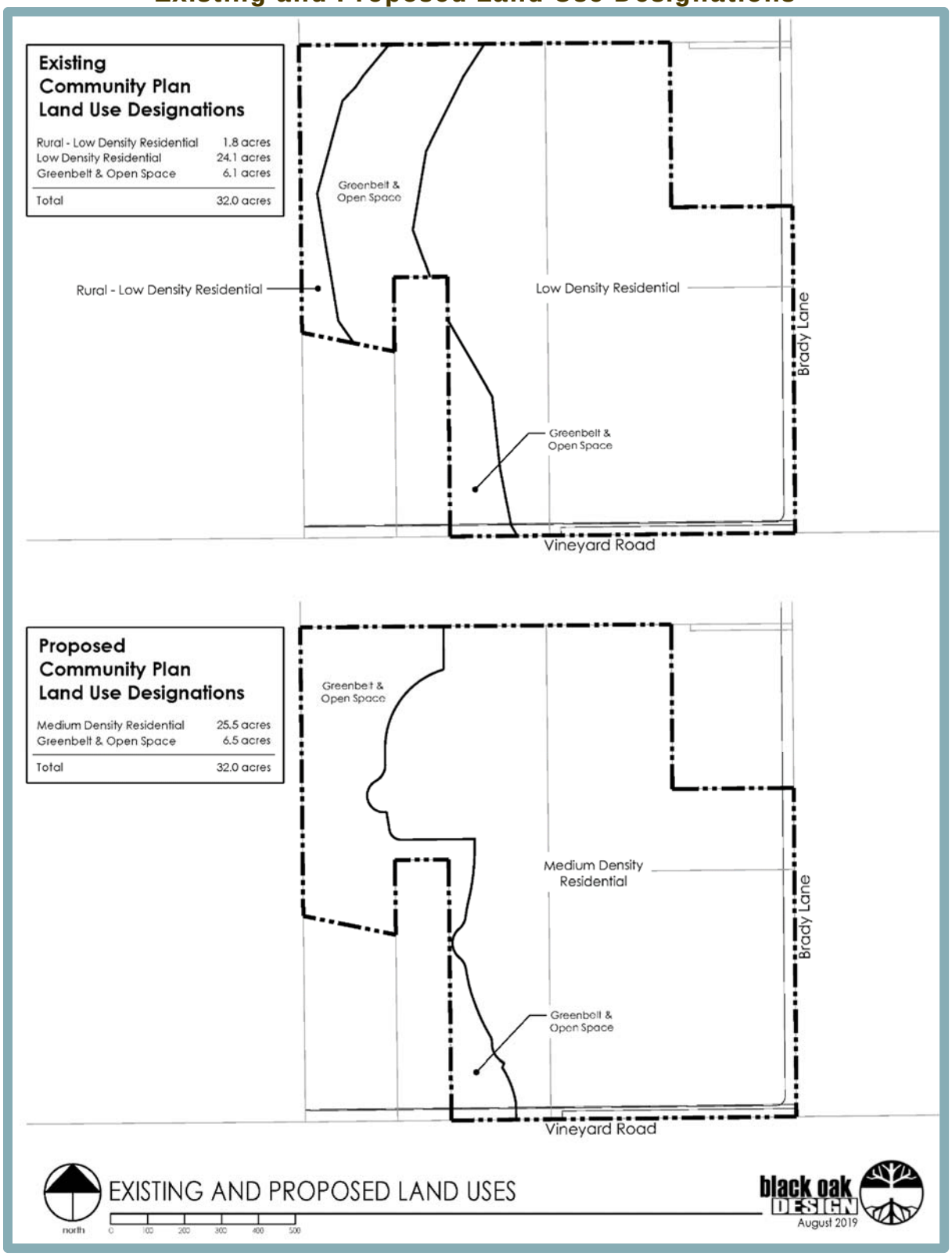
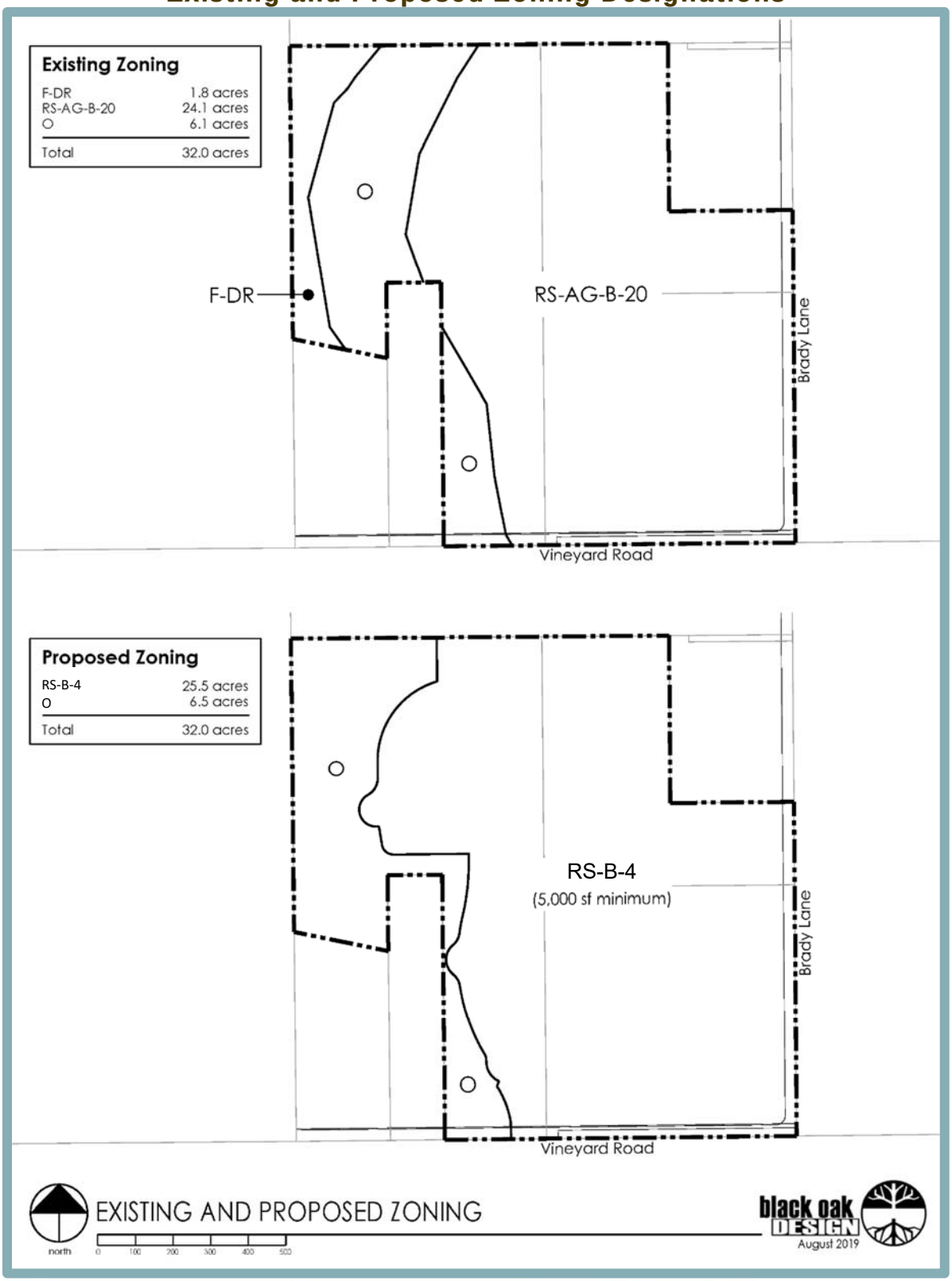


Figure 3-6
Existing and Proposed Zoning Designations



Access and Circulation

The proposed project would include private streets and a gated entry at Brady Lane. A 30-foot wide emergency vehicle access (EVA) for the site would be provided off Vineyard Road. The internal street pattern would consist of two connecting loops, with a cul-de-sac at the northwest corner of the site. The private streets would include separated five-foot sidewalks and three-foot rolled curb and gutter on two 17-foot-wide lanes within a 40-foot right-of-way. Parking would be allowed on both sides of the internal roadways.

Parks, Open Space, Trails, and Landscaping

As part of the proposed project, a total of 6.34 acres of the site would be retained, and protected with a deed restriction, as open space (Lot E), including the unnamed tributary and areas planned for on-site trails. Within Lot E, a total of 1.25 acres are planned for three "linear" parks (see Figure 3-7). In addition, 1.44 acres within the site would consist of landscape lots (Lots B, C, and D). The proposed trails would consist of a decomposed granite trail/sidewalk system that would extend from the northern property boundary and connect to the three separate linear park areas located along the riparian corridor. Small turf areas and benches would be provided within the open space areas. The trail would provide for access to Vineyard Road, with a connection looping eastward back to the main entry road.

Fencing along the open space corridor would be a post and cable design where adjacent to the road or trails, and an open iron design where adjacent to residential lots. Each internal street would include street trees, planted with either 15-gallon pistache (*Pistacia chinensis*) or London plane (*Platanus* × *acerifolia*) trees. The project entry would be accented with low stone walls, while other fencing within the project site between individual lots would be six-foot-tall solid wood.

With the exception of low-voltage, LED, landscape accent lights that would be provided at the gated entry, streetlights and other lighting elements are not proposed along the subdivision streets; however, a streetlight may be required at the intersection of the project entry and Brady Lane and the northwest corner of the intersection of Brady Lane and Vineyard Road.

The Vineyard Road frontage would include a setback/buffer of nearly 35 feet (minimum 25-foot from back of right-of-way to southern property line of the project site) and would be screened with a landscaped berm between the proposed six-foot-wide meandering decomposed granite path and property line. The Brady Lane frontage would also include a setback/buffer of nearly 35 feet from the edge of right-of-way to the project's eastern property line. The project would similarly be partially screened by a landscaped berm generally located between the sidewalk and the property line. Both berms may include a short masonry base wall, with portions including a five-foot-tall open iron fence on top.

Utilities

Figure 3-8 and Figure 3-9 provide an overview of the proposed water, sewer, and stormwater utility improvements.

Treated water service for the project would be provided by California American Water (Cal-Am) via its agreement with Placer County Water Agency (PCWA). New public water mains would be installed on-site and along the Brady Lane and Vineyard Road frontages. As shown in Figure 3-9, the proposed project would include a new connection to an existing 12-inch water main located in Vineyard Road to the southeast of the project site.

Figure 3-7
Preliminary Landscaping and Fencing Plan

Figure 3-8
Preliminary Utility Plan (North)

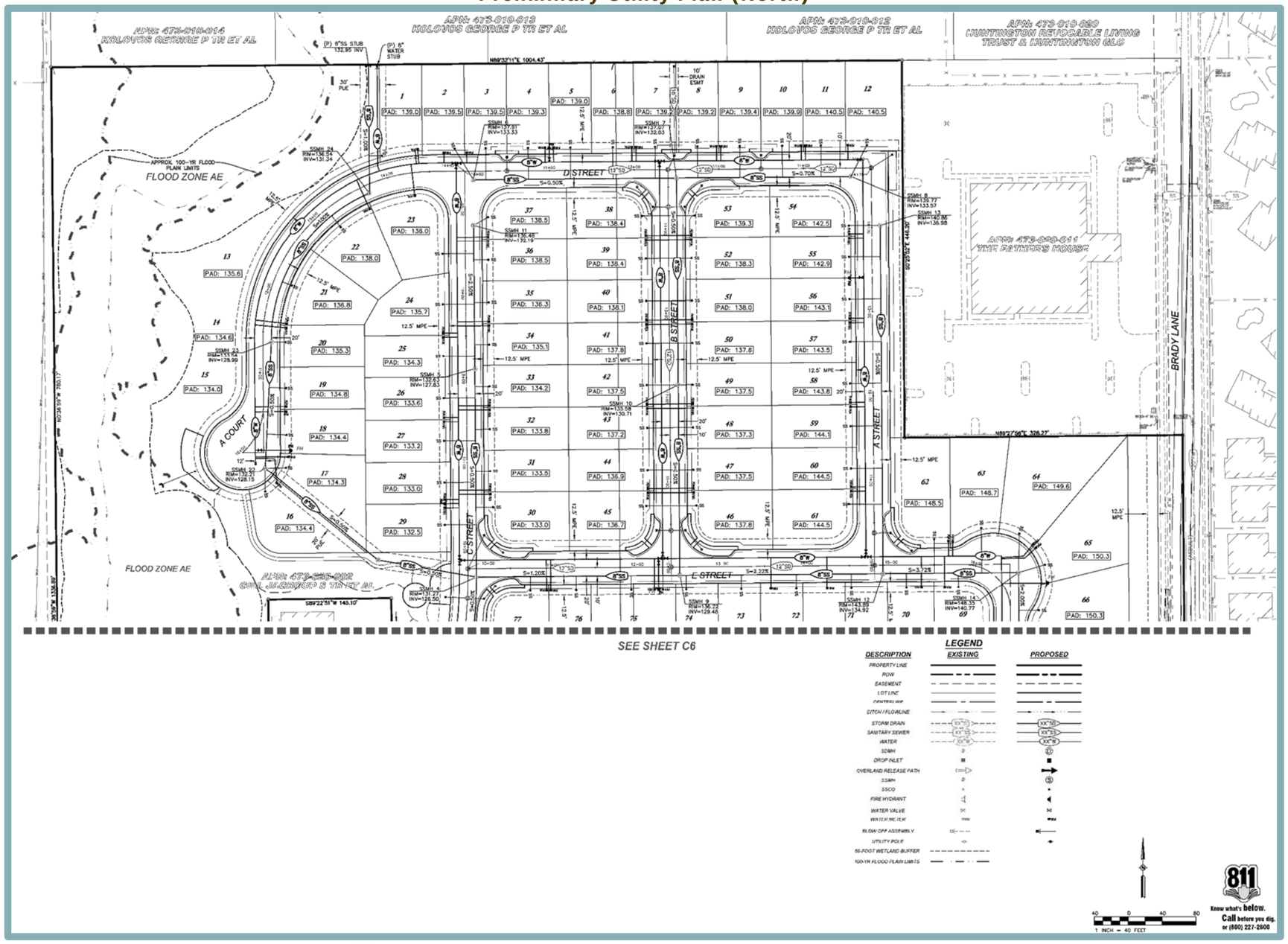
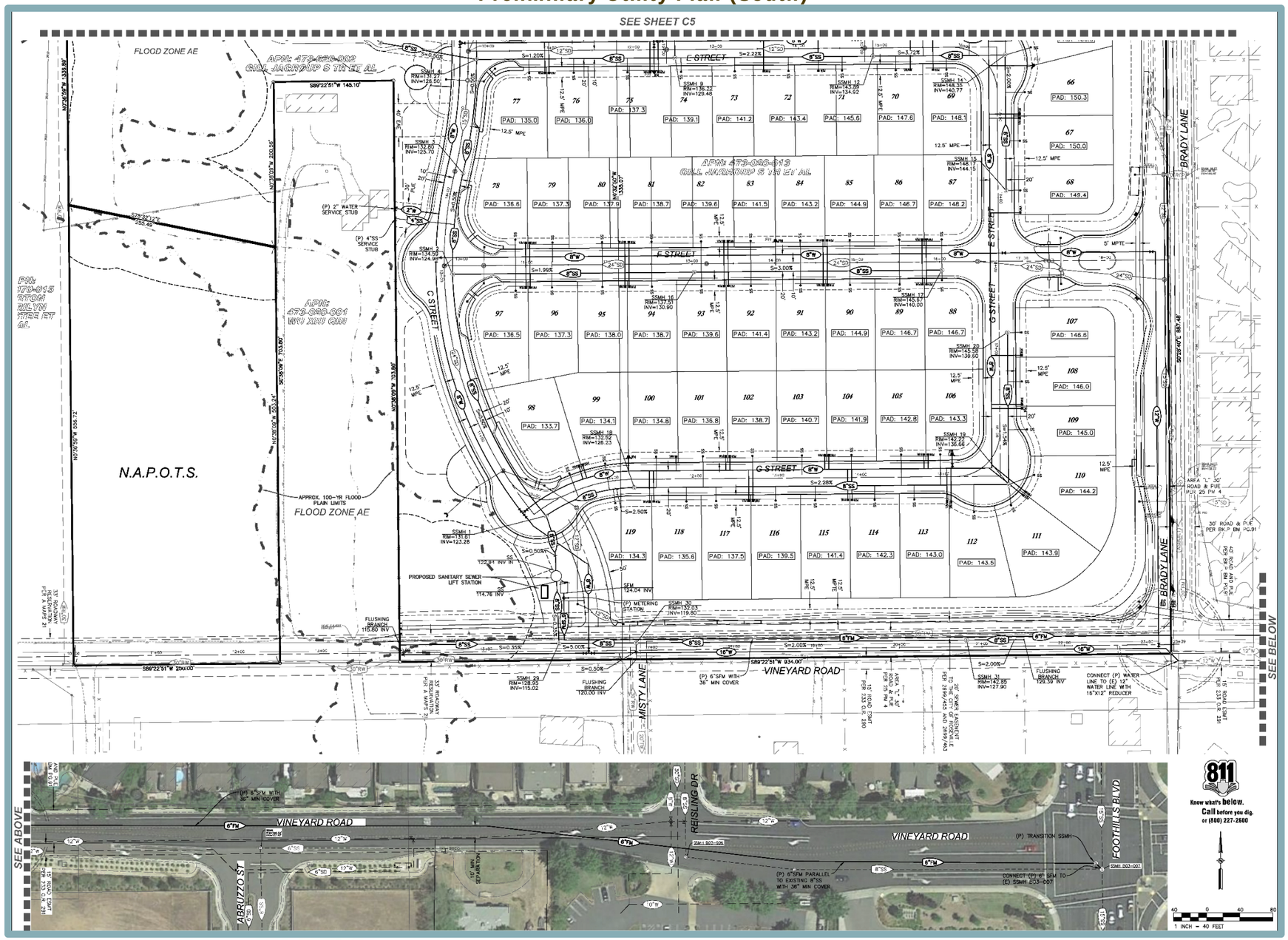


Figure 3-9
Preliminary Utility Plan (South)



From the connection point, the project would include extension of two new water lines: a new eight-inch water line extending northward within Brady Lane to the project site access; and a 16-inch water line extending westward within Vineyard Road to the southwestern site boundary. Both water lines would connect to the interior of the project site by way of a series of eight-inch lines extending throughout the proposed on-site roadways.

The project site would be annexed into Placer County Service Area 28, Zone 173, for sanitary sewer service, subject to Placer County Board of Supervisors approval. The proposed project would include installation of an on-site gravity sewer collection system. The on-site sanitary sewer system would flow to a new lift station to be located on Lot A, on the north side of Vineyard Road, east of the on-site tributary and opposite Misty Lane. The lift station would be primarily undergrounded; a manhole cover, control panel, and other associated piping and apparatuses would be visible from the surface. The lift station would be surrounded by a fence with slats, which would screen views of the aforementioned equipment from Vineyard Road. The lift station, which would be financed by the project applicant, has been previously planned by the County per the Northeast Area Sewer Master Plan and would have capacity to serve the northeast portion of the DCWPCP area (see Figure 15-5 in Chapter 15, Utilities and Service Systems). The proposed project would require off-site sewer improvements, as well, which are discussed in further detail within the Off-Site Improvements section below.

Stormwater generated by impervious areas within the project site would be collected by a series of new drain inlets and conveyed, by way of new on-site drainage pipes, to a series of bio-retention basins located along the corners of the internal roadways within the site (see Figure 3-10). The basins would include layers of soil and gravel that would provide for treatment of stormwater pollutants prior to collection and conveyance of treated stormwater by a perforated underdrain. The treated stormwater from the bio-retention basins would drain to the on-site tributary at two outfall locations. As noted previously, the tributary ultimately flows to Dry Creek.

Off-Site Improvements

The following sections describe the off-site improvements that would be included as part of the proposed project.

Brady Lane Improvements

Brady Lane is located within the City of Roseville. Currently, Brady Lane has been widened to include a parking lane/bicycle lane, curb, gutter, and sidewalk for approximately 210 feet of the northernmost portion of the project's frontage. The existing widening is approximately 22 feet-wide, as measured from the fog line of the existing southbound lane to the lip of gutter.

The proposed project would continue widening of Brady Lane along the project frontage and would provide for curb, gutter, and sidewalk improvements southward to the Brady Lane/Vineyard Road intersection, as generally shown under the "Interim" condition in Figure 3-11. As shown in Figure 3-11, the ultimate cross-section of the roadway, as per City of Roseville standards, would include a 10-foot northbound travel lane, a 14-foot center turn lane, a 10-foot southbound travel lane, with both sides of the roadway containing a five-foot bike lane, curb and gutter, and a five-foot attached sidewalk. In addition, the project includes a school bus turnout along the west side of Brady Lane, south of the project site access.

Figure 3-10
Preliminary Stormwater Control Plan

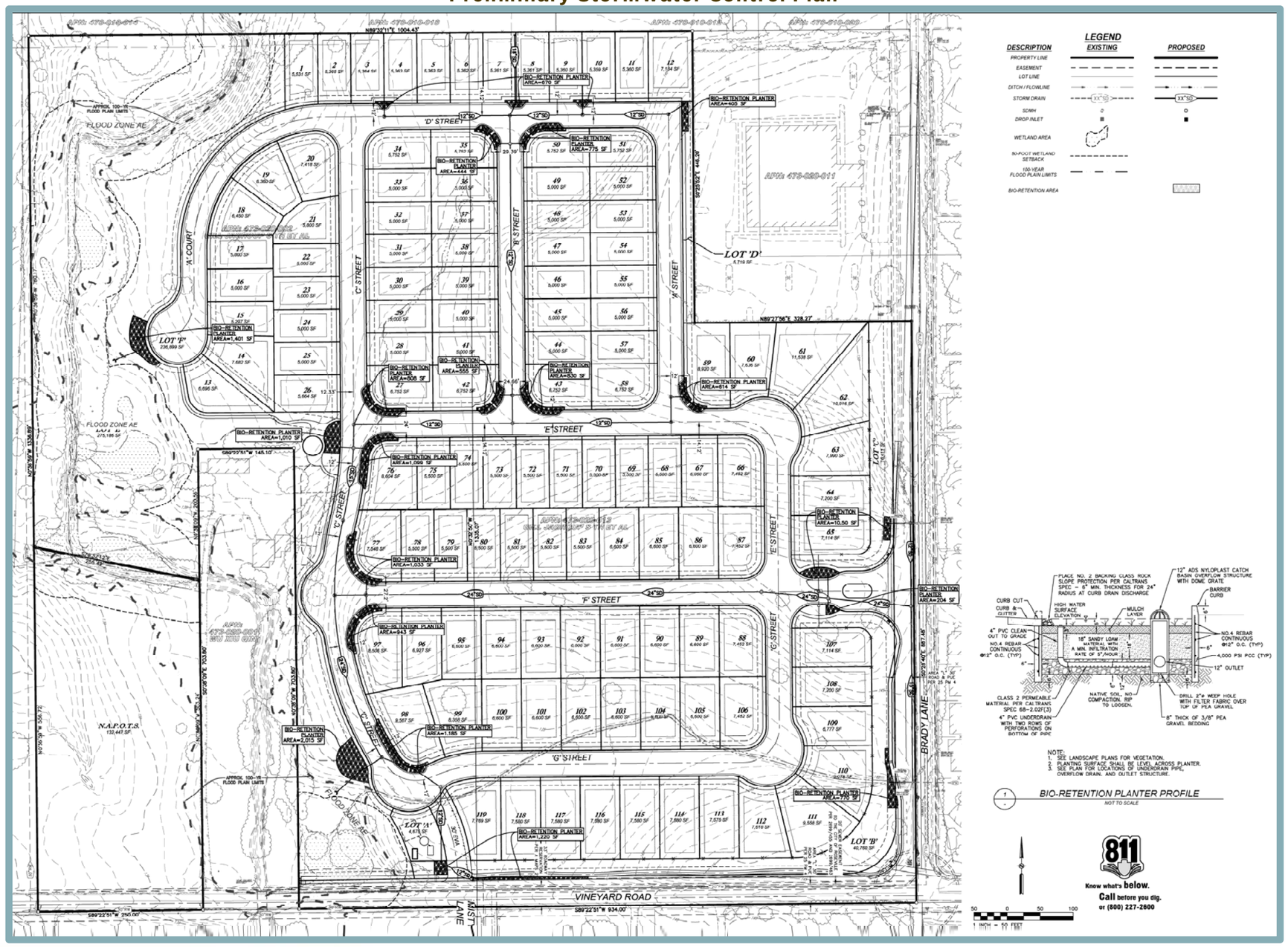
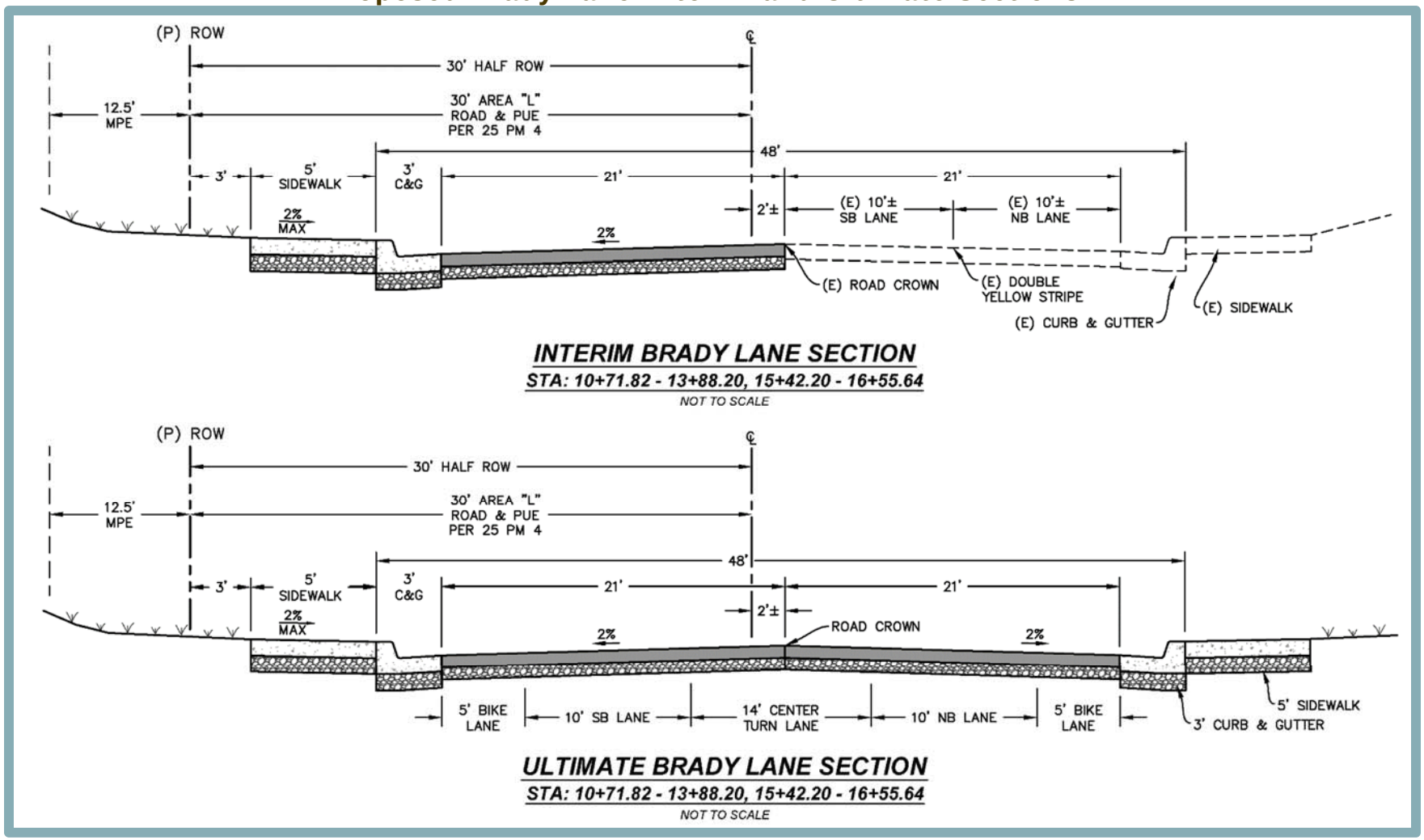


Figure 3-11
Proposed Brady Lane Interim and Ultimate Sections



Vineyard Road Improvements

At the County's request, the project would include widening of Vineyard Road by approximately 12 to 14 feet to accommodate one-half of a future 14-foot, two-way, left-turn lane, one 12-foot through lane, and a new six-foot bike lane (see Figure 3-12). In addition, the widened section would include an asphalt dike to direct drainage to a bio-retention planter. In total, the widened roadway section would include a width of 25 feet from the striped double yellow centerline. The interim and ultimate sections of the roadway are shown in Figure 3-13.

The road section would taper to the west, and the proposed on-site trail would terminate at a barricade at the western property line, with a 90-degree angle turn towards the edge of the road. A 30-foot-wide EVA off Vineyard Road would also provide access to a sewer lift station, to be located on Lot A, as shown in Figure 3-3.

Sewer System Improvements

As noted previously, the on-site sanitary sewer system would flow to a new lift station to be located on Lot A, on the north side of Vineyard Road, east of the on-site tributary and opposite Misty Lane. As part of the proposed project, a new eight-inch gravity sewer line would be constructed off-site within Vineyard Road, connecting to the new lift station. The eight-inch sewer line would allow for future planned development in the project sewer shed to route wastewater to the lift station. New dual six-inch sewer force mains would be constructed off-site within Vineyard Road, between the lift station and the existing manhole (SMH B03-006) located within Foothills Boulevard as shown in Figure 3-9. From there, sewage would gravity flow south and then west to the regional Dry Creek Wastewater Treatment Plant (DCWWTP).

Project Phasing and Construction

All project improvements, including off-site improvements, are anticipated to be built in a single phase, with homes constructed over a two- to three-year period. All lots within the project site would be pad graded, with lots adjacent to the 100-year floodplain pad graded a minimum of two feet above the 100-year flood elevation. An estimated 57,015 cubic yards (CY) of cut and 57,015 CY of fill would be required during on-site grading activities, meaning that cut and fill would be balanced on-site and net import or export of soil would not be required.

Conditional Use Permit

Per Section 17.14.010 of the Placer County Code, parks, playgrounds, and golf courses are considered a conditional use within the Open Space (O) zoning district. Therefore, the proposed project would require a CUP to construct the proposed on-site tot lot within the O zoning district.

Variance

Per Sections 17.50.010 and 17.52.040(C)(3) of the Placer County Code, projects with a -B combining district with lot sizes of 8,000 sf or less are limited to site coverage restrictions of 40 percent maximum.

The proposed project would require a Variance to increase the allowable building coverage to 50 percent for one-story units, while two-story units would remain at the allowable 40 percent maximum.

Minor Boundary Line Adjustment

The proposed project would require approval of a Minor Boundary Line Adjustment to create a separate parcel for the three-acre NAPOTS area at the southwestern portion of the project site.

Figure 3-12
Proposed Vineyard Road Transitional Widening: Full Width to Property Line

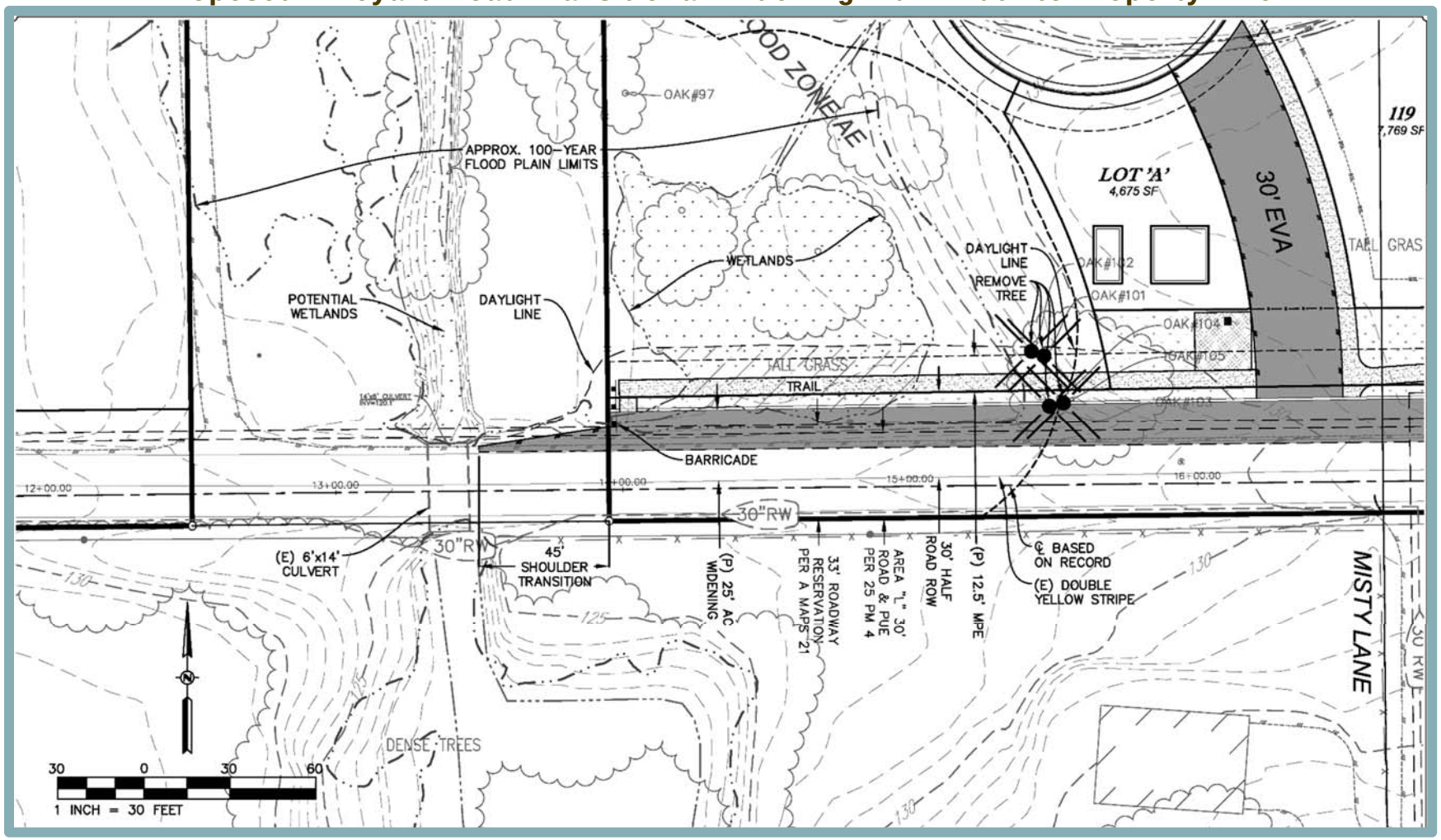
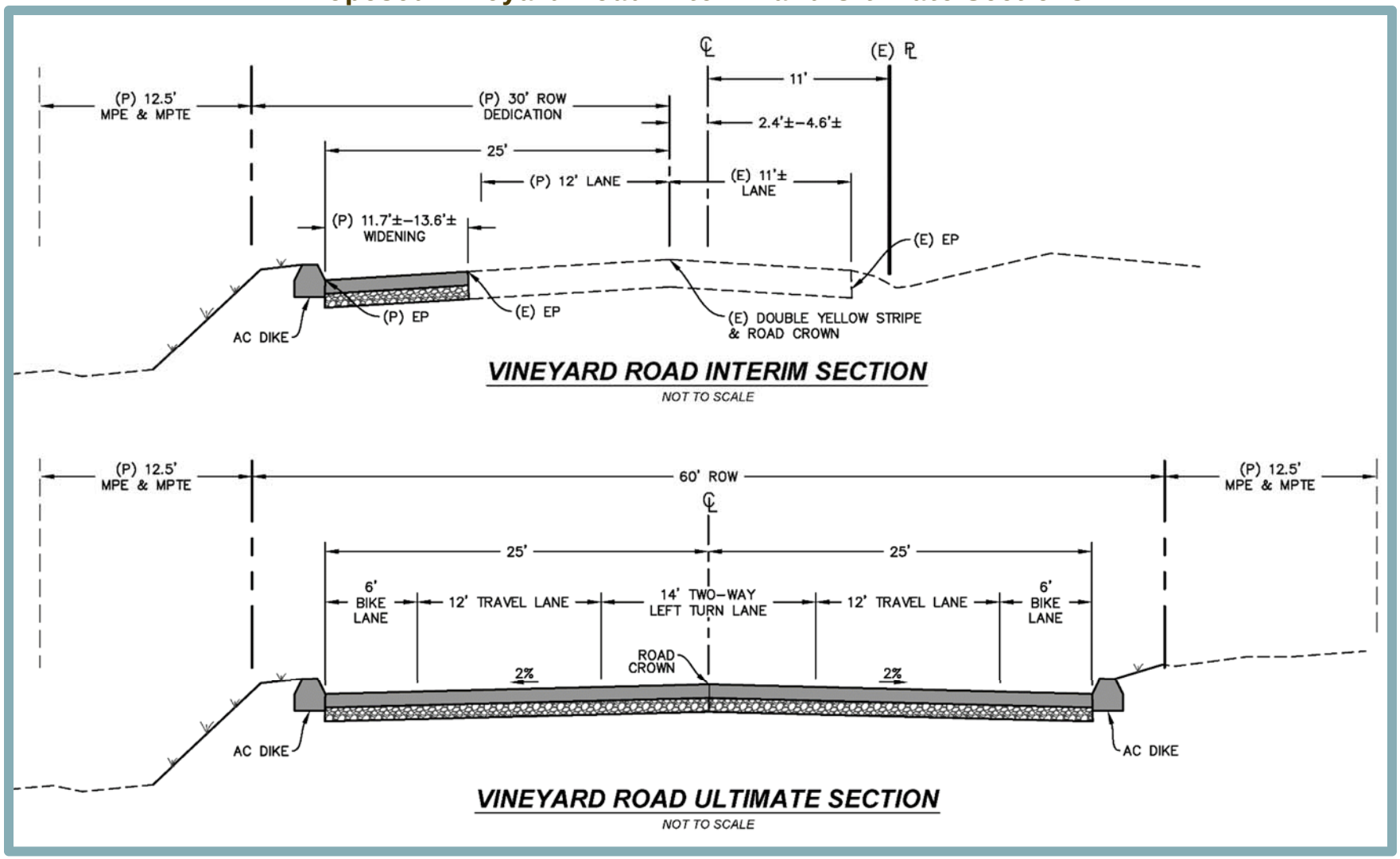


Figure 3-13
Proposed Vineyard Road Interim and Ultimate Sections



Design Exception Request

As noted previously, the proposed private streets within the project site would include separated five-foot sidewalks and three-foot rolled curb and gutter on two 17-foot-wide lanes within a 40-foot right-of-way. The proposed road section deviates slightly from County Plate 105, which specifies a roadway easement of 50 to 58 feet, measured from back of walk. The project proposal is to provide a 40-foot roadway easement, measured from back of curb. The width of the paving, curb and gutter, and sidewalks (outside of the easement) would still conform to County Plate 105. The deviation requires a Design Exception Request and can be approved administratively.

Annexations

The proposed project would include annexation into the Dry Creek Zone of Benefit (CSA 28, Zone 165) for provision of fire protection services to the project site by the Placer County Fire Department (PCF). Given that fire protection and emergency medical services within Zone 165 are the responsibility of Placer County, the requested annexation would be subject to approval by the County Board of Supervisors. Police protection services would be provided primarily by the Placer County Sheriff's Office.

The proposed project would also require annexation into Placer County Service Area 28, Zone of Benefit 169, for the purpose of generating funds for the maintenance of public park and open space facilities in the Dry Creek area, as well as annexation into Placer County Service Area 28, Zone 173, for sanitary sewer service.

The requested annexations would be subject to approval by the County Board of Supervisors.

3.6 PROJECT APPROVALS

The proposed project would require County approval of the following:

- General Plan/Community Plan Amendment (DCWPCP) from LDR 1-2 du/ac (24.1 acres), O (6.1 acres), and RLDR 1-2.3 ac min (1.8 acres) to MDR (25.5 acres) and O (6.5 acres). The existing DCWPCP land use designation for the NAPOTS area would not be altered;
- Rezone from RS-AG-B-20 (24.1 acres), O (6.1 acres), and F-DR (1.8 acres) to RS-B-4 (25.5 acres) and O (6.5 acres). The existing zoning designation for the NAPOTS area would not be altered;
- Vesting Tentative Subdivision Map for the subdivision of a 35-acre site into a 119-lot residential single-family subdivision;
- CUP to allow the proposed on-site tot lot within the O zoning district;
- Variance to increase allowable building coverage on residential lots from the maximum 40 percent to 50 percent for one-story units;
- Minor Boundary Line Adjustment to create the NAPOTS parcel;
- Design Exception Request for private internal roadways (Administrative Approval);
- Annexation into the Dry Creek Fire Zone of Benefit (County Service Area 28, Zone of Benefit 165) for provision of fire protection services (Placer County Board of Supervisors Approval); and
- Annexation into Placer County Service Area 28, Zone 173, for sanitary sewer service (Placer County Board of Supervisors Approval).
- Annexation into Placer County Service Area 28, Zone of Benefit 169 for the purposes of generating funds for the maintenance of public park and open space facilities in the Dry Creek area (Placer County Board of Supervisors Approval).

In addition, the project would require the following approvals/permits from other responsible and trustee agencies:

- Section 404 Nationwide Permit (or Letter of Permission) (USACE);
- Section 401 Water Quality Certification (RWQCB – Central Valley Region);
- Authority to Construct and Permit to Operate the proposed sewer lift station backup generator (Placer County Air Pollution Control District); and
- Potential Section 1600 Lake or Streambed Alteration Agreement (CDFW).

4. Aesthetics

4. AESTHETICS

4.1 INTRODUCTION

The Aesthetics chapter of the EIR describes existing aesthetic resources in the area of the proposed project and the broader region, and evaluates the potential aesthetic impacts of the project. CEQA describes the concept of aesthetic resources in terms of scenic vistas, scenic resources (such as trees, rock outcroppings, and historic buildings within a State scenic highway), and the existing visual quality of the project area. In addition, pursuant to CEQA Guidelines, this chapter describes potential impacts related to light and glare. The following analysis is based on information drawn from the Placer County General Plan,[1] the Placer County General Plan EIR,[2] the Dry Creek-West Placer Community Plan (DCWPCP),[3] the Placer County Design Guidelines,[4] and the Placer County Landscape Design Guidelines.[5]

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

4.2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing conditions of visual resources in the vicinity of the project site, which is located within the eastern portion of the DCWPCP, west of the City of Roseville city limits.

Visual Character of the Region

The area covered by the DCWPCP encompasses approximately 9,200 acres in the southwest portion of Placer County, California. Currently, the project region is developed with a variety of scattered rural single-family homes, as well as a small number of residential subdivisions. The most dominant natural feature in the DCWPCP area is Dry Creek and associated woodlands and riparian habitats. Dry Creek and the associated tributaries generally trend east to west through the central portion of the region, punctuating the open grassland areas present in the eastern portion of the DCWPCP area and the residential subdivisions to the west. The topography is generally flat.

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1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.
4 Placer County. *Design Guidelines Manual.* Revised September 24, 2003.
5 Placer County. *Placer County Landscape Design Guidelines.* Adopted May 7, 2013.

State Scenic Highways

According to the California Department of Transportation (Caltrans) map of designated and eligible scenic routes under the California Scenic Highway Program, officially-designated State scenic highways do not exist within the vicinity of the project site or in Placer County.[6]

Visual Character of the Project Site and Surrounding Area

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

Project Site

Currently, the project site consists primarily of ruderal grasses and is absent of structures or other indications of prior development. The western portion of the site contains an unnamed tributary that flows southward to Dry Creek. One seasonal swale and one drainage ditch within the site drain to the tributary. Existing riparian woodland lines both sides of the tributary, and scattered almond trees are located along the drainage ditch. The topography of the site is gently undulating, and a small knoll is located near the northwest portion of the site. Figure 4-1 through Figure 4-4 below provide representative views of the project site from the adjacent roadways. The photos include views from vantage points from roadways along the project site in which the site is visible. This grouping of photos does not comprise an exhaustive collection of every view that includes the project site from all vantage points, but is meant to show representative views toward the site from the two contiguous roads.

Surrounding Areas

The areas to the north and west of the site are primarily vacant and undeveloped, with the exception of the Father's House church located north of the site along the Brady Lane frontage. The nearest home to the west of the site is approximately 1,000 feet from the site boundary, and the nearest home to the north is located approximately 360 feet from the site boundary. To the south of the site, neighboring uses include four rural single-family homes across Vineyard Road. Generally, the areas to the north, west, and south of the site are representative of the rural character that largely defines the eastern portion of the DCWPCP. Neighboring uses to the east of the site include a single-family residential subdivision located across Brady Lane, within the City of Roseville limits. The subdivision includes lots from 5,000-square foot (sf) minimum lots with single-family homes that are typically located approximately 20 feet from the eastern edge of pavement along Brady Lane and are screened from the road with mature landscaping and masonry walls.

A two-acre rectangular-shaped parcel, located at 1940 Vineyard Road, extends approximately 700 feet north (roughly halfway) into the project site. The parcel is developed with a house and associated outbuildings, located approximately 25 feet from the parcel's northern property line and 15 feet from its eastern property line. The existing on-site tributary flows through a culvert crossing under Vineyard Road near the south/center of the two-acre parcel.

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[6] Department of Transportation. *California Scenic Highway Mapping System, Placer County.* Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/. Accessed February 2019.

Figure 4-1
Existing View of Project Site from Brady Lane Looking West

Figure 4-2
Existing View of Project Site from Brady Lane / The Father's House Church Looking Southwest

Figure 4-3
Existing View of Project Site from Vineyard Road Looking Northeast

Figure 4-4
Existing View of Project Site from Vineyard Road Looking Northwest

Off-Site Improvement Areas

Off-site improvement areas associated with the proposed project would include widening improvements to Brady Lane and Vineyard Road along the project frontages, as well as extension of a new sewer line within Vineyard Road east to Foothills Boulevard. All improvements would occur within the paved right-of-way. Generally, the off-site improvement areas do not possess any unique visual characteristics.

Viewer Types

Viewer types in the vicinity that have views of the project site include the following:

- *Motorists* along Vineyard Road and Brady Lane have existing views of the project site while driving past the site.
- *Pedestrians and bicyclists* along Brady Lane have existing views of the site. Vineyard Road does not include paved shoulders or sidewalks on either side of the roadway adjacent to the project site; thus, bicycle and pedestrian traffic along Vineyard Road in the project vicinity is limited.
- *Church members* at The Father's House church located northeast of the site have unimpeded views of the project site from the church parking lot.
- *Residents* of the existing single-family residential subdivisions to the east of the site within the City of Roseville have limited views of the project site from upper-story windows. Ground-level views for such residents are blocked by intervening hardscape and landscape features. To the south of the site, the existing single-family rural residences have views of the project site from across Vineyard Road. Views of the site from the residences to the northeast are blocked by landscaping elements along the northern boundary of the existing church. Views of the site from the existing residences to the west and northwest, including the single-family home located at 1940 Vineyard Road, are partially obscured by the riparian vegetation associated with the on-site tributary along the site's western boundary.

Public Versus Private Views

Travelers along nearby roadways, as well as the nearby residences east and south of the project site, would be considered sensitive visual receptors. However, it is important to distinguish between public and private views. Private views are views seen from privately-owned land and are typically viewed by individual viewers, including views from private residences. Public views are views that are experienced by the collective public. In the case of the proposed project, public views would consist primarily of views from Vineyard Road and Brady Lane in the project vicinity.

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

Existing Conditions of Key Viewpoints

A number of key viewpoints that would most clearly display the proposed project's potential visual effects have been selected for in-depth analysis. For the purpose of this analysis, the segments of Vineyard Road and Brady Lane within the project vicinity are characterized as key viewpoints.

Existing Views from Vineyard Road

Existing views of the project site from Vineyard Road consist of rural grassland with scattered trees in the foreground. From the southwest of the site, the foreground consists predominantly of riparian vegetation associated with the existing on-site tributary, which partially obscures views of the on-site grassland areas. The Father's House church and the two-story single-family homes within the subdivision to the east of the site are visible beyond the site in the background. The visual character of the viewshed reflects a transition between the rural residential landscape to the west of the site and the more densely developed urban landscape to the east of the site that is located within the City of Roseville.

Existing Views from Brady Lane

Views of the project site from Brady Lane consist of rural grassland with scattered trees. Dense vegetation associated with the existing on-site tributary, as well as vegetation along Vineyard Road to the south of the site, is visible in the distance. The rural visual character of the viewshed is consistent with grassland located beyond the site to the west and north.

Light Pollution and Glare

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

The project site is primarily characterized by an undeveloped, unlit landscape. As such, sources of light and glare do not currently occur on the project site. However, the project site is located within the vicinity of existing residential development to the south and east. Lighting associated with such development, as well as street lighting along Brady Lane and headlights from vehicles traveling on Brady Lane and Vineyard Road, contributes to the overall nighttime lighting environment of the project area.

4.3 REGULATORY CONTEXT

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

State Regulations

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

California Scenic Highway Program

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

Local Regulations

The following local regulations are applicable to the proposed project.

Placer County General Plan

The following design goals and policies of the Placer County General Plan are applicable to the proposed project.

Goal 1.K To protect the visual and scenic resources of Placer County as important quality-of-life amenities for County residents and a principal asset in the promotion of recreation and tourism.

Policy 1.K.3 The County shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.

Policy 1.K.4 The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines:

a. Limit cuts and fills;
b. Limit grading to the smallest practical area of land;
c. Limit land exposure to the shortest practical amount of time;
d. Replant graded areas to ensure establishment of plant cover before the next rainy season;
e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development; and
f. Provide and maintain site-specific construction Best Management Practices (BMPs).

Policy 1.K.5 The County shall require that new roads, parking, and utilities be designed to minimize visual impacts. Unless limited by geological or engineering constraints, utilities should be installed underground and roadways and parking areas should be designed to conform to the natural terrain.

Goal 1.O To promote and enhance the quality and aesthetics of development in Placer County.

Policy 1.O.9 The County shall discourage the use of outdoor lighting that shines unnecessarily onto adjacent properties or into the night sky.

Goal 6.D To preserve and protect the valuable vegetation resources of Placer County.

Policy 6.D.12 The County shall support the retention of heavily vegetated corridors along circulation corridors to preserve their rural character.

Dry Creek-West Placer Community Plan

The relevant goals and policies from the DCWPCP related to aesthetics are presented below.

Land Use Plan

Goal 2 To preserve outstanding visual features, natural resources, and landmarks.

Goal 6 To encourage compatibility between neighboring land uses.

Community Design Element

Goal 1 This plan strives to preserve the natural land forms, natural vegetation, and natural resources of the area as much as possible, while also recognizing the deleterious effects of intense development in the surrounding areas.

Goal 2 It is a goal of the plan to encourage and support projects which exemplify good design characteristics when judged against the goals and policies of this plan as well as other applicable design and landscape guidelines.

Goal 5 It is a goal to maintain the heavily vegetated corridors that exist along circulation routes to preserve their rural nature and their value as natural noise buffers.

Goal 6 It is a goal to create residential development which allows the following elements: human interaction, bicycle and pedestrian circulation, an appropriate relationship to existing development in the area, and the creation of a neighborhood identity and/or focus (i.e. parks, schools, natural open space areas, creek site of historical or archaeological significance, etc.).

Goal 8 A major goal of the plan is to utilize and improve the Dry Creek environs as a focal point of existing and new neighborhoods to be created in the area through the placement of park facilities, roadways, trails, interpretive areas, visibility, etc.

Policy 1 Wherever possible, natural features should be retained as buffers between different, potentially incompatible uses. Where natural features are not available, landscaped buffer yards shall be provided to minimize the adverse effects of higher intensity uses upon lower intensity uses.

Policy 3 Preservation of natural features, noise exposure, road access, and relationship to the surrounding properties shall be considered in preparing subdivision designs. Subdivision density, or total number of lots, will ultimately be determined by these factors. The development of the maximum number of lots permitted by the zoning will not be possible in most cases due to these and other design considerations required by this Plan.

Policy 9 Night lighting, visible from the exterior of buildings shall be limited to that necessary for security, safety, and identification.

Policy 10 Projects within the Plan area will comply with the Placer County Landscape Guidelines, the Placer County Design Guidelines, and the specific design guidelines contained in the Plan.

Policy 11 Landscaping shall be used to reduce the visual impact of all structures, including solid fences. Natural vegetation should dominate where possible. Where existing vegetation is inadequate the use of native plant materials is encouraged. Landscaping materials provide an informal character and smooth transition between buildings, parking lots, adjoining roadways and open areas.

Policy 12 Large, bulky and unscreened structures shall be discouraged, particularly if they are visible from the road.

Policy 13 The use of natural materials (i.e., wood siding, brick, block, and field stone) is required. Primary exterior colors shall blend with the surrounding natural landscape. The use of "earthtones" or natural finishes which blend with the natural background is encouraged.

Policy 15 In place of sound wall construction, require, wherever possible, the use of greater setbacks to provide a scenic corridor for all parcels fronting on all the major circulation routes (2, 4, or 6 lanes of traffic). Long expanses of sound walls are not consistent with the desired character of the Plan area and the use of open space setbacks and landscaping instead, will be a major difference between this area and surrounding areas to the north and south.

Policy 18 Utility lines hall be installed underground to ensure minimum disruption to the environment and as little disturbance as possible to vegetation, particularly in scenic corridors.

Placer County Landscape Design Guidelines

The Placer County Landscape Design Guidelines were adopted by the Placer County Board of Supervisors on May 7, 2013. The overall purpose of the Placer County Landscape Design Guidelines is to provide County staff, prospective developers, and stakeholders with a basic framework for designing landscaped areas within unincorporated Placer County and to ensure continuity, consistency, and quality design. In addition, the Guidelines are used to assist the Planning Services Division with their review of submitted plans for landscape improvements by providing consistent and specific design criteria intended to help determine if a proposal is acceptable. The Guidelines focus on landscaping requirements for streetscape and parking lots.

Placer County Design Guidelines Manual

The Placer County Design Guidelines Manual includes guidelines and standards that aim to remove as much design discretion as possible at the staff level in order for prospective developers to assess their chances of approval based on consistency with the manual. The overall goal of the Placer County Design Guidelines Manual is to promote visual environments in the communities of western Placer County that are of high aesthetic quality, offer variety in developing

community design images reflective of community heritage, and, in some cases, maintain an overall rural continuity while, in others, identify an appropriate urban design theme.

There is no particular "style" proposed for residential or institutional structures in western Placer County but the focus should be on constructing a high quality residential environment which is sensitive to the surrounding neighborhood character. The Guidelines strive for "quality" architecture through the descriptions of appropriate and inappropriate materials and architectural expression. The proposed project would include a variety of architectural styles, including craftsman, California Farmhouse, Monterey, Tuscan, French country and traditional elevation styles. Exterior materials would include a mix of stucco, hardboard siding, stone and masonry. Building colors would be selected to compliment and blend with the project environment.

4.4 IMPACTS AND MITIGATION MEASURES

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

Standards of Significance

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

- Have a substantial adverse effect on a scenic vista (see Chapter 16, Effects Not Found to be Significant);
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (see Chapter 16, Effects Not Found to be Significant);
- In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

As noted above, issues related to whether the proposed project would result in any of the following impacts are discussed in Chapter 16, Effects Not Found To Be Significant, of this EIR:

- A substantial adverse effect on a scenic vista; or
- Substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.

Method of Analysis

The section below gives full consideration to the development of the proposed project and acknowledges physical changes to the existing setting. Impacts to the existing environment of the project area are to be determined by the contrast between the visual setting before and after buildout of the proposed project. The standards of significance listed above are used to delineate the significance of any visual alterations of the site, including alterations that would impact views from public viewsheds in the project area.

It should be noted that in addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order to meet the County's affordable housing requirements. However, the total number of residential lots would remain unchanged, as would the overall disturbance area associated with the project. Therefore, from an aesthetics perspective, the potential inclusion of an additional 12 units on-site would not result in new impacts or substantially more severe impacts beyond the analysis presented herein.

Project-Specific Impacts and Mitigation Measures

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

4-1 In a non-urbanized area, substantially degrade the existing visual character or quality of public views of the site and its surroundings (public views are those that are experienced from publicly accessible vantage point) or, in an urbanized area, conflict with applicable zoning and other regulations governing scenic quality. Based on the analysis below, the impact is *less than significant*.

Generally, the project site is located within an urbanizing area. The area to the east of the site within the City of Roseville is built out with residential subdivisions, apartments, and various commercial uses. In addition, extensive development has occurred within the surrounding environs to the north and south of the site, outside of the DCWPCP area. Nonetheless, given that the existing development in the immediate vicinity of the site to the north, west, and south is primarily rural in nature, the analysis within this chapter considers the project area to be non-urbanized in order to provide a conservative analysis.

The proposed project would develop the site with a total of 119 single-family residences and various associated improvements, including new internal roadways, and a new on-site sewer lift station. A total of 6.34 acres of the site would be retained as open space (Lot E), including areas planned for an on-site trail. Within Lot E, a total of 1.25 acres are planned for development with three linear parks. In addition, 1.44 acres within the site would consist of landscape lots (Lots B, C, and D). The three-acre NAPOTS area within the southwestern portion of the site would remain vacant and undeveloped.

It should be noted that trench locations for all necessary utility improvements, including off-site proposed water and sewer improvements within Vineyard Road and Brady Lane, would be located within previously disturbed areas in or adjacent to existing roadways. All utilities would be placed underground. As such, installation of utilities would not result in significant alteration to existing vegetation or otherwise permanently degrade the visual character or quality of the project area.

The proposed project would be landscaped with both existing and proposed native trees, shrubs and groundcover (see Figure 3-7, Preliminary Landscaping and Fencing Plan). While the project would require removal of a small number of existing trees along the

project frontage at Vineyard Road in order to accommodate the proposed road widening, the project would retain oak woodland and riparian area along the western border of the site and would also involve the replanting of various other native trees, shrubs and groundcover. Open iron fencing would be constructed in the rear yards of residences backing to Brady Lane and Vineyard Road and also along the western property line of the church property. Front yards would be more traditional, with street trees, and a five-foot sidewalk along the street.

As discussed above, public views of the project site are afforded from Vineyard Road and Brady Lane. Changes to the aforementioned public views due to development of the proposed project are discussed separately in further detail below.

Views from Vineyard Road

With development of the proposed project, views of the project site from Vineyard Road would change from a predominantly undeveloped rural landscape to a single-family residential development. While the project would require removal of a small number of existing trees along the project frontage at Vineyard Road in order to accommodate the proposed road widening, the majority of the existing riparian vegetation associated with the on-site tributary would be retained as part of the project and would continue to partially obscure views of the site for sensitive viewers to the southwest of the site along Vineyard Road. Remaining vegetation, additional plantings, and a chain-link fence with privacy slats would also help to screen views of the proposed sewer lift station within Lot A. In addition, to the south of the proposed lots along Vineyard Road, the project would include a nearly 35-foot buffer (minimum 25-foot from back of right-of-way to southern property line of project site) with an elevated berm, landscaping trees, and shrubs/groundcover plantings to help further screen views of the site (see Figure 4-5). The berm may include a short masonry base wall, with portions including a five-foot-tall open iron fence on top, designed consistent with the Placer County Landscape Design Guidelines. Furthermore, the project would provide for a meandering decomposed granite path along the north side of Vineyard Road at the project frontage to allow for a more pedestrian-oriented streetscape, consistent with Goal 6 from the Community Design Element of the DCWPCP.

Given that 24.1 acres of the approximately 32-acre project site are currently designated Rural-Low Density Residential (RLDR) per the DCWPCP, the County has previously considered development of the project site with residential uses. While the project would include a General Plan/DCWPCP Amendment and rezone to allow for development of the site at an increased density, the proposed 5,000 sf-minimum lot sizes would be consistent with the lot sizes within the existing single-family residential subdivision to the east of the site across Brady Lane. Approximately 50 percent of the homes backing onto Vineyard Road would be limited to single-story homes, with all two-story homes being separated from each other by at least one single-story home, to increase the visual cohesion between the project site and the existing residences in the project area. In addition, views of scenic resources (e.g., ridgelines, other unique terrain, or State scenic highways) beyond the site do not currently exist and, thus, would not be blocked by the project.

The proposed project would be consistent with the Placer County Design Guidelines, the specific design guidelines contained in the DCWPCP, and all applicable sections of Article 17.54, General Development Regulations, of the Placer County Code. Based on the above, public views of the project site from Vineyard Road would not be considered to be

substantially degraded. Furthermore, public views of the project site would be temporary, occurring only as motorists, pedestrians, and cyclists pass by the site.

Views from Brady Lane

Similar to views from Vineyard Road, with development of the proposed project, views of the project site from Brady Lane would change from a predominantly undeveloped rural landscape to a single-family residential development. However, the project would include a nearly 35-foot landscaped buffer with an elevated berm along the length of the project frontage at Brady Lane to help screen views of the site (see Figure 4-5). The buffer would include street trees, shrub/groundcover plantings, and a berm which may include a short masonry base wall, with portions including a five-foot tall open iron fence on top, designed consistent with the Placer County Landscape Design Guidelines. A fence would continue along the shared property line with the existing church, helping to screen views of the proposed homes from the church parking lot.

At the project site access at Brady Lane, the gated project entryway would be landscaped with native vegetation and marked with enhanced hardscape features, including a stone/concrete project identification monument (see Figure 4-6). The identification monument would be designed consistent with Part VII, Section 6, Neighborhood Entries, of the Placer County Landscape Design Guidelines.

Overall, the proposed development on the southern parcel would change the visual character of the parcel from that of a rural and agricultural nature to that of a single-family development similar to the land uses found adjacent to and in the vicinity of the project site. While the project would include a General Plan/DCWPCP Amendment and rezone to allow for development of the site at an increased density, the proposed 5,000 sf-minimum lot sizes would be consistent with the lot sizes within the existing single-family residential subdivision to the east of the site across Brady Lane and The Vineyards residential subdivision southeast of the site. Approximately 50 percent of the homes backing onto Brady Lane would be limited to single-story homes to increase the visual cohesion between the project site and the existing residences in the project area. In addition, views of scenic resources (e.g., ridgelines, other unique terrain, or State scenic highways) beyond the site do not currently exist and, thus, would not be blocked by the project.

The proposed project would be consistent with the Placer County Design Guidelines, the specific design guidelines contained in the DCWPCP, and all applicable sections of Article 17.54, General Development Regulations, of the Placer County Code.

Highly visible residences along Brady Lane, Vineyard Road, and at the project entrance will be required to have enhanced façades that may include a combination of varied roof forms, façade element breaks, second-story balconies, a combination of horizontal and vertical elements, a combination of sheathing materials, enhanced windows, shutters, accents, or other details to provide visual interest. Residential units on the proposed lots along these frontages deemed not visible, i.e. a one-story design screened by the proposed berming and/or entry features/wall, would not be required to comply with the enhanced façade requirement. This will be a project Condition of Approval.

Figure 4-5
Frontage Landscaping

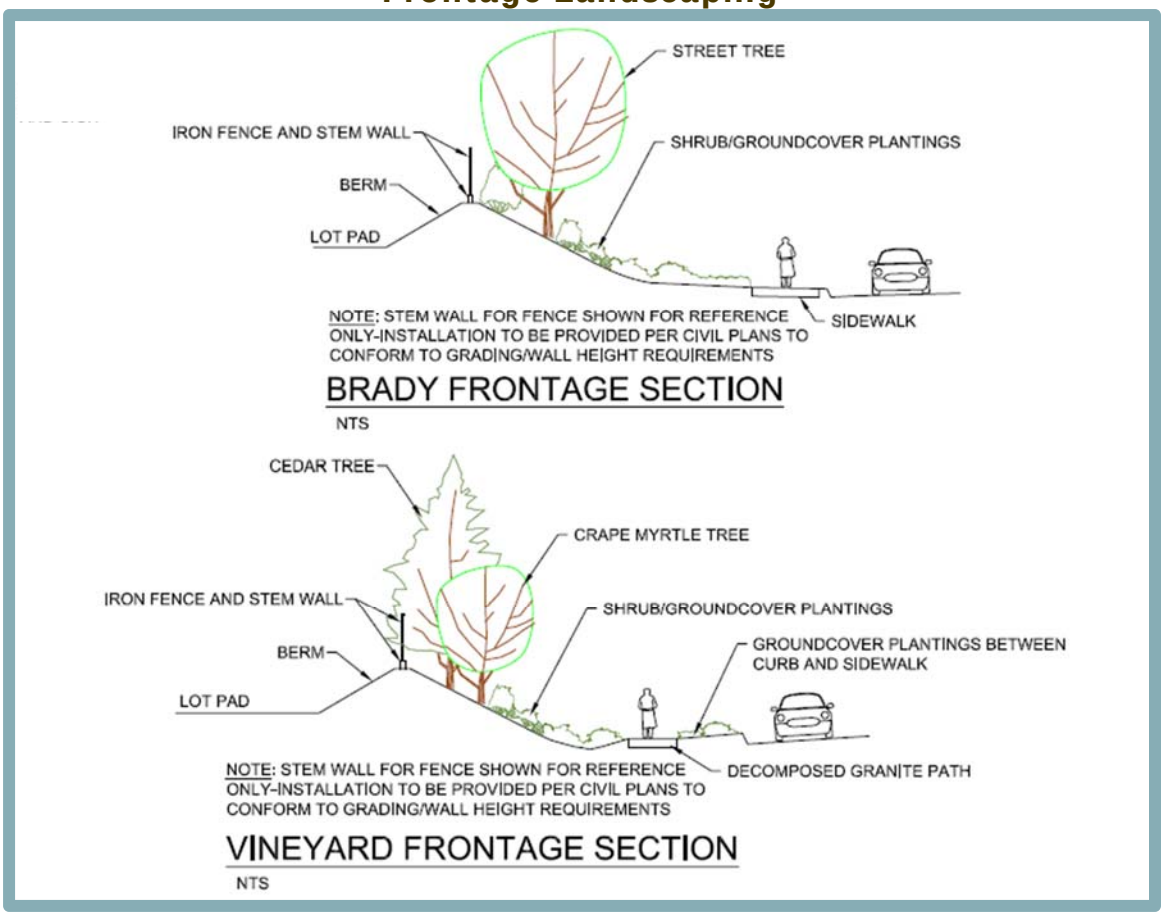
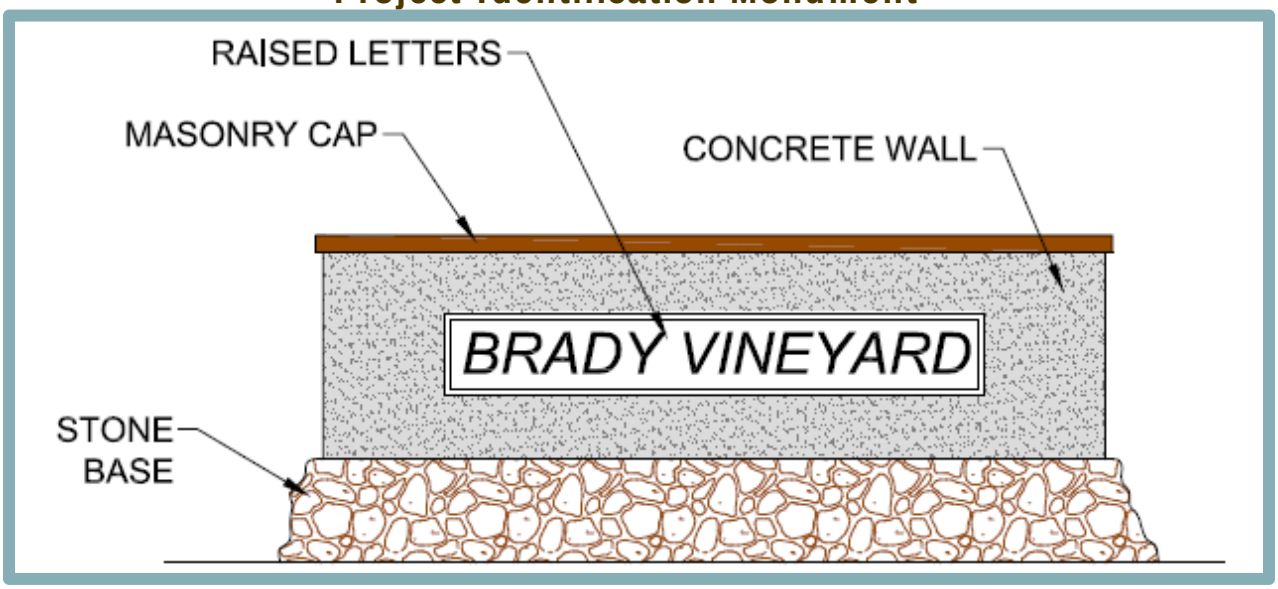


Figure 4-6
Project Identification Monument



Based on the above, public views of the project site from Brady Lane would not be considered to be substantially degraded. In addition, public views of the site for motorists, cyclists, and pedestrians traveling on Brady Lane would be temporary, occurring only briefly as such viewers pass the site.

Conclusion

As discussed above, the project site currently consists primarily of ruderal grasses. With the exception of the existing on-site tributary to Dry Creek and the associated riparian vegetation, which would be preserved by the proposed project, the project site does not contain any distinctive scenic resources. While the proposed single-family residential development would result in noticeable changes to the existing visual character of the project site as viewed from public vantage points along Vineyard Road and Brady Lane in the project vicinity, the project would not substantially degrade the character of a site having high visual quality. Views of the riparian vegetation would be partially obscured with development of the proposed project, but would continue to be visible for motorists, cyclists, and pedestrians travelling east on Vineyard Road. Furthermore, the visual quality of views beyond the site from Vineyard Road and Brady Lane is limited.

Changes to the visual character and quality of the site associated with development of a currently vacant lot have been anticipated by the County, and the proposed project would be designed to maximize the visual quality of all project frontages. In addition, all project elements would comply with applicable guidelines and regulations related to visual quality, including the Placer County Design Guidelines, the specific design guidelines contained in the DCWPCP, and Article 17.54 of the Placer County Code. Therefore, the proposed project would not be considered to substantially degrade the existing visual character or quality of public views of the site and its surroundings, or conflict with applicable zoning and other regulations governing scenic quality. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4-2 Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As noted previously, the proposed project site is primarily characterized by an undeveloped, unlit landscape. Thus, development of the project site with single-family residences and associated improvements would introduce additional sources of light and/or glare to a site where none currently exist.

Individual homes within the project site would introduce new sources of night lighting in the form of exterior light sources such as porch and patio lights, architectural accent lighting, motion activated security lighting, driveway lighting, landscape lighting, and interior lighting visible through windows. With the exception of low-voltage, LED landscape accent lights that would be provided at the gated entry, streetlights and other lighting elements are not proposed along the subdivision streets; however, a streetlight may be required at the intersection of the subdivision road and Brady Lane as well as the

northwest corner of the intersection of Brady Lane and Vineyard Road. Per Section 17.54.070(A)(2)(i) of the Placer County Code, the project would be subject to compliance with the applicable sections of the Placer County Design Guidelines related to light pollution, including, but not limited to, shielding of fixtures such that direct rays do not pass property lines.

However, because the types of lighting and the specific locations have not yet been determined, the proposed project could increase the amount of light and glare generated on-site, which could be visible from the surrounding residential development and roadways in the project vicinity. Therefore, the proposed project could be considered to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4-2 *Prior to Improvement Plan approval, the project applicant shall submit a lighting plan for the project to the Placer County Design Review Committee (DRC) for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association. The lighting plan shall include, but not necessarily be limited to, the following provisions:*

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

Cumulative Impacts and Mitigation Measures

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

Some types of impacts to aesthetic resources are localized and not cumulative in nature. For example, the creation of glare or shadows at one location is not worsened by glare or shadows created at another location. Rather these effects are independent, and the determination as to

whether they are adverse is specific to the project and location where they are created. Projects that block a view or affect the visual quality of a site also have localized aesthetic impacts. The impact occurs specific to a site or area and remains independent from another project elsewhere that may block a view or degrade the visual environment of a specific site.

Two types of aesthetic impacts may be additive in nature and thus cumulative, including night sky lighting and overall changes in the visual environment as the result of increasing urbanization of large areas. As development in one area increases and possibly expands over time and meets or connects with development in an adjoining exurban area, the effect of night sky lighting experienced outside of the region may increase in the form of larger and/or more intense nighttime glow in the viewshed.

Similarly, as development in one area changes from rural to urban, and this pattern continues to occur throughout the undeveloped areas of a jurisdiction, the changes in visual character may become additive and cumulatively considerable. The proposed project's incremental contribution to night sky lighting and changes in visual character are addressed below.

4-3 Long-term changes in visual character associated with cumulative development of the proposed project in combination with future buildout of the DCWPCP. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The geographic setting for analysis of long-term cumulative changes in visual character associated with the proposed project is the area covered by the DCWPCP, as development within the DCWPCP has the potential to affect many of the same views analyzed for the proposed project. Specific views of the project site from Vineyard Road and Brady Lane are identified in Figure 4-1 through Figure 4-4 of this EIR. Currently, a number of projects within the cumulative geographic setting are under construction or are planned, including the Riolo Vineyards Specific Plan (under construction) and the Placer Vineyards Specific Plan (planned).

Future development within the DCWPCP would result in changes to the existing land use environment through conversion of vacant land to developed uses that would result in a change in visual character. The goals and objectives of the DCWPCP are to identify those features of the DCWPCP area that characterize the unique nature and identifying traits of the community and then to specify standards of site development for proposed projects which would implement the goals and policies of the DCWPCP.

Planned development within the DCWPCP area includes the Riolo Vineyards Specific Plan and the Placer Vineyards Specific Plan; both areas are located approximately 2.2 miles west of the project site and are separated from the site by intervening residential and agricultural uses. Similarly, the Double S Ranch project, located along Vineyard Road to the west of the project site, is bordered by agricultural uses and rural single-family homes to the north, east, and west. Development of other approved projects, as well as the proposed project site, would change the existing visual character of those specific locations from vacant or minimally developed land to more intensively developed residential areas with one- and two-story homes on various sized lots. However, such

development would be subject to existing regulations and guidelines designed to ensure compatibility with adjacent land uses and ensure a pleasing visual character.

Specifically, such projects would be required to comply with the Placer County Landscape Guidelines, the Placer County Design Guidelines, the specific design guidelines contained in the DCWPCP, and all applicable sections of the Placer County Code. The Placer County Design Guidelines Manual provides instruction on the design direction to be implemented with the construction of new buildings, which includes setbacks, extensive use of wood, colors consistent with earth tones and significant amounts of landscaping. Such standards serve to reduce impacts on visual character and maintain consistency with the project surroundings. The proposed project would use natural building materials (e.g., masonry, stucco, wood, and stone) and colors (complementary natural, earth tones) consistent with the Placer County Design Guidelines. While cumulative projects in the DCWPCP would result in conversion of vacant land to developed land, the projects, including the proposed project, would develop new residential uses that would be well designed and consistent with other residential developments in the larger project vicinity. Development patterns would include landscaping and setbacks that would both screen the proposed project from the adjacent neighbors and provide a transition space from existing surrounding rural residential lots.

Cumulative buildout in the geographic area would result in a substantial change in visual character of region and, thus, a significant cumulative impact would occur. However, as discussed under Impact 4-1 above, the proposed project would not result in substantial degradation of the visual character and quality of public views of the site and its surroundings. While the proposed single-family residential development would result in noticeable changes to the existing visual character of the project site, as viewed from public vantage points along Vineyard Road and Brady Lane in the project vicinity, the proposed project would be designed to maximize the visual quality of all project frontages, and 50 percent of the proposed single-family homes closest to the roadways would be limited to one-story homes to increase the visual cohesion between the project site and the existing residences in the project area. In addition, visible rear and/or side façades along Brady Lane, Vineyard Road, and at the project entrance will be required to have enhanced façades that may include a combination of varied roof forms, façade element breaks, second-story balconies, a combination of horizontal and vertical elements, a combination of sheathing materials, enhanced windows, shutters, accents, or other details to provide visual interest.

The proposed project would be required to comply with the Placer County Landscape Guidelines, the Placer County Design Guidelines, the specific design guidelines contained in the DCWPCP, and all applicable sections of the Placer County Code, which would ensure that the proposed project incorporates natural building materials, colors, and landscaping. Therefore, the project's incremental contribution to the significant impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

4-4 Creation of new sources of light or glare associated with cumulative development of the proposed project in combination with future buildout of the DCWPCP. Based on the analysis below, the impact is *less than significant*.

Cumulative effects of lighting are visible over a wide area, due to the potential for lighting from a number of projects to create sky glow. Cumulative development throughout the DCWPCP area, particularly conversion of rural or currently vacant sites to urban uses, would increase the sources of light and glare, which would have the potential to contribute to sky glow in the area. Such sources of light would be typical of existing residential development in the project area, such as the residential subdivisions located to the west and south of the project site.

However, cumulative development within the DCWPCP area, including the proposed project, would be subject to existing regulations and guidelines related to light and glare. For example, Section 17.54.070(i) of the Placer County Code requires that lighting in new development is consistent with the lighting standards contained within the Placer County Design Guidelines Manual. As described in Impact 4-2 above, the proposed project in particular would be required to submit a lighting plan for the project to the Placer County Planning Services Division for review and approval prior to Improvement Plan approval (see Mitigation Measure 4-2). Mitigation Measure 4-2 requires the project's lighting to be Dark-Sky compliant as specified by the International Dark-Sky Association.

Based upon the above analysis, cumulative development within the DCWPCP area would be subject to Section 17.54.070(i) of the Placer County Code requiring that new development within the County comply with lighting standards, and prior to project implementation, a lighting plan must be submitted showing that the proposed project would avoid contribution to sky glow through Dark-Sky design compliance. Thus, the proposed project, in combination with cumulative development of the DCWPCP area, would not be anticipated to result in a significant cumulative impact related to light and glare and the impact would be ***less than significant***.

Mitigation Measure(s)

None required.

5. Air Quality and Greenhouse Gas Emissions

5. AIR QUALITY AND GREENHOUSE GAS EMISSIONS

5.1 INTRODUCTION

The Air Quality and Greenhouse Gas Emissions chapter of the EIR describes the potential impacts of the proposed project on local and regional air quality. The chapter includes a discussion of the existing air quality and greenhouse gas (GHG) setting, construction-related air quality impacts resulting from grading and equipment emissions, direct and indirect emissions associated with the project, the impacts of these emissions on both the local and regional scale, and mitigation measures warranted to reduce or eliminate any identified significant impacts. This chapter is based on the Placer County General Plan[1] and associated EIR,[2] the Dry Creek-West Placer Community Plan (DCWPCP),[3] the Placer County Air Pollution Control District's (PCAPCD) *CEQA Air Quality Handbook*,[4] PCAPCD's *Review of Land Use Projects Under CEQA*,[5] and technical analysis performed by Raney Planning and Management, Inc.

5.2 EXISTING ENVIRONMENTAL SETTING

The following information provides an overview of the existing environmental setting in relation to air quality within the proposed project area. Air basin characteristics, ambient air quality standards (AAQS), attainment status and regional air quality plans, local air quality monitoring, odors, sensitive receptors, and greenhouse gases are discussed.

Air Basin Characteristics

The proposed project site is located in western Placer County, which falls within the Sacramento Valley Air Basin (SVAB) and is within the jurisdictional boundaries of the PCAPCD. Air flows into the SVAB through the Carquinez Strait, moves across the Delta and carries pollutants from the heavily populated San Francisco Bay Area into the SVAB. The climate is characterized by hot, dry summers and cool, rainy winters. Characteristic of SVAB winter weather are periods of dense and persistent low-level fog, which are most prevalent between storms. From May to October, the region's intense heat and sunlight lead to high ozone concentrations. Prevailing winds are from the south and southwest, and as a result of prevailing winds coming generally from south to southwest, air quality in the area is heavily influenced by mobile and stationary sources of air pollution located upwind in the Sacramento Metropolitan Area.

Most precipitation in the SVAB results from air masses moving in from the Pacific Ocean during the winter months. Storms usually move through the area from the west or northwest. During the winter rainy season (November through February) over half the total annual precipitation falls while the average winter temperature is a moderate 49 degrees Fahrenheit. During the summer, daytime temperatures can exceed 100 degrees Fahrenheit. Dense fog occurs mostly in mid-winter and rarely in the summer. Daytime temperatures from April through October average between 60 and 80 degrees Fahrenheit with low humidity. The inland location and surrounding

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1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
2 Placer County. *Countywide General Plan EIR.* July 1994.
3 Placer County, Planning Services Division. *Dry Creek-West Placer Community Plan*. May 14, 1990.
4 Placer County Air Pollution Control District. *CEQA Air Quality Handbook*. November 21, 2017.
5 Placer County Air Pollution Control District. *Review of Land Use Projects Under CEQA*. October 13, 2016.

mountains shelter the valley from much of the ocean breeze that keeps the coastal regions moderate in temperature. The only breech in the mountain barrier is the Carquinez Strait, which exposes the midsection of the valley to the coastal air mass.

Air quality in Placer County is also affected by inversion layers, which occur when a layer of warm air traps a layer of cold air, preventing vertical dispersion of air contaminants. The presence of an inversion layer results in higher concentrations of pollutants near ground level. Summer inversions are strong and frequent, but are less troublesome than those that occur in the fall. Autumn inversions, formed by warm air subsiding in a region of high pressure, have accompanying light winds that do not provide adequate dispersion of air pollutants.

Air quality in the project vicinity is influenced by both local and distant emission sources. Air pollutant sources in the immediate project vicinity include emissions from vehicle traffic on nearby roadways, as well as emissions from locomotives within the Roseville Railyard. Other sources of air pollutants in the area include activities associated with commercial, residential, and industrial land uses.

Ambient Air Quality Standards

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. The federal standards are divided into primary standards, which are designed to protect the public health, and secondary standards, which are designed to protect the public welfare. The ambient air quality standards for each contaminant represent safe levels that avoid specific adverse health effects. Pollutants for which air quality standards have been established are called “criteria” pollutants. Table 5-1 identifies the major pollutants, characteristics, health effects and typical sources. The federal and California ambient air quality standards (NAAQS and CAAQS, respectively) are summarized in Table 5-2. The NAAQS and CAAQS were developed independently with differing purposes and methods. As a result, the federal and State standards differ in some cases. In general, the State of California standards are more stringent than the federal standards, particularly for ozone and particulate matter (PM).

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

Ozone

Ozone is a reactive gas consisting of three oxygen atoms. In the troposphere, ozone is a product of the photochemical process involving the sun's energy, and is a secondary pollutant formed as a result of a complex chemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NO_X) emissions in the presence of sunlight. As such, unlike other pollutants, ozone is not released directly into the atmosphere from any sources. In the stratosphere, ozone exists naturally and shields Earth from harmful incoming ultraviolet radiation. The primary source of ozone precursors is mobile sources, including cars, trucks, buses, construction equipment, and agricultural equipment. Ground-level ozone reaches the highest level during the afternoon and early evening hours. High levels occur most often during the summer months. Ground-level ozone is a strong irritant that could cause constriction of the airways, forcing the respiratory system to work harder in order to provide oxygen. Ozone at the Earth's surface causes numerous adverse health effects and is a major component of smog. High concentrations of ground level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments.

Table 5-1
Summary of Criteria Pollutants

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

Sources:
- ***California Air Resources Board. California Ambient Air Quality Standards (CAAQS). Available at: http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm. Accessed May 2019.***
- ***Sacramento Metropolitan, El Dorado, Feather River, Placer, and Yolo-Solano Air Districts, Spare the Air website. Air Quality Information for the Sacramento Region. Available at: http://www.sparetheair.com/health.cfm?page=healthoverall. Accessed May 2019.***
- ***California Air Resources Board. Glossary of Air Pollution Terms. Available at: http://www.arb.ca.gov/html/gloss.htm. Accessed May 2019.***

Table 5-2
Ambient Air Quality Standards

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

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

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

***Source:** California Air Resources Board. Ambient Air Quality Standards. May 4, 2016. Available at: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed May 2019.*

Reactive Organic Gas

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

Oxides of Nitrogen

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

effects related to NO_X include lung irritation and lung damage and can cause increased risk of acute and chronic respiratory disease.

Carbon Monoxide

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

Sulfur Dioxide

Sulfur Dioxide (SO_2) is a colorless, irritating gas with a rotten egg odor formed primarily by the combustion of sulfur-containing fossil fuels from mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Similar to airborne NO_X, suspended sulfur oxide particles contribute to poor visibility. The sulfur oxide particles are also a component of PM_{10}.

Particulate Matter

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

- "Inhalable coarse particles ($PM_{2.5\text{-}10}$)," which are found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. $PM_{2.5\text{-}10}$ is deposited in the thoracic region of the lungs.
- "Fine particles ($PM_{2.5}$)," which are found in smoke and haze, are 2.5 micrometers in diameter and smaller. $PM_{2.5}$ particles could be directly emitted from sources such as forest fires, or could form when gases emitted from power plants, industries, and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.
- “Ultrafine particles (UFP),” are very, very small particles (less than 0.1 micrometers in diameter) largely resulting from the combustion of fossil fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of $PM_{2.5}$, their high surface area, deep lung penetration, and transfer into the bloodstream could result in disproportionate health impacts relative to their mass. UFP is not currently regulated separately, but is analyzed as part of $PM_{2.5}$.

PM_{10}, $PM_{2.5}$, and UFP include primary pollutants, which are emitted directly to the atmosphere and secondary pollutants, which are formed in the atmosphere by chemical reactions among precursors. Generally speaking, $PM_{2.5}$ and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM_{10} sources include the same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust. Long-term PM pollution, especially fine particles, could result in significant health problems including, but not limited to, the following: increased respiratory

symptoms, such as irritation of the airways, coughing or difficulty breathing; decreased lung function; aggravated asthma; development of chronic respiratory disease in children; development of chronic bronchitis or obstructive lung disease; irregular heartbeat; heart attacks; and increased blood pressure.

Lead

Lead is a relatively soft and chemically resistant metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, and, thus, essentially persists forever. Lead forms compounds with both organic and inorganic substances. As an air pollutant, lead is present in small particles. Sources of lead emissions in California include a variety of industrial activities. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically. However, because lead was emitted in large amounts from vehicles when leaded gasoline was used, lead is present in many soils (especially urban soils) as a result of airborne dispersion and could become re-suspended into the air.

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

Sulfates

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

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

Hydrogen Sulfide

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

Vinyl Chloride

Vinyl Chloride (C_2H_3Cl, also known as VCM) is a colorless gas that does not occur naturally, but is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloro-ethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used

to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Visibility Reducing Particles

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

Toxic Air Contaminants

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

Fossil fueled combustion engines, including those used in cars, trucks, and some pieces of construction equipment, release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene, toluene, xylenes, and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust, DPM, is composed of carbon particles and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of such chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and NO_X. Due to the published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects, the CARB has identified DPM from diesel-fueled engines as a TAC. Although a variety of TACs are emitted by fossil fueled combustion engines, the cancer risk due to DPM exposure represents a more significant risk than the other TACs discussed above.[6]

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

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

[6] California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.

to generate concentrations of DPM from on-road haul trucks and off-road equipment exhaust emissions.

The size of diesel particulates that are of the greatest health concern are fine particles (i.e., $PM_{2.5}$) and UFPs. UFPs have a small diameter (on the order of 0.1 micrometers).[7] The small diameter of UFPs imparts the particulates with unique attributes, such as high surface areas and the ability to penetrate deeply into lungs. Once UFPs have been deposited in lungs, the small diameter allows the UFPs to be transferred to the bloodstream. The high surface area of the UFPs also allows for a greater adsorption of other chemicals, which are transported along with the UFPs into the bloodstream of the inhaler, where the chemicals can eventually reach critical organs.[8] The penetration capability of UFPs may contribute to adverse health effects related to heart, lung, and other organ health.[9] UFPs are a subset of DPM and activities that create large amounts of DPM, such as the operations involving heavy diesel-powered engines, also release UFPs. Considering that UFPs are a subset of DPM, and DPM represents a subset of $PM_{2.5}$, estimations of either concentrations or emissions of $PM_{2.5}$ or DPM include UFPs.

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

Diesel Particulate Matter

Diesel powered engines, including locomotive engines, represent a major source of DPM in California. Because locomotive engines emit DPM during operations, areas where locomotive engines are operated in place/idle frequently or for long periods of time can experience increased atmospheric concentrations of DPM. Consequently, the CARB considers railyards to be substantial sources of TACs.

The Union Pacific J.R. Davis Yard (rail yard), located in Roseville, California, is approximately 0.7-mile away from the southeastern boundary of the project site. In 2004 the CARB and PCAPCD conducted a health risk assessment (HRA) to determine the potential public health risks from DPM emissions due to locomotive activity at the rail yard. The rail yard covers approximately 950 acres and is used for service and maintenance operations with approximately 30,000 locomotives visiting the railyard annually. The CARB concluded that operation of the rail yard resulted in the emission of approximately 25 tons of DPM in the year 2000. Moving locomotives accounted for 50 percent of the emissions, while idling locomotives accounted for 45 percent and testing accounted for five percent of the DPM emissions from the yard. The HRA showed that the potential impacts from DPM emissions originating at the rail yards to residents in the area varied with distance from the railyard.[10]

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7 South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.
8 Health Effects Institute. *Understanding the Health Effects of Ambient Ultrafine Particles*. January 2013.
9 South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.
10 California Air Resources Board. *Roseville Rail Yard Study*. October 14, 2004.

Potential impacts related to DPM emissions were estimated based on a 70-year exposure period (i.e., a resident living a given distance from the rail yard for 70 years), and were presented as an increase in cancer risk per million residents. Representing increased cancer risk per million resident means that if a cancer risk of one per million is estimated, then in a population of one million people, one new case of cancer above the expected cancer risk may occur. At the time that the HRA was prepared for the railyards, the risks estimated based on the DPM emissions from the rail yard ranged from as high as 500 cases per million for residents in proximity to the service area, to 10 cases per million for residents farther away from the project site. At the time of the 2004 study, at least 155,000 people live within areas with increased cancer risk of 10 in one million or more.[11]

Subsequent to the preparation of the HRA, on December 9, 2004, the PCAPCD authorized an agreement with UPRR concerning mitigation measures and continued air monitoring at the rail yard. In addition, the CARB signed a Memorandum of Understanding (MOU) with the UPRR and BNSF Railway Company to mitigate emissions from major railyards throughout the State. The PCAPCD agreement included a Mitigation Plan with four main areas of focus: 1) Reduction of unnecessary idling; 2) Introduction of low-sulfur diesel fuel for locomotives; 3) Switcher locomotive fleet replacements/upgrades; and 4) Investigate the use of emission control from the service, test, and maintenance and repair locations using stationary source type of equipment (often referred to as the "hood" or Advanced Locomotive Emission Control System [ALECS]).[12]

In 2009, the PCAPCD summarized findings from on-going monitoring of the rail yard, and concluded that by the end of 2007, DPM emissions from operations of the rail yard had been reduced from 25 tons per year in 2000 to 19 tons per year in 2007, with emission of all pollutants from the overall facility operations being reduced by 23 percent. The reduction in pollutant emissions is a result of implementation of mitigation measures one through three. While a proof-of-concept test was completed for the ALECS technology, ALECS had not been deployed within the rail yard at the time of the 2009 report summarizing the monitoring of the rail yard.[13]

Although the PCAPCD has not released any subsequent health impact analyses based on the 2009 report and measured emissions reductions, the 23 percent reduction in overall emissions would directly reduce the exposure of nearby residence to pollutants; thus, reducing health risks to residents. Since the 2009 study, continued implementation of the PCAPCD-UPRR Agreement, as well as the CARB-UPRR-BNSF MOU, is anticipated to have resulted in maintained emissions reductions or further reductions.[14] However, reports summarizing emissions at the rail yards since 2009 have not yet been prepared.[15]

Considering the above, emissions and resulting health risks from the rail yard have decreased from the levels analyzed in the 2004 HRA. However, rail yard activity continues to involve emissions, which pose health risks to residents in the area.

Considering the proposed project's proximity to the railyards, the conclusions of the 2004 rail yard study, and the 2009 summary of findings, the project site is anticipated to be within an area of

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11 California Air Resources Board. *Roseville Rail Yard Study*. October 14, 2004.

12 Placer County Air Pollution Control District. *Memorandum: Final Update Pertaining to the Mitigation Measures and Monitoring Activities for the Union Pacific Roseville Railyard (Information)*. December 10, 2009.

13 *Ibid*.

14 *Ibid*.

15 Yushuo Chang, Planning & Monitoring Section Manager, PCAPCD. Personal Communication [phone] with Green, Angel, Placer County Planning Services Division, Senior Planner. August 23, 2019.

increased cancer risk due to rail yard related DPM. Because the proposed project is a residential development, future residents of the project may be exposed to increased cancer risk related to DPM from rail yard activity.

As part of the *California Building Industry Association v. Bay Area Air Quality Management District* case (CBIA case), the California Supreme Court granted limited review to the question: Under what circumstances, if any, does CEQA require an analysis of how existing environmental conditions will impact future residents or users (receptors) of a proposed project? The question specifically concerned the applicability of thresholds promulgated by the Bay Area Air Quality Management District (BAAQMD), some of which related to exposure of sensitive receptors to existing TAC emissions. In the opinion published on December 17, 2015, the Supreme Court looked closely at the language and legislative intent in CEQA, and found that CEQA does not provide "enough of a basis to suggest that the term 'environmental effects' [. . .] is meant, as a general matter, to encompass these broader considerations associated with the health and safety of a project's future residents or users." Based on the Supreme Court opinion, it would be considered appropriate to evaluate a project's potentially significant *exacerbating* effects on existing environmental hazards – effects that arise because the project brings "development and people into the area affected." The Supreme Court stated that even in those specific instances where evaluation of a project's potentially significant exacerbating effects on existing environmental hazards is appropriate, the evaluation of how future residents or users could be affected by the exacerbated conditions is still compelled by the project's impact on the environment, for instance the project's emission of TACs, and not the environment's impact on the project, such as the exposure of proposed receptors to existing off-site TAC emissions.[16]

Considering the court ruling, while the future residents of the proposed project would be considered a sensitive receptor, consideration of potential impacts from existing sources of TACs, such as the existing rail yards, would only be justified if the proposed project would exacerbate existing hazardous conditions. The proposed project involves a residential development that would operate separately from the rail yard and would not have an effect on rail yard operations or rail yard related DPM emissions. Therefore, the proposed project would not be considered to exacerbate an existing hazardous condition, and analysis of potential impacts related to DPM exposure of future residents is outside of the scope of CEQA. Thus, the analysis in this chapter will focus on the potential for the proposed project to result in TAC emissions that could affect existing nearby sensitive receptors.

Naturally Occurring Asbestos

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

[16] Alameda County Superior Court. *California Building Industry Association v. Bay Area Air Quality Management District. A135335 and A136212*. Filed August 12, 2016.

NOA is typically associated with fault zones, and areas containing serpentinite or contacts between serpentinite and other types of rocks. According to the *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California* prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain NOA, because faults and serpentinite outcroppings are not known to be in the project area.[17]

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA) require all areas of California to be classified as attainment, nonattainment, or unclassified as to their status with regard to the NAAQS and/or CAAQS. The FCAA and CCAA require that the CARB, based on air quality monitoring data, designate portions of the State where the federal or State AAQS are not met as "nonattainment areas." Because of the differences between the national and State standards, the designation of nonattainment areas is different under the federal and State legislation. The CCAA requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or, provide for adoption of "all feasible measures on an expeditious schedule."

As presented in Table 5-3, under the CCAA, Placer County has been designated nonattainment for the State one-hour ozone, State and federal eight-hour ozone and State PM_{10} standards. The County is designated attainment or unclassified for all other AAQS. Due to the nonattainment designations, the PCAPCD, along with the other air districts in the SVAB region, is required to develop plans to attain the federal and State standards for ozone and particulate matter. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals. Each of the attainment plans currently in effect are discussed in further detail in the Regulatory Context section of this chapter.

Local Air Quality Monitoring

Air quality is monitored by CARB at various locations to determine which air quality standards are being violated, and to direct emission reduction efforts, such as developing attainment plans and rules, incentive programs, etc. The nearest local air quality monitoring station to the project site is the Roseville-N Sunrise Boulevard station, located at 151 North Sunrise Boulevard in Roseville CA, approximately 2.6 miles from the project site. Based on the data available for the Roseville-N Sunrise Boulevard monitoring station, Table 5-4, below, presents the number of days that the State and federal AAQS were exceeded for the three-year period from 2015 to 2017.

Odors

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative or formulaic methodologies to determine the presence of a significant odor impact do not exist.

[17] California Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. Published 2006.

Table 5-3
Placer County Attainment Status Designations

Pollutant	Averaging Time	California Standards	Federal Standards
Ozone	1 Hour	**Nonattainment**	Revoked in 2005
	8 Hour	**Nonattainment**	**Nonattainment**
Carbon Monoxide	8 Hour	Attainment	Attainment
	1 Hour	Attainment	Attainment
Nitrogen Dioxide	Annual Mean	Attainment	Attainment
	1 Hour	Attainment	Attainment
Sulfur Dioxide	Annual Mean	Attainment	-
	24 Hour	Attainment	-
	3 Hour	Attainment	-
	1 Hour	Attainment	-
Respirable Particulate Matter (PM_{10})	Annual Mean	**Nonattainment**	-
	24 Hour	**Nonattainment**	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Annual Mean	Attainment	Attainment
	24 Hour	-	**Nonattainment**
Lead	30 Day Average	Attainment	Attainment
	Calendar Quarter	Attainment	Attainment
	Rolling 3-Month Average	Attainment	Attainment
Sulfates	24 Hour	Attainment	-
Hydrogen Sulfide	1 Hour	-	-
Visibility Reducing Particles	8 Hour	-	-

Source: Placer County Air Pollution Control District. CEQA Air Quality Handbook. November 21, 2017.

Table 5-4
Air Quality Data Summary for the Roseville-N Sunrise Boulevard Station (2015-2017)

Pollutant	Standard	Days Standard Was Exceeded		
		2015	2016	2017
1-Hour Ozone	State	1	5	4
	Federal	0	0	0
8-Hour Ozone	State	6	21	10
	Federal	6	20	9
24-Hour $PM_{2.5}$	Federal	0	0	0
24-Hour PM_{10}	State	1	0	5
	Federal	0	0	0
1-Hour Nitrogen Dioxide	State	0	0	0
	Federal	0	0	0

Source: California Air Resources Board. Aerometric Data Analysis and Management (iADAM) System. Available at http://www.arb.ca.gov/adam/welcome.html. Accessed June 2019.

Adverse effects of odors on residential areas and other sensitive receptors warrant the closest scrutiny; but consideration should also be given to other land use types where people congregate, such as recreational facilities, worksites, and commercial areas. The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between a receptor and an odor source, and local meteorological conditions.

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

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

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

The Dry Creek Wastewater Treatment Plant is located approximately 1,800 feet to the southwest of the project site and is considered a potential source of odors. In addition, various industrial land uses and the Roseville Railyards are in proximity to the project site, and could generate odors from existing or future operations. Although existing potential sources of odors are located in proximity to the project site, the recent CBIA case, discussed above, dictates that analysis of existing environmental conditions must be limited to the effects of the proposed project on the environment as will be done in the Project-Specific Impacts and Mitigation Measures section of this Chapter.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. Residential developments exist directly to the east and south of the project site across Brady Lane and Vineyard Road, respectively. Additional rural residential developments exist to the northwest and west of the site. Furthermore, a residence exists within a carve out parcel in the southwestern portion of the project site, located approximately 25 feet from the parcel's northern property line and 15 feet from its eastern property line. The existing residence would be retained with implementation of the project and, thus, is considered the nearest sensitive receptor.

Greenhouse Gas Emissions

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

The primary GHG emitted by human activities is CO_2, with the next largest components being CH_4 and N_2O. A wide variety of human activities result in the emission of CO_2. Some of the largest sources of CO_2 include the burning of fossil fuels for transportation and electricity, industrial processes including fertilizer production, agricultural processing, and cement production. The primary sources of CH_4 emissions include domestic livestock sources, decomposition of wastes in landfills, releases from natural gas systems, coal mine seepage, and manure management. The main human activities producing N_2O are agricultural soil management, fuel combustion in motor vehicles, nitric acid production, manure management, and stationary fuel combustion. Emissions of GHG by economic sector indicate that energy-related activities account for the majority of U.S. emissions. Electricity generation is the largest single-source of GHG emissions, and transportation is the second largest source, followed by industrial activities. The agricultural, commercial, and residential sectors account for the remainder of GHG emission sources.[18]

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

Global Warming Potential

Global Warming Potential (GWP) is one type of simplified index (based upon radiative properties) that can be used to estimate the potential future impacts of emissions of various gases. According to the United States Environmental Protection Agency (USEPA), the global warming potential of a gas, or aerosol, to trap heat in the atmosphere is the "cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas." The reference gas for comparison is CO_2. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO_2, as well as the decay rate of each gas relative to that of CO_2. Each gas's GWP is determined by comparing the radiative forcing associated with emissions of that gas versus the radiative forcing associated with emissions of the same mass of CO_2, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 21 times greater than that of CO_2, as shown in Table 5-5.

[18] U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: https://19january2017snapshot.epa.gov/ghgemissions/sources-greenhouse-gas-emissions_.html. Accessed August 2019.

Table 5-5
Global Warming Potentials and Atmospheric Lifetimes of Select GHGs

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	50-200[1]	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
HFC-23	230-270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

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

Source: USEPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2013, April 15, 2015.

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

Effects of Global Climate Change

Uncertainties exist as to exactly what the climate changes will be in various areas of the Earth. According to the Intergovernmental Panel on Climate Change's Working Group II Report, *Climate Change 2007: Impacts, Adaptation and Vulnerability*,[19] climate change impacts to North America may include:

- Diminishing snowpack;
- Increasing evaporation;
- Exacerbated shoreline erosion;
- Exacerbated inundation from sea level rising;
- Increased risk and frequency of wildfire;
- Increased risk of insect outbreaks;
- Increased experiences of heat waves; and

[19] Intergovernmental Panel on Climate Change, 2014: Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA, pp. 1-32.

- Rearrangement of ecosystems as species and ecosystems shift northward and to higher elevations.

For California, climate change has the potential to cause/exacerbate the following environmental impacts:

- Increased frequency, duration, and intensity of conditions conducive to air pollution formation (particularly ozone);
- Reduced precipitation, changes to precipitation and runoff patterns, reduced snowfall (precipitation occurring as rain instead of snow), earlier snowmelt, decreased snowpack, and increased agricultural demand for water;
- Increased growing season and increased growth rates of weeds, insect pests and pathogens;
- Inundation by sea level rise;
- Increased incidents and severity of wildfire events; and
- Expansion of the range and increased frequency of pest outbreaks.

5.3 REGULATORY CONTEXT

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

Federal Regulations

The most prominent federal regulation is the FCAA, which is implemented and enforced by the USEPA.

FCAA and USEPA

The FCAA requires the USEPA to set NAAQS and designate areas with air quality not meeting NAAQS as nonattainment. The USEPA is responsible for enforcement of NAAQS for atmospheric pollutants and regulates emission sources that are under the exclusive authority of the federal government including emissions of GHGs. The USEPA's air quality mandates are drawn primarily from the FCAA, which was signed into law in 1970. Congress substantially amended the FCAA in 1977 and again in 1990. The USEPA has adopted policies consistent with FCAA requirements demanding states to prepare State Implementation Plans (SIPs) that demonstrate attainment and maintenance of the NAAQS. In order to track GHG emissions, the USEPA develops official U.S. GHG inventories each year, which account for emissions and removals of GHG.

On December 7, 2009, USEPA issued findings under Section 202(a) of the CAA concluding that GHGs are pollutants that could endanger public health. Under the so-called Endangerment Finding, USEPA found that the current and projected concentrations of the six key, well-mixed GHGs – CO_2, CH_4, N_2O, PFCs, SF_6, and HFCs – in the atmosphere threaten the public health and welfare of current and future generations. These findings do not, by themselves, impose any requirements on industry or other entities.

State Regulations

California has adopted a variety of regulations aimed at reducing air pollution and GHG emissions. Only the most prominent and applicable California air quality- and GHG-related legislation is included below; however, an exhaustive list and extensive details of California air quality legislation can be found at the CARB website (http://www.arb.ca.gov/html/lawsregs.htm).

CCAA and CARB

The CARB is the agency responsible for coordination and oversight of State and local air pollution control programs in California and for implementing the CCAA. The CCAA requires that air quality plans be prepared for areas of the State that have not met the CAAQS for ozone, CO, NO_X, and SO_2. Among other requirements of the CCAA, the plans must include a wide range of implementable control measures, which often include transportation control measures and performance standards. In order to implement the transportation-related provisions of the CCAA, local air pollution control districts have been granted explicit authority to adopt and implement transportation controls. The CARB, California's air quality management agency, regulates and oversees the activities of county air pollution control districts and regional air quality management districts. The CARB regulates local air quality indirectly using State standards and vehicle emission standards, by conducting research activities, and through planning and coordinating activities. In addition, the CARB has primary responsibility in California to develop and implement air pollution control plans designed to achieve and maintain the NAAQS established by the USEPA. Furthermore, the CARB is charged with developing rules and regulations to cap and reduce GHG emissions.

State Legislation Related to Air Quality

Although significant overlap exists between regulations related to air quality and GHG emissions, to the extent feasible, the following section provides the regulations related to air quality in California.

Air Quality and Land Use Handbook

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook) addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities.[20] The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (I-405 and I-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day" (CARB 2005).

Importantly, the Introduction chapter of the CARB Handbook clarifies that the guidelines are strictly advisory, recognizing that: "[l]and use decisions are a local government responsibility. The Air Resources Board Handbook is advisory and these recommendations do not establish regulatory standards of any kind." CARB recognizes that there may be land use objectives as well

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

as meteorological and other site-specific conditions that need to be considered by a governmental jurisdiction relative to the general recommended setbacks, specifically stating, "[t]hese recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues" (CARB 2005).

Assembly Bill 1807

Assembly Bill (AB) 1807, enacted in September 1983, sets forth a procedure for the identification and control of TACs in California. CARB is responsible for the identification and control of TACs, except pesticide use, which is regulated by the California Department of Pesticide Regulation.

AB 2588

The Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588), California Health and Safety Code Section 44300 et seq., provides for the regulation of over 200 TACs, including DPM, and is the primary air contaminant legislation in California. Under the act, local air districts may request that a facility account for its TAC emissions. Local air districts then prioritize facilities on the basis of emissions, and high priority designated facilities are required to submit a health risk assessment and communicate the results to the affected public.

Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations

In 2002, the Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (Title 17, Section 93105, of the California Code of Regulations) went into effect, which requires each air pollution control and air quality management district to implement and enforce the requirements of Section 93105 and propose their own asbestos ATCM as provided in Health and Safety Code section 39666(d).[21]

Senate Bill 656

In 2003, the Legislature passed Senate Bill (SB) 656 to reduce public exposure to PM_{10} and $PM_{2.5}$ above the State CAAQS. The legislation requires the CARB, in consultation with local air pollution control and air quality management districts, to adopt a list of the most readily available, feasible, and cost-effective control measures that could be implemented by air districts to reduce PM_{10} and $PM_{2.5}$ emissions. The CARB list is based on California rules and regulations existing as of January 1, 2004, and was adopted by CARB in November 2004. Categories addressed by SB 656 include measures for reduction of emissions associated with residential wood combustion and outdoor green waste burning, fugitive dust sources such as paved and unpaved roads and construction, combustion sources such as boilers, heaters, and charbroiling, solvents and coatings, and product manufacturing. Some of the measures include, but are not limited to, the following:

- Reduce or eliminate wood-burning devices allowed;
- Prohibit residential open burning;
- Permit and provide performance standards for controlled burns;
- Require water or chemical stabilizers/dust suppressants during grading activities;
- Limit visible dust emissions beyond the project boundary during construction;

[21] California Air Resources Board. *2002-07-29 Asbestos ATCM for Construction, Grading, Quarrying, and Surface Mining Operations*. June 3, 2015. Available at: http://www.arb.ca.gov/toxics/atcm/asb2atcm.htm. Accessed April 2017.

- Require paving/curbing of roadway shoulder areas; and
- Require street sweeping.

Under SB 656, each air district is required to prioritize the measures identified by CARB, based on the cost effectiveness of the measures and their effect on public health, air quality, and emission reductions. Per SB 656 requirements, the PCAPCD amended their Rule 225 related to wood-burning appliances to include conditions consistent with SB 656, including such conditions as the prohibition of the installation of any new, permanently installed, indoor or outdoor, uncontrolled wood-burning appliances.

Heavy-Duty Vehicle Idling Emission Reduction Program

On October 20, 2005, CARB approved a regulatory measure to reduce emissions of toxics and criteria pollutants by limiting idling of new and in-use sleeper berth equipped diesel trucks.[22] The regulation consists of new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. For example, the regulation requires 2008 and newer model year heavy-duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling, or optionally meet a stringent NO_X emission standard. The regulation also requires operators of both in-state and out-of-state registered sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California beginning in 2008. Emission producing alternative technologies such as diesel-fueled auxiliary power systems and fuel-fired heaters are also required to meet emission performance requirements that ensure emissions are not exceeding the emissions of a truck engine operating at idle.

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, CARB adopted a regulation to reduce DPM and NO_X emissions from in-use (existing), off-road, heavy-duty diesel vehicles in California.[23] Such vehicles are used in construction, mining, and industrial operations. The regulation is designed to reduce harmful emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements, imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The idling limits require operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to less than five minutes. The idling requirements are specified in Title 13 of the California Code of Regulations.

State Legislation Related to GHG Emissions

Although significant overlap exists between regulations related to air quality and GHG emissions, to the extent feasible, the following section provides the regulations related to GHG emissions in California.

AB 1007

AB 1007, State Alternative Fuels Plan (Pavley, Chapter 371, Statutes of 2005), required development and adoption of a State plan to increase the use of alternative fuels. The final *State Alternative Fuels Plan* was adopted on December 5, 2007 and presented strategies and actions

[22] California Air Resources Board. *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*. October 24, 2013. Available at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm. Accessed August 2019.

[23] California Air Resources Board. *In-Use Off-Road Diesel Vehicle Regulation*. December 10, 2014. Available at: http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm. Accessed August 2019.

California must take to increase the use of alternative, non-petroleum fuels in a manner that minimizes costs to California and maximizes the economic benefits of in-state production. Examples of such strategies include establishment of government incentive programs for alternative fuels, creation of a Low Carbon Fuel Standard to reduce the carbon intensity of transportation fuels, and the allowance of GHG emissions credits to entities using alternatively fueled vehicles. The plan assessed various alternative fuels and developed fuel portfolios to meet California's goals to reduce petroleum consumption, increase alternative fuels use, reduce GHG emissions, and increase in-state production of biofuels without causing a significant degradation of public health and environmental quality. The Plan recommended goals for alternative fuel use as well as reductions in the carbon intensities of fuels such as gasoline and diesel, and lays a foundation for building a multi-fuel transportation energy future for California by 2050. As of 2017, decreases in the carbon intensity of conventional fuels have met or exceeded the compliance targets, and the use of alternative fuels has increased by approximately 800 million gallons of gas equivalence units.[24]

AB 1493

California AB 1493 (Stats. 2002, ch. 200) (Health & Safety Code, §42823, 43018.5), known as Pavley I, was enacted on July 22, 2002. AB 1493 requires that the CARB develop and adopt regulations that achieve "the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty truck and other vehicles determined by the CARB to be vehicles whose primary use is noncommercial personal transportation in the state." On June 30, 2009, the USEPA granted a waiver of CAA preemption to California for the State's GHG emission standards for motor vehicles, beginning with the 2009 model year. Pursuant to the CAA, the waiver allows for the State to have special authority to enact stricter air pollution standards for motor vehicles than the federal government's. On September 24, 2009, the CARB adopted amendments to the Pavley regulations (Pavley I) that reduce GHG emissions in new passenger vehicles from 2009 through 2016. The second phase of the Pavley regulations (Pavley II) is expected to affect model year vehicles from 2016 through 2020. The CARB estimates that the regulation would reduce GHG emissions from the light-duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030.

Renewable Portfolio Standard (RPS) and SB 100

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, and expanded in 2011 under SB 2, California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Since the inception of the RPS program, the program has been extended and enhanced multiple times. In 2015, SB 350 extended the State's RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. The requirements of SB 350 were expanded and intensified in 2018 through the adoption of SB 100, which mandated that all electricity generated within the State by publicly owned utilities be generated through carbon-free sources by 2045. In addition, SB 100 increased the previous renewable energy requirement for the year 2030 by 10 percent; thus requiring that 60 percent of electricity generated by publicly owned utilities originate from renewable sources by 2030.

[24] California Air Resources Board. *Low Carbon Fuel Standard Data Dashboard*. Available at: https://www.arb.ca.gov/fuels/lcfs/dashboard/dashboard.htm. Accessed May 2019.

Executive Order S-03-05

On June 1, 2005, then-Governor Schwarzenegger signed Executive Order S-03-05, which established total GHG emission targets. Specifically, emissions are to be reduced to year 2000 levels by 2010, 1990 levels by 2020, and to 80 percent below 1990 levels by 2050. The Executive Order directed the Secretary of the California Environmental Protection Agency (Cal-EPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary is also directed to submit biannual reports to the governor and state legislature describing: (1) progress made toward reaching the emission targets; (2) impacts of global warming on California's resources; and (3) mitigation and adaptation plans to combat these impacts.

To comply with the Executive Order, the Secretary of the Cal-EPA created a Climate Act Team (CAT) made up of members from various State agencies and commissions. In March 2006, CAT released their first report. In addition, the CAT has released several "white papers" addressing issues pertaining to the potential impacts of climate change on California.

AB 32

In September 2006, AB 32, the California Climate Solutions Act of 2006, was enacted (Stats. 2006, ch. 488) (Health & Saf. Code, §38500 et seq.). AB 32 delegated the authority for its implementation to the CARB and directs CARB to enforce the State-wide cap. Among other requirements, AB 32 required CARB to (1) identify the State-wide level of GHG emissions in 1990 to serve as the emissions limit to be achieved by 2020, and (2) develop and implement a Scoping Plan. Accordingly, the CARB has prepared the *Climate Change Scoping Plan* (Scoping Plan) for California, which was approved in 2008 and updated in 2014 and 2017.[25] The following sections present further information regarding plans and programs that have been introduced in order to meet the statutory requirements of AB 32.

California Scoping Plan

The 2008 Scoping Plan identified GHG reduction measures that would be necessary to reduce statewide emissions as required by AB 32. Many of the GHG reduction measures identified in the 2008 Scoping Plan have been adopted, such as the Low Carbon Fuel Standard, Pavley, Advanced Clean Car standards, RPS, and the State's Cap-and-Trade system.

Building upon the 2008 Scoping Plan, the 2013 and 2017 Scoping Plan Updates introduced new strategies and recommendations to continue GHG emissions reductions. The 2013 Scoping Plan Update created a framework for achievement of 2020 GHG reduction goals and identified actions that may be built upon to continue GHG reductions past 2020, as required by AB 32. Following the 2013 Scoping Plan, the 2017 Scoping Plan sets a path for the achievement of California's year 2030 GHG reduction goals.

California GHG Cap-and-Trade Program

California's GHG Cap-and-Trade Program was originally envisioned in the 2008 Scoping Plan as a key strategy to achieve GHG emissions reductions mandated by AB 32. The Cap-and-Trade Program is intended to put California on the path to meet the GHG emission reduction goal of 1990 levels by the year 2020, and ultimately achieving an 80 percent reduction from 1990 levels by 2050. Under cap-and-trade, an overall limit on GHG emissions from capped sectors has been

[25] California Air Resources Board. *AB 32 Scoping Plan*. Accessible at: https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm. Accessed August 2019.

established and facilities or industries subject to the cap are be able to trade permits (allowances) to emit GHGs. The CARB designed the California Cap-and-Trade Program to be enforceable and to meet the requirements of AB 32.[26] The Program started on January 1, 2012, with an enforceable compliance obligation beginning with the 2013 GHG emissions. On January 1, 2014 California linked the state's cap-and-trade plan with Quebec's, and on January 1, 2015 the program expanded to include transportation and natural gas fuel suppliers.[27] AB 398 was adopted by the State's legislature in July 2017, which reauthorized the Cap-and-Trade program through December 31, 2030. The reauthorization and continued operation of the Cap-and-Trade program represents a key strategy within the State's 2017 Scoping Plan Update for the achievement of California's year 2030 GHG reduction goals.

Executive Order S-01-07

On January 18, 2007, then-Governor Schwarzenegger signed Executive Order S-01-07, which mandates that a State-wide goal be established to reduce carbon intensity of California's transportation fuels by at least 10 percent by 2020. The Order also requires that a Low Carbon Fuel Standard (LCFS) for transportation fuels be established for California.

SB 97

As amended, SB 97, signed in August 2007, acknowledges that climate change is an important environmental issue that requires analysis under CEQA. The bill directed the Governor's Office of Planning and Research (OPR) to prepare, develop, and transmit to the Resources Agency guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. As directed by SB 97, the OPR amended the CEQA Guidelines to provide guidance to public agencies regarding the analysis and mitigation of GHG emissions and the effects of GHG emissions in CEQA documents. The amendments included revisions to the *Appendix G Initial Study Checklist* that incorporated a new subdivision to address project-generated GHG emissions and contribution to climate change. The new subdivision emphasizes that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. Under the revised CEQA Appendix G checklist, an agency should consider whether a project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, and whether a project conflicts with an applicable plan, policy, or regulation adopted for the purpose of reducing emission of GHGs.

Further guidance based on SB 97 suggests that the lead agency make a good-faith effort, based on available information, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. When assessing the significance of impacts from GHG emissions on the environment, lead agencies should consider the extent to which the project may increase or reduce GHG, as compared to the existing environmental setting, whether the project emissions exceed a threshold of significance determined applicable to the project, and/or the extent to which the project complies with adopted regulations or requirements to implement a state wide, regional, or local plan for the reduction or mitigation of GHG emissions. Feasible mitigation under SB 97 includes on-site and off-site measures, such as GHG emission-reducing design features and GHG sequestration.

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[26] California Air Resources Board. *Overview of ARB Emissions Trading Program*. Available at: https://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf. Accessed August 2019.

[27] California Air Resources Board. *Overview of ARB Emissions Trading Program*. Available at: https://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf. Accessed August 2019.

SB 375

In September 2008, SB 375, known as the Sustainable Communities and Climate Protection Act of 2008, was enacted, which is intended to build on AB 32 by attempting to control GHG emissions by curbing sprawl. SB 375 enhances CARB's ability to reach goals set by AB 32 by directing CARB to develop regional GHG emission reduction targets to be achieved by the State's 18 metropolitan planning organizations (MPOs), including the Sacramento Area Council of Governments (SACOG). Under SB 375, MPOs must align regional transportation, housing, and land-use plans and prepare a "Sustainable Communities Strategy" (SCS) to reduce the amount of vehicle miles traveled in their respective regions and demonstrate the region's ability to attain its greenhouse gas reduction targets. SB 375 provides incentives for creating walkable and sustainable communities and revitalizing existing communities, and allows home builders to get relief from certain environmental reviews under CEQA if they build projects consistent with the new sustainable community strategies. Furthermore, SB 375 encourages the development of alternative transportation options, which will reduce traffic congestion.

Executive Order S-13-08

Then-Governor Arnold Schwarzenegger issued Executive Order S-13-08 on November 14, 2008. The Executive Order is intended to hasten California's response to the impacts of global climate change, particularly sea level rise, and directs state agencies to take specified actions to assess and plan for such impacts, including requesting the National Academy of Sciences to prepare a Sea Level Rise Assessment Report, directing the Business, Transportation, and Housing Agency to assess the vulnerability of the State's transportation systems to sea level rise, and requiring the Office of Planning and Research and the Natural Resources Agency to provide land use planning guidance related to sea level rise and other climate change impacts.

The order also required State agencies to develop adaptation strategies to respond to the impacts of global climate change that are predicted to occur over the next 50 to 100 years. The adaption strategies report summarizes key climate change impacts to the State for the following areas: public health; ocean and coastal resources; water supply and flood protection; agriculture; forestry; biodiversity and habitat; and transportation and energy infrastructure. The report recommends strategies and specific responsibilities related to water supply, planning and land use, public health, fire protection, and energy conservation.

AB 197 and SB 32

On September 8, 2016, AB 197 and SB 32 were enacted with the goal of providing further control over GHG emissions in the State. SB 32 built on previous GHG reduction goals by requiring that the CARB ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by the year 2030. Additionally, SB 32 emphasized the critical role that reducing GHG emissions would play in protecting disadvantaged communities and the public health from adverse impacts of climate change. Enactment of SB 32 was predicated on the enactment of AB 197, which seeks to make the achievement of SB 32's mandated GHG emission reductions more transparent to the public and responsive to the Legislature. Transparency to the public is achieved by AB 197 through the publication of an online inventory of GHG and TAC emissions from facilities required to report such emissions pursuant to Section 38530 of California's Health and Safety Code. AB 197 further established a six-member Joint Legislative Committee on Climate Change Policies, which is intended to provide oversight and accountability of the CARB, while also adding two new legislatively-appointed, non-voting members to the CARB. Additionally, AB 197 directs the CARB to consider the "social costs" of emission reduction rules and regulations, with particular focus on how such measures may impact disadvantaged communities.

Executive Order B-55-18

On September 10, 2018, then-Governor Brown established a statewide goal of carbon neutrality as soon as possible, and no later than 2045. Following achievement of carbon neutrality, net negative emissions should be pursued as the new emissions goal. The executive order directed the CARB to work with relevant state agencies to develop frameworks for implementation and tracking of the new goal, and further directed the CARB to support the carbon neutrality goal through future updates to the State Scoping Plan. The implementation of carbon sequestration targets and projects for natural and working lands is identified as a necessary measure to achieve carbon neutrality and net negative emissions.

California Building Standards Code

California's building codes (California Code of Regulations [CCR], Title 24) are published on a triennial basis, and contain standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The California Building Standards Code (CBSC) is responsible for the administration and implementation of each code cycle, which includes the proposal, review, and adoption process. Supplements and errata are issued throughout the cycle to make necessary mid-term corrections. The 2019 code has been prepared and will become effective January 1, 2020. The California building code standards apply State-wide; however, a local jurisdiction may amend a building code standard if the jurisdiction makes a finding that the amendment is reasonably necessary due to local climatic, geological, or topographical conditions.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the CBSC, which will become effective with the rest of the CBSC on January 1, 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California.

The CALGreen Code encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the tiers, the provisions become mandates for all new construction within that jurisdiction.

Building Energy Efficiency Standards

The 2019 Building Energy Efficiency Standards is a portion of the CBSC (CCR Title 24, Parts 6 and 11) expands upon energy efficiency measures from the 2016 Building Energy Efficiency Standards resulting in a seven percent reduction in energy consumption from the 2016 standards for residential structures. Energy reductions relative to previous Building Energy Efficiency Standards would be achieved through various regulations including requirements for the use of high efficacy lighting, improved water heating system efficiency, and high-performance attics and walls.

One of the improvements included within the 2019 Building Energy Efficiency Standards will be the requirement that certain residential developments, including some single-family and low-rise residential developments, include on-site solar energy systems capable of producing 100 percent

of the electricity demanded by the residences. Certain residential developments, including developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement; however, such developments would continue to be subject to all other applicable portions of the 2019 Building Energy Efficiency Standards.

Local

The most prominent local regulations related to air quality and GHG emissions are established by the PCAPCD and the Placer County General Plan.

Placer County Air Pollution Control District

The PCAPCD regulates many sources of pollutants in the ambient air as well as GHG emissions, and is responsible for implementing certain programs and regulations for controlling air pollutant and GHG emissions to improve air quality in order to attain federal and State AAQs and reduce GHG emissions in compliance with state goals.

Air Quality Attainment Plan

As a part of the SVAB federal ozone nonattainment area, the PCAPCD works with the other local air districts within the Sacramento area to develop a regional air quality management plan under the FCAA requirement. The regional air quality management plan is called the SIP which describes and demonstrates how Placer County, as well as the Sacramento nonattainment area, would attain the required federal ozone standard by the proposed attainment deadline. In accordance with the requirements of the FCAA, the PCAPCD, along with the other air districts in the region, prepared the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Ozone Attainment Plan), adopted by the PCAPCD on February 19, 2009. The CARB determined that the Ozone Attainment Plan met federal Clean Air Act requirements and approved the Plan on March 26, 2009 as a revision to the SIP. Revisions to the Placer County portion of the SIP or Ozone Attainment Plan were made and adopted on August 11, 2011. In addition, an update to the plan, *2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2013 Ozone Attainment Plan), has been prepared and was adopted on September 26, 2013, and approved by CARB as a revision to the SIP on November 21, 2013. The 2013 Ozone Attainment Plan was approved by the USEPA on January 9, 2015.

The 2013 Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the FCAA requirements, including the NAAQS. It should be noted that in addition to strengthening the 8-hour ozone NAAQS, the USEPA also strengthened the secondary 8-hour ozone NAAQS, making the secondary standard identical to the primary standard. The SVAB remains classified as a severe nonattainment area for ozone with an attainment deadline of 2027. On October 26, 2015, the USEPA released a final implementation rule for the revised NAAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). On April 30, 2018, the USEPA published designations for areas in attainment/unclassifiable for the 2015 ozone standards. The USEPA identified the portions of Placer County within the SVAB as nonattainment for the 2015 ozone standards.[28] Due to the designation of the SVAB as nonattainment for the

[28] U.S. Environmental Protection Agency. *Nonattainment and Unclassifiable Area Designations for the 2015 Ozone Standards*. April 30, 2018.

2015 standards, the PCAPCD will work with other regional air districts to prepare a new ozone SIP for the revised 2015 standards.

PCAPCD Rules and Regulations

All projects under the jurisdiction of the PCAPCD are required to comply with all applicable PCAPCD rules and regulations. In addition, PCAPCD permit requirements apply to many commercial activities (e.g., print shops, drycleaners, gasoline stations), and other miscellaneous activities (e.g., demolition of buildings containing asbestos). The proposed project is required to comply with all applicable PCAPCD rules and regulations, which shall be noted on County-approved construction plans. The PCAPCD regulations and rules include, but are not limited to, the following:

Regulation 2 – Prohibitions

Regulation 2 is comprised of prohibitory rules that are written to achieve emission reductions from specific source categories. The rules are applicable to existing sources as well as new sources. Examples of prohibitory rules include Rule 202 related to visible emissions, Rule 217 related to asphalt paving materials, Rule 218 related to architectural coatings, Rule 228 related to fugitive dust, Rule 205 related to nuisance, and Rule 225 related to wood-burning appliances.

Rule 228 sets forth requirements necessary to comply with the Asbestos Airborne Toxic Control Measure (ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations (Title 17, Section 93105, of the California Code of Regulations), as discussed above.

Regulation 5 – Permits

Regulation 5 is intended to provide an orderly procedure for the review of new sources, and modification and operation of existing sources, of air pollution through the issuance of permits. Regulation 5 primarily deals with permitting major emission sources and includes, but is not limited to, rules such as General Permit Requirements (Rule 501), New Source Review (Rule 502), Emission Statement (Rule 503), Emission Reduction Credits (Rule 504), and Toxics New Source Review (Rule 513).

Placer County General Plan

The following goals and policies related to air quality are from the Placer County General Plan:

Air Quality – General

Goal 6.F To protect and improve air quality in Placer County.

Policy 6.F.2 The County shall develop mitigation measures to minimize stationary source and area source emissions.

Policy 6.F.3 The County shall support the Placer County Air Pollution Control District (PCAPCD) in its development of improved ambient air quality monitoring capabilities and the establishment of standards, thresholds, and rules to more adequately address the air quality impacts of new development.

Policy 6.F.4 The County shall solicit and consider comments from local and regional agencies on proposed projects that may affect regional air quality.

Policy 6.F.5 The County shall encourage project proponents to consult early in the planning process with the County regarding the applicability of Countywide indirect and areawide source programs and transportation control measures (TCM) programs. Project review shall also address energy-efficient building and site designs and proper storage, use, and disposal of hazardous materials.

Policy 6.F.6 The County shall require project-level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts. The County shall dedicate staff to work with project proponents and other agencies in identifying, ensuring the implementation of, and monitoring the success of mitigation measures.

Policy 6.F.7 The County shall encourage development to be located and designed to minimize direct and indirect air pollutants.

Policy 6.F.8 The County shall submit development proposals to the PCAPCD for review and comment in compliance with CEQA prior to consideration by the appropriate decision-making body.

Policy 6.F.9 In reviewing project applications, the County shall consider alternatives or amendments that reduce emissions of air pollutants.

Policy 6.F.10 The County may require new development projects to submit an air quality analysis for review and approval. Based on this analysis, the County shall require appropriate mitigation measures consistent with the PCAPCD's 1991 Air Quality Attainment Plan (or updated edition).

Policy 6.F.11 The County shall apply the buffer standards described in Part I of this Policy Document and meteorological analyses to provide separation between possible emission/nuisance sources (such as industrial and commercial uses) and residential uses.

Air Quality – Transportation/Circulation

Goal 6.G To integrate air quality planning with the land use and transportation planning process.

Policy 6.G.1 The County shall require new development to be planned to result in smooth flowing traffic conditions for major roadways. This includes traffic signals and traffic signal coordination, parallel roadways, and intra- and inter-neighborhood connections where significant reductions in overall emissions can be achieved.

Policy 6.G.2 The County shall continue and, where appropriate, expand the use of synchronized traffic signals on roadways susceptible to emissions improvement through approach control.

Policy 6.G.3 The County shall encourage the use of alternative modes of transportation by incorporating public transit, bicycle, and pedestrian modes in County transportation planning and by requiring new development to provide adequate pedestrian and bikeway facilities.

Policy 6.G.5 The County shall endeavor to secure adequate funding for transit services so that transit is a viable transportation alternative. New development shall pay its fair share of the cost of transit equipment and facilities required to serve new projects.

Policy 6.G.6 The County shall require large new developments to dedicate land for and construct appropriate improvements for park-and-ride lots, if suitably located.

Transportation – Non-Motorized Transportation

Goal 3.D To provide a safe, comprehensive, and integrated system of facilities for non-motorized transportation.

Policy 3.D.5 The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.

Policy 3.D.7 The County shall, where appropriate, require new development to provide sheltered public transit stops, with turnouts.

Policy 3.D.9 Consider Complete Streets infrastructure and design features in street design and construction to create safe and inviting environments for all users consistent with the land uses to be served.

Dry Creek-West Placer Community Plan

The following goals and policies related to air quality are from the DCWPCP:

Land Use Plan Element

Policy 28 Continue to monitor and control existing land uses that could deteriorate air and water quality.

Policy 29 Review Proposed Developments for their potential adverse effect on air and water quality.

Policy 30 Encourage application of measures to mitigate erosion and water pollution from earth disturbing activities such as grading and road construction.

Environmental Resources Management Element

Goal 8 Recognize that clean air and water are essential resources for maintaining a high quality of living, and ensure that these resources are maintained at acceptable levels.

Policy 11 Recognize clean air as a resource to be protected and improved through project mitigation.

Policy 22 Continue to monitor and control land uses which threaten to deteriorate air and water quality.

5.4 IMPACTS AND MITIGATION MEASURES

The standards of significance and methodology used to analyze and determine the proposed project's potential project-specific impacts related to air quality and GHG emissions are described below. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Based on the recommendations of PCAPCD and in coordination with the County, consistent with Appendix G of the CEQA Guidelines, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations (including localized CO concentrations and TAC emissions);
- Result in other emissions (such as those leading to odors) affecting a substantial number of people;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Criteria Pollutant Emissions and TAC Emissions

In order to evaluate criteria air pollutant emissions from development projects, the PCAPCD has established significance thresholds for emissions of ROG, NO_X, and PM_{10}. The significance thresholds, expressed in pounds per day (lbs/day), serve as air quality standards in the evaluation of air quality impacts associated with proposed development projects. Thus, if the proposed project's emissions exceed the PCAPCD thresholds, the project could have a significant effect on regional air quality and attainment of federal and State AAQS. The PCAPCD's recommended thresholds of significance are listed in Table 5-6. Therefore, if the proposed project's emissions exceed the pollutant thresholds presented in Table 5-6, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

Table 5-6
PCAPCD Thresholds of Significance

Pollutant	Construction Threshold (lbs/day)	Operational/Cumulative Threshold (lbs/day)
ROG	82	55
NO_X	82	55
PM_{10}	82	82

Source: Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.

Additionally, the PCAPCD has developed screening criteria for determining whether a project would cause substantial localized CO emissions at a given intersection. If the project would result in CO emissions from vehicle operations in excess of 550 lbs/day and either of the following conditions are met, the project could potentially result in substantial concentrations of localized CO and further analysis would be required:

- Degrade the peak hour level of service (LOS) on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F); or
- Substantially worsen (i.e., increase delay by 10 seconds or more when project-generated traffic is included) an already existing unacceptable peak hour LOS on one or more streets or at one or more intersections in the project vicinity.[29]

For TAC emissions, if a project would introduce a new source of TAC or a new sensitive receptor near an existing source of TAC that would not meet the CARB's minimum recommended setback, a detailed health risk assessment may be required. The PCAPCD considers an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 to be a significant impact related to TACs. The foregoing cancer risk level and non-cancer hazard index are typically applied to individual stationary sources of TACs; however, the PCAPCD does note that the cancer risk and hazard index thresholds may also be applied to activities that are non-stationary, such as diesel delivery trucks and off-road construction equipment.

GHG Emissions and Other Cumulative Emissions

Nearly all development projects in the region have the potential to generate air pollutants that may increase global climate change. On October 13, 2016, the PCAPCD adopted GHG emissions thresholds. The thresholds were designed to analyze a project's compliance with applicable state laws including AB 32 and SB 32.[30] While designed to assess a project's compliance with state laws, as discussed in the PCAPCD's Justification Report for the thresholds, the District relied on a review of historical CEQA projects within the County during the 13-year period from 2003-2015. The District modeled emissions from 688 total projects in the year 2020, and used the modeled emissions to determine a reasonable level to establish emissions thresholds. In addition to modeling past projects within Placer County, the PCAPCD modeled a range of potential future residential and commercial projects to provide additional County-specific evidence in developing the District's thresholds.[31]

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29 Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 38]. November 21, 2017.

30 Placer County Air Pollution Control District. *California Environmentla Quality Act Thresholds of Significance: Justification Report*. October 2016.

31 Placer County Air Pollution Control District. *California Environmentla Quality Act Thresholds of Significance: Justification Report*. October 2016.

The GHG thresholds include a bright-line threshold for the construction and operational phases of land use projects and stationary source projects, a screening level threshold for the operational phase of land use projects, and efficiency thresholds for the operational phase of land use projects that result in GHG emissions that fall between the bright-line threshold and the screening level threshold. The bright-line threshold of 10,000 $MTCO_2e$/yr represents the level at which a project's GHG emissions would be substantially large enough to contribute to cumulative impacts and mitigation to lessen the emissions would be mandatory. The PCAPCD further recommends use of the 10,000 $MTCO_2e$/yr for analysis of construction-related GHG emissions for land use projects. Any project with GHG emissions below the screening level threshold of 1,100 $MTCO_2e$/yr is judged by the PCAPCD as having a less-than-significant impact related to GHG emissions, and would not conflict with any State or regional GHG emissions reduction goals. Projects that would result in GHG emissions above the 1,100 $MTCO_2e$/yr screening level threshold, but below the bright-line threshold of 10,000 $MTCO_2e$/yr, must result in GHG emissions below the efficiency thresholds in order to be considered to result in a less-than-significant impact related to GHG emissions and not conflict with any State or regional GHG emission reduction goals. The GHG efficiency thresholds, which are in units of $MTCO_2e$/yr per capita or per square-foot, are presented in Table 5-7.

Table 5-7
PCAPCD Operational GHG Efficiency Thresholds of Significance

Residential ($MTCO_2e$/capita)		Non-Residential ($MTCO_2e$/1,000 sf)	
Urban	**Rural**	**Urban**	**Rural**
4.5	5.5	26.5	27.3

Source: ***Placer County Air Pollution Control District. Placer County Air Pollution Control District Policy. Review of Land Use Projects Under CEQA. October 13, 2016.***

In accordance with CARB and PCAPCD recommendations, the County, as lead agency, uses the currently adopted PCAPCD GHG thresholds of significance as presented above. Therefore, if the proposed project results in construction GHG emissions in excess of 10,000 $MTCO_2e$/yr, and/or operational GHG emissions in excess of 1,100 $MTCO_2e$/yr and are unable to show that emissions would achieve the efficiency thresholds presented in Table 5-7, the project would be considered to result in a cumulatively considerable contribution to global climate change.

With regard to other cumulative emissions, such as the cumulative emissions of criteria air pollutants, the PCAPCD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and thus result in a significant incremental contribution to cumulative emissions. As discussed throughout this Chapter, the PCAPCD's recommended thresholds of significance for ozone precursors and PM_{10} are based on attainment plans for the region. Thus, the PCAPCD concluded that if a project's ozone precursor and PM_{10} emissions would be less than PCAPCD project-level thresholds, the project would not be expected to conflict with any relevant attainment plans, and would not result in a cumulatively considerable contribution to a significant cumulative impact. As a result, the operational phase cumulative-level emissions thresholds established by PCAPCD are identical to the project-level operational emissions thresholds; the operational/cumulative thresholds are presented in Table 5-6.

Method of Analysis

The analysis protocol and guidance provided by the PCAPCD's *CEQA Air Quality Handbook*, including screening criteria and pollutant thresholds of significance, was used to analyze the proposed project's air quality impacts. It should be noted that in addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order to meet the County's affordable housing requirements. However, the total number of residential lots would remain unchanged, as would the overall disturbance area associated with the project. Potential emissions from the 12 on-site Accessory Dwelling Units (ADUs) are analyzed as applicable in this chapter.

Construction Emissions

The proposed project's short-term construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 software, which is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the ITE Manual, vehicle mix, trip length, average speed, etc. However, where project-specific data was available, such data was input into the model. For instance, the proposed project is anticipated to be developed over approximately three years, beginning in the year 2021. Additionally, a total of approximately 27 acres would be disturbed during on-site development activities.

In addition to the modeling discussed above for proposed construction activity on the project site, proposed off-site construction activity related to widening of Brady Lane and Vineyard Road, as well as the proposed sewer line improvements, was also modeled. For proposed linear projects, such as roadway widening and utility line improvements, the Roadway Construction Emissions Model (RoadMod), prepared by the Sacramento Metropolitan Air Quality Management District (SMAQMD),[32] is the recommended model.[33] Off-site sewer improvements were assumed to occur over an approximate 0.145-acre area, which would be spread across a 0.40-mile length of Vineyard Road. Widening of Brady Lane and Vineyard Road would occur over a total of 0.711 acres along 0.31 miles of roadway. Off-site improvements were assumed to include the use of air compressors, concrete saws, generator sets, signal boards, tractors/loaders/backhoes, trenchers, and paving equipment, among other pieces of machinery. To provide a conservative analysis, off-site and on-site construction activity was assumed to occur simultaneously.

Construction of the 12 ADUs would occur within the 27-acre disturbance area assumed for the project. Site grading is typically the most emissions-intensive phase of project construction. Because the 12 ADUs would be constructed within the 119 single-family lots, the construction of the ADUs would not require any additional grading activity beyond what was assumed for implementation of the 119 single-family units. Construction of the ADUs is anticipated to rely on the equipment and construction workers already on-site for development of the 119 single-family residences. Use of equipment and construction workers already on-site would avoid the need for additional equipment or workers to operate on-site, which would reduce the potential for development of the ADUs to result in construction emissions beyond what has been anticipated for construction of the 119 single-family units. Furthermore, the ADUs are anticipated to have a

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32 Sacramento Metropolitan Air Quality Management District. *Roadway Construction Emissions Model*. May 2016.
33 Placer County Air Pollution Control District. *Recommended CEQA Modeling Analysis Tools*. Available at: https://www.placerair.org/1808/Recommended-CEQA-Modeling-Analysis-Tools. Accessed June 2019.

smaller household size relative to the standard market-rate single-family units and the 119 single-family residences included in the project. The smaller relative size of the units would limit the amount of material and construction time needed for each ADU, thus further limiting emissions from the construction of the ADUs. Considering that construction of the ADUs would occur within the proposed 119 single-family residential lots, would rely on equipment and construction workers that would already be on-site, and would involve construction of smaller sized units than standard market-rate single-family units, construction of up to 12 ADUs is not anticipated to result in a substantial amount of pollutants and was not modeled separately.

The results of construction emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod and RoadMod modeling results are included in Appendix C to this EIR.

Operational Emissions

The proposed project's operational emissions were estimated using CalEEMod. Based on project-specific construction information provided by the project applicant, the proposed project is anticipated to be fully operational by 2024. The modeling performed for the proposed project included compliance with PCAPCD rules and regulations (i.e., low-VOC [volatile organic compounds] paints and low-VOC cleaning supplies), as well as with the 2019 California Building Energy Efficiency Standards Code, which is part of the CBSC. The proposed project's compliance with such would be verified as part of the County's building approval review process. KD Anderson & Associates, Inc. provided project-specific trip generation rates and vehicle miles travelled (VMT) data, which were applied to the project modeling.[34] In compliance with the 2019 CBSC, the modeling for project operations included the assumption that 100 percent of the electricity required for project operations would be provided by on-site renewable energy systems.

Operational emissions of 12 ADUs was modeled separately using similar assumptions related to the first operational year and compliance with the 2019 CBSC as discussed above. Vehicle trip rates for the 12 ADUs was based off of a technical memorandum prepared by KD Anderson & Associates for the 12 ADUs.[35]

The results of operational emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results are included in Appendix C to this EIR.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above. It should be noted that GHG emissions are inherently cumulative; thus, the discussion of associated impacts is included under the Cumulative Impacts and Mitigation Measures section below.

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34 KD Anderson & Associates. *Traffic Impact Analysis for Brady Vineyard Subdivision*. August 5, 2019.

35 KD Anderson & Associates. *Technical Memorandum: Traffic Impact Analysis for Brady Vineyards Subdivision: ASSessment of 12 Ancillary Units*. August 21, 2019.

5-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site and in off-site improvement areas. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate emissions of criteria air pollutants, including ROG, NO_X, and PM_{10}, intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM.

The construction modeling assumptions are described in the Method of Analysis section above. As discussed in the Method of Analysis section, the modeling assumed that both on-site and off-site construction would occur simultaneously during implementation of the proposed project. However, for informational purposes, the anticipated emissions that would result from off-site construction activity and on-site construction activity are presented separately in Table 5-8 and Table 5-9, respectively, while the combined emissions of off-site and on-site emissions are presented in Table 5-10.

Table 5-8
Maximum Unmitigated Off-Site Construction Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Off-site Roadway Construction	5.67	62.75	6.1
Off-site Pipeline Construction	2.39	15.46	1.24
Subtotal	*8.06*	*78.21*	*7.34*
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: Roadmod 2019 (see Appendix C).

Table 5-9
Maximum Unmitigated On-Site Construction Emissions (lbs/day)

	ROG	NO_X	PM_{10}
On-Site Construction	8.44	46.44	20.26
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, June 2019 (see Appendix C).

Table 5-10
Total Maximum Unmitigated Project Construction Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Off-site Roadway Construction	5.67	62.75	6.1
Off-site Pipeline Construction	2.39	15.46	1.24
On-Site Construction	8.44	46.44	20.26
Total Emissions	*16.50*	*124.66*	*27.60*
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**YES**	**NO**

Source: CalEEMod, June 2019; Roadmod (see Appendix C).

As shown in Table 5-8 and Table 5-9, when considered separately, on- and off-site construction activities would result in emissions of ROG, NO_X, or PM_{10} below the applicable PCAPCD thresholds of significance. Accordingly, should implementation of the off-site construction activity associated with both the roadway widening and pipeline utility work occur before or after implementation of on-site construction (i.e., the timing of off-site construction does not coincide with any on-site construction activity), construction activity associated with the proposed project would result in emissions of ROG, NO_X, and PM_{10} below the PCAPCD's thresholds. However, should implementation of the proposed project include simultaneous on- and off-site construction activity, as shown in Table 5-10, the combined emissions would exceed the PCAPCD's applicable thresholds of significance for NO_X. Although emissions of ROG and PM_{10} from on- and off-site construction would remain below the applicable PCAPCD thresholds of significance for each pollutant, because NO_X emissions would exceed the PCAPCD's applicable threshold, the simultaneous implementation of on- and off-site construction would contribute substantially to the region's nonattainment status for ozone.

It should be noted that construction activity related to implementation of the proposed project would be subject to PCAPCD Rule 228. Rule 228 requires projects involving earth-disturbing activities to implement various dust control measures, such as minimizing track-out on to paved public roadways, limiting vehicle travel on unpaved surfaces to 15 miles per hour, and stabilization of storage piles and disturbed areas. Furthermore, standard Placer County conditions of approval for proposed projects within the County include various requirements that would result in additional reductions of emissions related to implementation of the proposed project from what has been estimated and presented above within Table 5-8 through Table 5-10. The County's standard conditions of approval are listed below:

- The applicant shall submit a Dust Control Plan to the Placer County Air Pollution Control District (APCD) when the project area to be disturbed is greater than one acre. The Dust Control Plan shall be submitted to the APCD a minimum of 21 days before construction activity is scheduled to commence. The Dust Control Plan can be submitted online via a fill-in form: http://www.placerair.org/dustcontrolrequirements/dustcontrolform.
- With submittal of the Dust Control Plan, the contractor shall submit to the APCD a comprehensive equipment inventory (e.g., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower of greater) that will be used in aggregate of 40 or more hours. If any new equipment is added after submission

of the inventory, the contractor shall notify the APCD prior to the new equipment being utilized. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the APCD with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman.

- With submittal of the equipment inventory, the contractor shall provide a written calculation to the APCD for approval demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet-average of 20 percent NO_X reduction and 45 percent particulate reduction comparing with the statewide fleet averages. Acceptable options for reducing emissions may include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. The following link shall be used to calculate compliance with this condition and shall be submitted to the APCD as described above: http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation (click on the current "Construction Mitigation Tool" spreadsheet under Step 1).

Moreover, the County's standard conditions of approval require Grading Plans for the proposed project to include the following notes:

- Prior to construction activity, a Dust Control Plan or Asbestos Dust Mitigation Plan shall be submitted to the Placer County Air Pollution Control District (APCD) when the project area to be disturbed is greater than one acre. The Dust Control Plan shall be submitted to the APCD a minimum of 21 days before construction activity is scheduled to commence. The Dust Control Plan can be submitted online via the fill-in form:
  http://www.placerair.org/dustcontrolrequirements/dustcontrolform.
- Construction equipment exhaust emissions shall not exceed the APCD Rule 202 Visible Emissions limitations. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified by the APCD to cease operations, and the equipment must be repaired within 72 hours.
- Dry mechanical sweeping is prohibited. Watering of a construction site shall be carried out to mitigate visible emissions. (Based on APCD Rule 228 / Section 301).
- The contractor shall not discharge into the atmosphere volatile organic compounds caused by the use or manufacture of Cutback or Emulsified asphalts for paving, road construction or road maintenance unless such manufacture or use complies with the provisions of Rule 217 Cutback and Emulsified Asphalt Paving Materials.
- The contractor shall utilize existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.
- During construction, open burning of removed vegetation is only allowed under APCD Rule 304 Land Development Smoke Management. A Placer County Air Pollution Control District permit could be issued for land development burning, if the vegetation removed is for residential development purposes from the property of a single or two family dwelling or when the applicant has provided a demonstration as per Section 400 of the Rule that there is no practical alternative to burning and that the Air Pollution Control Officer (APCO) has determined that

the demonstration has been made. The APCO may weigh the relative impacts of burning on air quality in requiring a more persuasive demonstration for more densely populated regions for a large proposed burn versus a smaller one. In some cases, all of the removed vegetative material shall be either chipped on site or taken to an appropriate recycling site, or if a site is not available, a licensed disposal site. (Based on APCD Rule 304)

- The contractor shall minimize idling time to a maximum of five minutes for all diesel-powered equipment. (Placer County Code Chapter 10, Article 10.14).
- Idling of construction-related equipment and construction-related vehicles shall be minimized within 1,000 feet of any sensitive receptor (i.e., house, hospital, or school).
- The contractor shall suspend all grading operations when fugitive dust exceeds the APCD Rule 228 (Fugitive Dust) limitations. Fugitive dust is not to exceed 40 percent opacity, nor go beyond the property boundary at any time. Lime or other drying agents utilized to dry out wet grading areas shall not exceed APCD Rule 228 limitations. (Based on APCD Rule 228 / section 302 & 401.4)
- The prime contractor shall be responsible for keeping adjacent public thoroughfares clean by keeping dust, silt, mud, dirt and debris from being released or tracked offsite. Wet broom or other methods can be deployed as control and as approved by the individual jurisdiction. (Based on APCD Rule 228 / section 401.5)
- During construction activity, traffic speeds on all unpaved surfaces shall be limited to 15 miles per hour or less unless the road surface and surrounding area is sufficiently stabilized to prevent vehicles and equipment traveling more than 15 miles per hour from emitting dust or visible emissions from crossing the project boundary line. (Based on APCD Rule 228 / section 401.2)
- The contractor shall apply methods such as surface stabilization, the establishment of a vegetative cover, paving, (or use another method to control dust as approved by the individual jurisdiction) to minimize wind-driven dust.
- The contractor shall apply water or use methods to control dust impacts offsite. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site. (Based on APCD Rule 228 / section 304)
- The contractor shall suspend all grading operations when wind speeds (including instantaneous gusts) are high enough to result in dust emissions crossing the boundary line, despite the application of dust mitigation measures. (Based on APCD Rule 228 / section 401.6)
- In order to minimize wind driven dust during construction, the prime contractor shall apply methods such as surface stabilization, establishment of a vegetative cover, paving (or use of another method to control dust as approved by Placer County). (Based on APCD Rule 228 / section 402)
- Any device or process that discharges 2 pounds per day or more of air contaminants into the atmosphere, as defined by Health and Safety Code Section 39013, may require an APCD permit. Developers/contractors should contact the APCD prior to construction and obtain any necessary permits prior to the issuance of a Building Permit. (APCD Rule 501)

Conclusion

Although emissions from construction-related activities would be reduced through implementation of the foregoing County requirements, the combined emissions resulting

from on- and off-site construction activity are still anticipated to exceed the PCAPCD's applicable threshold of significance for NO_X. Thus, implementation of the proposed project could conflict with or obstruct implementation of the applicable air quality plan related to the region's nonattainment status for ozone, resulting in a ***significant*** impact.

Mitigation Measure(s)

Implementation of Mitigation Measure 5-1(a) would result in emissions as shown in Table 5-11 below.

Table 5-11
Maximum Project Construction-Related Emissions with Implementation of Mitigation Measure 5-1(a) (lbs/day)

	ROG	NO_X	PM_{10}
Off-site Roadway Construction	5.67	50.28	4.92
Off-site Pipeline Construction	2.39	12.51	0.85
On-Site Construction	8.44	37.16	19.33
Total Emissions	*16.5*	*99.95*	*25.10*
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**YES**	**NO**

Source: CalEEMod, June 2019; Roadmod (see Appendix C).

As shown in Table 5-11, despite implementation of Mitigation Measure 5-1(a), project construction emissions would still be anticipated to exceed the PCACPD's applicable thresholds. Implementation of Mitigation Measure 5-1(a) in combination with option 1 of Mitigation Measure 5-1(b) would result in emissions as shown in Table 5-12, while implementation of Mitigation Measure 5-1(a) in combination with option 2 of Mitigation Measure 5-1(b) would result in emissions as shown in Table 5-13.

Table 5-12
Maximum Project Construction-Related Emissions with Implementation of Mitigation Measure 5-1(a) and Option 1 (lbs/day)

	ROG	NO_X	PM_{10}
Off-site Roadway Construction	2.95	6.45	3.79
Off-site Pipeline Construction	1.31	3.35	0.51
On-Site Construction	8.44	37.16	19.33
Total Emissions	*12.7*	*46.96*	*23.63*
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, June 2019; Roadmod (see Appendix C).

Table 5-13
Maximum Project Construction-Related Emissions with Implementation of Mitigation Measure 5-1(a) and Option 2 (lbs/day)

	ROG	NO_X	PM_{10}
Off-site Roadway Construction	5.67	50.28	4.92
Off-site Pipeline Construction	2.39	12.51	0.85
On-Site Construction	6.68	3.89	18.28
Total Emissions	*14.74*	*66.68*	*24.05*
PCAPCD Significance Threshold	**82.0**	**82.0**	**82.0**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, June 2019; Roadmod (see Appendix C).

As shown in Table 5-12 and Table 5-13, implementation of Mitigation Measure 5-1(a) and either of the options set forth within Mitigation Measure 5-1(b) would result in construction-related emissions below the applicable PCACPD thresholds of significance. Therefore, implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

5-1(a) *Prior to approval of any Improvement Plans, the project applicant shall submit to the Placer County Air Pollution Control District (PCAPCD) a comprehensive equipment inventory (e.g., make, model, year, emission rating) of all off-road diesel-powered equipment over 50 horsepower (including owned, leased, and subcontractor equipment). With submittal of the equipment inventory, the contractor shall provide a written calculation to the PCAPCD for approval demonstrating that the heavy-duty off-road vehicles over 50 horsepower to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet-average of 20 percent of NO_X and 45 percent of DPM reduction as compared to California Air Resources Board (CARB) statewide fleet average emissions. Acceptable options for reducing emissions may include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. If any new equipment is added after submission of the inventory, the contractor shall contact the PCAPCD prior to the new equipment being utilized. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the PCAPCD with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman. In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications.*

Portable equipment over 50 horsepower must have either a valid District Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.

Idling shall be limited to five minutes or less for all on-road related and/or delivery trucks in accordance with CARB's On-Road Heavy-Duty Diesel

Vehicles (In-Use) Regulation. Clear Signage regarding idling restrictions should be placed at the entrances to the construction site.

5-1(b) *The project applicant must comply with one of the following options:*

1. *If any portion of on-site and off-site construction is to occur simultaneously, prior to approval of any Improvement Plans, the project applicant shall show on the Improvement Plan via notation that the contractor shall ensure that all off-road diesel-powered equipment over 25 horsepower to be used in off-site construction activity related to the Vineyard Road and Brady Lane road widening and sewer pipeline improvements (including owned, leased, and subcontractor equipment) shall meet California Air Resources Board (CARB) Tier 4 emissions standards or cleaner. The plans shall be submitted for review and approval to the Placer County Community Development Resource Agency.*
2. *If any portion of on-site and off-site construction is to occur simultaneously, prior to approval of any Improvement Plans, the project applicant shall show on the Improvement Plans via notation that the contractor shall ensure that all off-road diesel-powered equipment over 25 horsepower to be used in on-site construction activity (including owned, leased, and subcontractor equipment) shall meet California Air Resources Board (CARB) Tier 4 emissions standards or cleaner. The plans shall be submitted for review and approval to the Placer County Community Development Resource Agency.*

5-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As discussed above, due to the nonattainment designations of the area, the PCAPCD has developed plans to attain the State and federal standards for ozone and particulate matter. The currently applicable air quality plan is the 2013 Ozone Attainment Plan. Adopted PCAPCD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with the applicable air quality plan. Thus, if a project's operational emissions exceed the PCAPCD's mass emission thresholds, a project would be considered to conflict with or obstruct implementation of the PCAPCD's air quality planning efforts.

Emissions of ROG, NO_X, and PM_{10} would be generated during operations of the proposed project from both mobile and stationary sources. Emissions related to operation of the proposed project would include sources such as architectural coatings, landscape maintenance equipment exhaust, the emergency generator associated with the proposed sewer lift station, and consumer products (e.g., deodorants, detergents, hair spray, cleaning products, spray paint, insecticides, floor finishes, polishes, etc.). However, the most significant source of emissions related to the proposed project would be from mobile

sources. As discussed in the Method of Analysis section above, to capture the potential emissions related to mobile sources from the proposed project, KD Anderson & Associates, Inc. prepared project-specific trip generation rates and VMT estimates.

The maximum unmitigated operational emissions for the proposed project are presented in Table 5-14 below.

Table 5-14
Maximum Unmitigated Project Operational Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions	189.58	14.24	36.86
PCAPCD Significance Threshold	**55**	**55**	**82**
Exceeds Threshold?	**YES**	**NO**	**NO**

Source: CalEEMod, May and June 2019 (see Appendix C).

As shown in Table 5-14, the emissions resulting from operation of the proposed project would be below the PCACPD's thresholds for NO_X, and PM_{10}, but would exceed the PCAPCD's threshold for ROG. It should be noted that the operational emissions modeling for the proposed project assumed that the design of all proposed residences would include fireplaces, which could include woodfired or natural gas fireplaces. The operation of wood or natural gas fired fireplaces is the primary source of ROG emissions related to project operations, with approximately 99 percent of the estimated ROG emissions included in Table 5-14 originating from hearths assumed to be included in the project.

The emissions presented in Table 5-14 include emissions from the 119 proposed single-family units, but do not include emissions from up to 12 ADUs that could be built within the site. Table 5-15 presents combined emissions of both the 119 proposed single-family units, and up to 12 ADUs.

Table 5-15
Maximum Unmitigated Project Operational Emissions Including ADUs (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions (119 SF units)	189.58	14.24	36.86
ADU Emissions (12 units)	18.85	1.27	3.73
Total Emissions	*208.43*	*15.51*	*40.59*
PCAPCD Significance Threshold	**55**	**55**	**82**
Exceeds Threshold?	**YES**	**NO**	**NO**

Source: CalEEMod, May, June, and August 2019 (see Appendix C).

As shown in Table 5-15, with consideration of operational emissions from the 12 ADUs, project emissions would remain below the PCAPCD's emissions thresholds for NO_X and PM_{10}. However, operational emissions would continue to exceed the PCAPC's emissions threshold for ROG.

Based on the emissions presented in Table 5-14 and Table 5-15, operation of the proposed project, with or without inclusion of the 12 ADUs, could create a conflict with or obstruction of implementation of the applicable air quality plan due to ROG emissions, and a ***significant*** impact could result.

Mitigation Measure(s)

Implementation of the following mitigation measure, which prohibits the use of wood burning fireplaces within the project site, would reduce ROG emissions from an unmitigated maximum of 208.43 lbs/day to a maximum of 8.17 lbs/day, as shown in Table 5-16. As shown in Table 5-16, implementation of Mitigation Measure 5-2 would also reduce NO_X and PM_{10}. Maximum mitigated emissions of 8.17 lbs/day would be below the PCAPCD's threshold of significance. Thus, implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

Table 5-16
Maximum Mitigated Project Operational Emissions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions (119 SF units)	7.67	12.18	5.48
ADU Emissions (12 units)	0.50	1.08	0.56
Total Emissions	*8.17*	*13.26*	*6.04*
PCAPCD Significance Threshold	**55**	**55**	**82**
Exceeds Threshold?	**NO**	**NO**	**NO**

Source: CalEEMod, May, June, and August 2019 (see Appendix C).

5-2 *Wood-burning fireplaces, woodstoves, or similar wood-burning devices shall be prohibited throughout the proposed project plan area. Homes may be fitted with the applicable regulation-compliant natural gas burning appliances if desired. The prohibition shall be included on any project plans submitted prior to issuance of building permits, subject to review and approval by the Placer County Community Development Resource Agency.*

5-3 Expose sensitive receptors to substantial pollutant concentrations. Based on the analysis below, the impact is *less than significant*.

The major pollutants of concern are localized CO emissions and TAC emissions, which are addressed below.

Localized CO Emissions

Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Implementation of the proposed project would increase traffic volumes on streets near the project site; therefore, the project would be expected to increase local CO concentrations. Concentrations of CO approaching the AAQS are only expected where background levels are high, and traffic volumes and congestion levels are high. The statewide CO Protocol document identifies signalized intersections operating at LOS E or F, or projects that would result in the worsening of signalized intersections to LOS E or F, as having the potential to result in localized CO concentrations in excess of AAQS, as a result of large numbers of cars idling at stop lights.[36] In accordance with the statewide CO Protocol, the PCAPCD has established screening methodology for localized CO emissions, which are intended to provide a conservative indication of whether project-generated vehicle trips would result in the generation of localized CO emissions that would

[36] University of California, Davis. *Transportation Project-Level Carbon Monoxide Protocol*. December 1997.

contribute to an exceedance of AAQS and potentially expose sensitive receptors to substantial CO concentrations. Per the PCAPCD's screening methodology, if the project would result in vehicle operations producing more than 550 lbs/day of CO emissions and if either of the following scenarios are true, the project could result in localized CO emissions that would violate CO standards:

- Degrade the peak hour LOS on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity from an acceptable LOS (i.e., LOS A, B, C, or D) to an unacceptable LOS (i.e., LOS E or F); or
- Substantially worsen an already existing unacceptable peak hour LOS on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes an increase in delay at an intersection by 10 seconds or more when project-generated traffic is included.[37]

According to the Air Quality analysis performed for the proposed project, operation of the project would result in maximum mobile source CO emissions of 26.97 lbs/day without ADUs, and 29.63 lbs/day with up to 12 ADUs (see Appendix C). Consequently, CO emissions related to operation of the proposed project would be far below the 550 lbs/day screening threshold used by PCAPCD. Therefore, according to the PCAPCD's screening methodology for localized CO emissions, the proposed project would not be expected to generate localized CO emissions that would contribute to an exceedance of AAQS, and the proposed project would not expose sensitive receptors to substantial concentrations of localized CO.

TAC Emissions

As stated above, if a project would introduce a new source of TACs, a detailed health risk assessment may be required. The PCAPCD considers an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 to be a significant impact related to TACs.

The existing residential development opposite the project site across Brady Lane, as well as the rural residential developments to the south and northwest, would all be considered sensitive receptors. The closest sensitive receptor to the project site would be the existing residence located within the carve out parcel in the southwestern portion of the project site. Thus, activities related to the construction and operation of the proposed project are analyzed to determine whether the proposed project would expose nearby sensitive receptors to TAC emissions.

The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks from TACs are a function of both the concentration of emissions and the duration of exposure. Health-related risks associated with DPM in particular are primarily associated with long-term exposure and associated risk of contracting cancer.

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions.

[37] Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 37]. November 21, 2017.

However, construction would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. While methodologies for conducting health risk assessments are associated with long-term exposure periods (e.g., over a 30-year period or longer), construction activities associated with the proposed project were estimated to occur over an approximately three-year period, which would include all off-site work as well. Only portions of the site or off-site improvement areas would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location on the project site or within the off-site improvement areas. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of Best Available Control Technologies. As discussed above, through standard conditions of approval, Placer County requires off-road equipment used within the County to achieve lower than state-average emissions of NO_X and PM. Thus, on-site emissions of PM would be reduced, which would result in a proportional reduction in DPM emissions and exposure of nearby residences to DPM. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, including Rule 501 related to General Permit Requirements. Considering the intermittent nature of construction equipment operating within an influential distance to the nearest sensitive receptors, the duration of construction activities in comparison to the operational lifetime of the project, the typical long-term exposure periods associated with conducting health risk assessments, and compliance with regulations, the likelihood that any one nearby sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low.

As discussed above, and with implementation of Mitigation Measure 5-1(a) and 5-1(b), the proposed project's construction-related emissions would be below the applicable mass emissions thresholds of significance for PM_{10}, which includes DPM and fugitive dust related to construction. The PCAPCD's Handbook advises that if construction-related emissions have been quantified and are below the thresholds of significance, the project would result in a less-than-significant impact.[38] Considering that PM_{10} emissions, which include emissions of DPM, would be below the PCAPCD's thresholds of significance, construction of the proposed project would not be expected to generate substantial DPM emissions such that an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0 would occur. Therefore, the proposed project would not expose sensitive receptors to substantial concentrations of DPM during construction.

Operational-related emissions of TACs are typically associated with stationary diesel engines or land uses that involve heavy truck traffic or idling. Although the residences included in the proposed project would not involve long-term or frequent operations of any stationary diesel engines, the proposed sewer lift station would include installation of an emergency generator. Operations of the emergency generator would be strictly limited by PCAPCD permit conditions, and would be limited to infrequent maintenance and reliability testing, as well as operations in emergency conditions. Considering the intermittent nature of operation of the generator for testing and emergency purposes, and the highly

[38] Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 31 to 32]. November 21, 2017.

dispersive nature of DPM, the proposed generator would not be anticipated to result in the exposure of sensitive receptors to substantial concentrations of DPM.

The CARB's Handbook includes facilities (distribution centers) associated with 100 or more heavy-duty diesel trucks per day as a source of substantial DPM emissions. The project is not a distribution center, and is not located near any existing distribution centers. Residential developments do not involve frequent heavy-duty diesel truck trips. Some future residents may own diesel-fueled vehicles; however, emissions from passenger vehicles are typically less intense than from heavy-duty trucks, and the likelihood that the equivalent of 100 heavy-duty diesel trucks per day would occur from diesel-fueled passenger vehicles to and from the site is very low. Accordingly, the proposed project would not involve diesel trucks at the site in excess of 100 per day and would not be expected to expose any existing sensitive receptors to substantial DPM emissions associated with truck trips. Therefore, operation of the proposed project would not result in an increase in cancer risk levels of more than 10 in one million persons or a non-cancer hazard index greater than 1.0, and existing nearby sensitive receptors would not be exposed to substantial pollutant concentrations.

Naturally Occurring Asbestos

According to the *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*, prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain NOA, because faults and serpentinite outcroppings are not known to be in the project area.[39] Consequently, NOA is not anticipated to be present on the project site.

Criteria Pollutants

As noted in Table 5-1, exposure to criteria air pollutants can result in adverse health effects. The AAQS presented in Table 5-2 are health-based standards designed to ensure safe levels of criteria pollutants that avoid specific adverse health effects. Because the SVAB is designated as nonattainment for State and federal eight-hour ozone and State PM_{10} standards, the PCAPCD, along with other air districts in the SVAB region, has adopted federal and state attainment plans to demonstrate progress towards attainment of the AAQS. Full implementation of the attainment plans would ensure that the AAQS are attained and sensitive receptors within the SVAB are not exposed to excess concentrations of criteria pollutants. The PCAPCD's thresholds of significance were established with consideration given to the health-based air quality standards established by the AAQS, and are designed to aid the district in implementing the applicable attainment plans to achieve attainment of the AAQS.[40] Thus, if a project's criteria pollutant emissions exceed the PCAPCD's mass emission thresholds of significance, a project would be considered to conflict with or obstruct implementation of the PCAPCD's air quality planning efforts, thereby delaying attainment of the AAQS. Because the AAQSs are representative of safe levels that avoid specific adverse health effects, a project's hinderance of attainment of the AAQS could be considered to contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards.

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[39] Department of Conservation, California Geological Survey. *Special Report 190: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Placer County, California*. Published 2006.

[40] Placer County Air Pollution Control District. *CEQA Air Quality Handbook* [pg. 20]. November 21, 2017.

However, as discussed in Impact 5-1 and 5-2, and following implementation of Mitigation Measures 5-1(a) and 5-1(b), the proposed project would not result in exceedance of the PCAPCD's thresholds of significance. Consequently, implementation of the proposed project would not conflict with the PCAPCD's adopted attainment plans nor would the proposed project inhibit attainment of regional AAQS. Therefore, implementation of the proposed project would not contribute towards regional health effects associated with the existing nonattainment status of ozone and PM_{10} standards.

Conclusion

Based on the above analysis, the proposed residential land uses would not be anticipated to result in the production of substantial concentrations of TACs, including DPM, localized CO, or criteria pollutants. In addition, the likelihood of NOA being present on the project site is low. Therefore, the proposed project would not result in the exposure of sensitive receptors to substantial pollutant concentrations, and a ***less-than-significant*** impact would result.

Mitigation Measure(s)

None required.

5-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Based on the analysis below, the impact is *less than significant*.

Emissions of pollutants have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, visible emission (including dust), or emissions considered to constitute air pollutants. Air pollutants have been discussed in Impacts 5-1 through 5-3 above. Therefore, the following discussion focuses on emissions of odors and visible emissions.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact do not exist. Certain land uses such as wastewater treatment and conveyance facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. The proposed project would include the construction and operation of a sewer lift station, which would be located on the southern boundary of the project site, to the west of the proposed emergency vehicle access on Vineyard Road. The proposed sewer lift station would have the potential to result in odors within the project area. As discussed in the Existing Environmental Setting section, this analysis is appropriately limited to the potential effects that the proposed project, specifically the sewer lift station, may have on the surrounding environment, and not future on-site residents, per CBIA case law. The nearest off-site residences to the proposed lift station would be the existing residences located south of Vineyard Road, the closest of which is approximately 150 feet away from the lift station (note: the existing residence within the NAPOTS portion of the project site is approximately 480 feet away from the proposed sewer lift station).

Placer County maintains a Pump Station Design Manual, which provides design and engineering criteria that must be met for approval of proposed sewer lift stations.[41] The County, through the Design Manual, reserves the right to require that odor control facilities be included in sewer lift station design. In order to determine whether a proposed sewer lift station would require the inclusion of odor control facilities, County staff reviews project Improvement Plans for several factors. In particular, the potential for sewer lift stations to result in odors is largely dependent upon the size of the area serviced by the proposed lift station and if the lift station receives sewerage flows from other lift stations. Sewer lift stations that service large sewer shed areas or receive flows from other lift stations can have a heightened potential for creating odors, because sewage collected over large areas or transported over large distances is exposed to anaerobic conditions where odors can be generated. In addition to the consideration of the potential for a proposed lift station to result in the generation of odors, County staff considers the distance between the proposed lift station and the nearest receptors, as well as the site conditions surrounding the lift station.

In the case of the proposed lift station, the sewer shed serviced by the station would be limited to that of the project site and approximately 200 additional (future) units within the northeast area of the DCWPCP. Therefore, the proposed lift station would not service a large sewer shed area and sewage directed to the proposed lift station would not be conducive to anaerobic conditions over large distances. Furthermore, the proposed lift station would not receive flows from other upstream lift stations, and, thus, the proposed lift station would not handle sewage from off-site areas that had been transported over long distances. Due to the small sewer shed area and lack of connections to other upstream sewer lift stations, operations of the on-site sewer lift station are not anticipated to result in substantial odors. Moreover, the nearest off-site receptor to the proposed sewer lift station would be approximately 150 feet away from the lift station, which would provide ample distance for the minimal odors to dissipate. For the purposes of avoiding impacts related to operations of sewer lift stations, the County considers a setback distance of 50 feet or more to be sufficient to avoid impacts. The nearest off-site receptors would be well outside of the 50-foot setback.

Considering the above, odor control facilities are not anticipated to be required, as minimal odors would result from operation of the lift station and all off-site receptors would be sufficiently separated from the proposed lift station. Consequently, operation of the proposed lift station would not result in the exposure of sensitive receptors to substantial odors.

Although not within the purview of CEQA, during review of Improvement Plans, County staff would review the sewer lift station design to determine the potential for the station to expose future on-site project receptors to odors. The nearest proposed receptor would be future residents at Lot 119, which is directly east of the sewer lift station. An Emergency Vehicle Access, sidewalk, and landscaping would separate Lot 119 and the proposed lift station. As such, sufficient area would be available to achieve up to 50 feet of separation between the proposed lift station and the proposed residence at Lot 119.

Nevertheless, the County maintains the discretion to require the inclusion of odor control facilities, such as air filters/scrubbers, in the design of the sewer lift station. The final

[41] Placer County Environmental Engineering. *Pump Station Design Manual*. June 30, 2016.

determination with regard to the inclusion of odor control facilities would occur prior to approval of Improvement Plans for the project. Because odor control facilities would be considered primarily for the benefit of future on-site receptors, any potential need for inclusion of odor control facilities would not be within the purview of CEQA and would not be considered mitigation for the purpose of avoiding a significant environmental impact.

Apart from the proposed sewer lift station, operations of the proposed project would involve activities typical to residential developments, and, consequently, would not be anticipated to result in the creation of substantial odors.

Diesel fumes from construction equipment are often found to be objectionable; however, construction is temporary and operation of equipment is regulated by federal, State, and local standards, including PCAPCD rules and regulations. Buildout of the proposed project would involve construction activity in different areas of the site and within off-site improvement areas throughout the construction period. Therefore, construction equipment would operate at varying distances from existing sensitive receptors, and potential odors from such equipment would not expose any single receptor to odors for a substantial period of time. Furthermore, construction activity would be restricted to certain hours of the day per the Placer County Code, Section 9.36.030(A)(7), which would limit the times of day during which construction related odors would potentially be emitted. Development of the proposed project would be required to comply with all applicable PCAPCD rules and regulations, which would help to control construction-related odorous emissions. Due to the temporary duration of construction and the regulated nature of construction equipment, project-related construction activity would not be anticipated to result in the creation of substantial odors.

Considering the above, construction equipment and the proposed sewer lift station would be unlikely to result in the creation of substantial odors. Consequently, implementation of the proposed project would not be anticipated to result in a significant impact related to the emission of compounds, such as those leading to odors.

Visible Emissions

As defined in PCAPCD Rule 202, visible emissions may be smoke, dust, or any other substance that obscures an observer's view based on standardized scales of opacity. Visible emissions may result from the use of internal combustion engines, such as smoke from diesel fueled equipment, the burning of vegetation, or the upset and release of soil as dust.

PCAPCD Rule 202 specifically prohibits any person from discharging visible emissions of any air contaminant for a period or periods aggregating to more than three minutes in any one-hour time. Operation of the proposed residential land uses would not be anticipated to result in any visible emissions that would have the potential of violating Rule 202. Construction equipment on-site would be required to meet the visible emissions standards of Rule 202, and, considering the regulated nature of construction equipment, as well as the temporary use of such equipment on-site, would not be anticipated to result in substantial visible emissions. Should vegetation cleared from the site be burned, burning activity would be subject to the requirements of PCAPCD Rule 304. Rule 304 includes standards and administrative requirements to ensure that vegetation burning does not result in smoke-related impacts during land development.

Considering the above, implementation of the proposed project would not be anticipated to result in substantial visible emissions during project construction or operations.

Conclusion

In addition to the regulations and modeling results discussed above, PCAPCD Rule 205, Nuisance, addresses the exposure of "nuisance or annoyance" air contaminant discharges, which would include odors and visible emissions, and provides enforcement of nuisance control. Rule 205 is complaint-based, where if public complaints are sufficient to cause the emission source to be considered a public nuisance, then the PCAPCD is required to investigate the identified source, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications to correct the nuisance condition. Thus, although not anticipated, if air pollutant complaints are made during project construction or operations, the PCAPCD would be required (per PCAPCD Rule 205) to ensure that such complaints are addressed and mitigated, as necessary.

For the aforementioned reasons, project construction and operations would not result in substantial emissions of visible pollutants, and project operations would not result in other emissions (such as those leading to odors). Accordingly, implementation of the proposed project would not result in operational emissions leading to odors, which could adversely affect a substantial number of people, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

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

A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The geographic context for the cumulative air quality analysis includes Placer County and surrounding areas within the portion of the SVAB that is designated nonattainment for ozone and PM_{10}.

As mentioned above, global climate change is, by nature, a cumulative impact. Emissions of GHG contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate

due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed project, the geographical context for global climate change in this EIR is limited to the State of California.

5-5 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Based on the analysis below and with implementation of mitigation, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The proposed project is within a nonattainment area for ozone and PM_{10}. By nature, air pollution is largely a cumulative impact. The population growth and vehicle usage within the nonattainment area from the proposed project, in combination with other past, present, and reasonably foreseeable projects within Placer County and surrounding areas, contributes to the region's adverse air quality impacts on a cumulative basis, and could either delay attainment of AAQS or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. Thus, the project's emissions of criteria air pollutants would contribute to cumulative regional air quality effects.

As noted in the Standards of Significance section above, the PCAPCD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. A project's interference with such plans may be determined through the use of the PCAPCD's recommended thresholds of significance for ozone precursors and PM_{10}. The PCAPCD's recommended cumulative thresholds are identical to the operational thresholds, both of which are presented in Table 5-6.

Accordingly, if the proposed project would result in an increase of ROG, NO_X or PM_{10} in excess of PCAPCD's operational phase cumulative-level emissions threshold, which are identical to PCAPCD's project-level operational emissions thresholds, the project could potentially result in a significant incremental contribution towards cumulative air quality impacts. The proposed project's unmitigated cumulative contribution to regional emissions is presented in Table 5-17.

Table 5-17
Maximum Unmitigated Project Contribution of Operational Emissions to Cumulative Conditions (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions	189.58	14.24	36.86
PCAPCD Significance Threshold	**55**	**55**	**82**
Exceeds Threshold?	**YES**	**NO**	**NO**

Source: CalEEMod, May and June 2019 (see Appendix C).

As shown in Table 5-17, the proposed project's unmitigated operational emissions of NO_X and PM_{10} would be below the PCAPCD's applicable thresholds of significance. However, the unmitigated emissions of ROG would exceed the PCACPD's cumulative thresholds.

The emissions presented in Table 5-17 represent emissions from the 119 proposed single-family units, but do not include emissions from the ADUs that could be built within the site. Table 5-18 presents combined emissions of both the 119 proposed single-family units, and up to 12 ADUs.

Table 5-18
Maximum Unmitigated Project Contribution of Operational Emissions to Cumulative Conditions Including ADUs (lbs/day)

	ROG	NO_X	PM_{10}
Project Emissions (119 SF units)	189.58	14.24	36.86
ADU Emissions (12 units)	18.85	1.27	3.73
Total Emissions	*208.43*	*15.51*	*40.59*
PCAPCD Significance Threshold	**55**	**55**	**82**
Exceeds Threshold?	**YES**	**NO**	**NO**

Source: CalEEMod, May, June, and August 2019 (see Appendix C).

As shown in Table 5-18, with consideration of operational emissions from the 12 ADUs, project emissions would remain below the PCAPCD's emissions thresholds for NO_X and PM_{10}. However, operational emissions would continue to exceed the PCAPCD's emissions thresholds for ROG.

Therefore, implementation of the proposed project, with or without the 12 ADUs, could result in a significant incremental contribution to a cumulative violation of any air quality standards, contribute substantially to an existing or projected air quality violation, or conflict with and/or obstruct implementation of the PCAPCD's air quality planning efforts. As such, the proposed project's incremental contribution to regional air quality impacts would be ***cumulatively considerable***.

Mitigation Measure(s)

Restriction of the installation of woodburning fireplaces would result in the reduction of ROG emissions from an unmitigated maximum of 208.43 lbs/day to a maximum of 8.17 lbs/day, as shown in Table 5-16. Maximum mitigated emissions of 8.17 lbs/day would be below the PCAPCD's thresholds of significance. Thus, implementation of the following mitigation measure would reduce the above impact to a *less than cumulatively considerable* level.

5-5 Implement Mitigation Measure 5-2.

5-6 Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operation. As discussed in

the Method of Analysis section, the modeling assumed that both on- and off-site construction would occur during implementation of the proposed project.

Construction GHG Emissions

The estimated unmitigated maximum construction-related emissions from the proposed project are presented in Table 5-19. As shown in the table, the short-term emissions related to on-site construction would be below the applicable threshold of significance.

Table 5-19
Unmitigated On-site Construction GHG Emissions

Year	GHG Emissions ($MTCO_2e$/yr)	Threshold of Significance ($MTCO_2e$/yr)
2021	376.52	10,000
2022	424.85	10,000
2023	116.47	10,000

Source: CalEEMod, June 2019 (see Appendix C).

As shown in the table above, the maximum annual emissions related to construction of the proposed project are anticipated to occur in 2022. However, even in 2022, the construction-related GHG emissions would be well below the PCAPCD's bright-line threshold of 10,000 $MTCO_2e$/yr. Furthermore, off-site construction work related to water line improvements were estimated by RoadMod to involve the emission of an additional 613.86 $MTCO_2e$. If such emissions were to occur within 2022, the maximum annual GHG emissions from construction of the project would equal 1,038.71 $MTCO_2e$. Considering the off-site construction emissions, as well as on-site construction-related emissions, the proposed project would result in GHG emissions below the PCAPCD's bright-line threshold of 10,000 $MTCO_2e$/yr.

Long-Term Operational GHG Emissions

The modeling assumptions for the GHG emissions related to operations of the proposed project are discussed in the Method of Analysis section above. The estimated unmitigated operational GHG emissions at full buildout (2024) are presented in Table 5-20. It should be noted that the emissions presented in Table 5-20 do not include consideration of Mitigation Measure 5-2.

Table 5-20
Unmitigated Project Operational GHG Emissions ($MTCO_2e$/yr)

Emission Source	GHG Emissions
Area	181.67
Energy	165.03
Mobile	1,069.18
Stationary	0.23
Solid Waste	66.44
Water	17.21
TOTAL ANNUAL GHG EMISSIONS	**1,499.76**
PCAPCD Screening Level Threshold	**1,100**

Note: Rounding may result in small differences in summation.

Source: CalEEMod, June 2019 (see Appendix C).

As shown in the table, the proposed project would result in operational GHG emissions in excess of the 1,100 $MTCO_2e$/yr operational threshold of significance. Accordingly, the project must be further evaluated in comparison with the efficiency thresholds presented in Table 5-7. The efficiency thresholds rely on per capita $MTCO_2e$/yr emissions to determine significance for residential projects in rural or urban settings. In general, urban projects are considered to involve shorter vehicle trips, which would inherently reduce GHG emissions from mobile sources, while rural projects are considered to involve relatively longer vehicle trips and proportionally higher GHG emissions from mobile sources. In recognition of the inherent inequality between mobile source GHG emissions from rural and urban projects, PCAPCD established higher efficiency thresholds for rural projects as compared to urban projects (see Table 5-7 above). The PCAPCD directs lead agencies to determine whether a project is considered rural or urban. The proposed project is located within a generally rural portion of the DCWPCP region, but is adjacent to more urbanized uses within the City of Roseville. Although the project site is currently within a rural portion of the DCWPCP, because urban development within the City of Roseville exists to the east of the site, the PCAPCD's urban efficiency threshold is used for further analysis of project-related operational emissions. It should be noted that the urban efficiency metric is more stringent, and, thus, use of the urban efficiency metric presents a conservative analysis. The proposed project's estimated per capita emissions are presented below in Table 5-21 and compared with the applicable PCAPCD efficiency threshold.

Table 5-21
Unmitigated Project Operational GHG Emissions Per Capita

Project Emissions ($MTCO_2e$/yr/capita)	PCAPCD Efficiency Threshold for Urban Residential Projects ($MTCO_2e$/yr/capita)
4.08	4.5

Notes: As discussed in Chapter 11 of this EIR, the estimated population for the project at buildout is anticipated to be 367 residents based on a 3.08 persons per household rate for the DCWPCP area. Thus, the emissions efficiency rate for the project would be 4.08 (1,499.76 $MTCO_2e$/yr / 367 residents = 4.08 $MTCO_2e$/yr/capita).

As shown in the table, the proposed project would result in operational GHG emissions of 4.08 $MTCO_2e$/yr/capita, which would be below the applicable PCAPCD efficiency threshold.

It should be noted that implementation of Mitigation Measure 5-2 would reduce emissions from the levels shown in Table 5-20. As shown in Table 5-22, Mitigation Measure 5-2 would reduce emissions from area sources, resulting in overall emissions decreasing from an unmitigated level of 1,499.76 $MTCO_2e$/yr to a mitigated level of 1,404.43 $MTCO_2e$/yr. A mitigated emissions level of 1,404.43 $MTCO_2e$/yr would result in a mitigated emissions efficiency metric of 3.83 $MTCO_2e$/yr/capita. As demonstrated in Table 5-21, project emissions would be below the PCAPCD's efficiency threshold even without consideration of Mitigation Measure 5-2.

Furthermore, operation of up to 12 ADUs would result in additional GHG emissions not presented in the preceding tables. Both mitigated and unmitigated operational emissions of the proposed ADUs is presented in Table 5-23 below.

Table 5-22
Mitigated Project Operational GHG Emissions ($MTCO_2e$/yr)

Emission Source	GHG Emissions
Area	86.34
Energy	165.03
Mobile	1,069.18
Stationary	0.23
Solid Waste	66.44
Water	17.21
TOTAL ANNUAL GHG EMISSIONS	**1,404.43**
PCAPCD Screening Level Threshold	**1,100**

Note: Rounding may result in small differences in summation.

Source: CalEEMod, June 2019 (see Appendix C).

Table 5-23
ADU Operational GHG Emissions ($MTCO_2e$/yr)

Emission Source	Unmitigated GHG Emissions	Mitigated GHG Emissions
Area	18.32	8.71
Energy	13.87	7.79
Mobile	107.19	107.19
Solid Waste	2.78	2.78
Water	1.74	1.74
TOTAL ANNUAL GHG EMISSIONS	**143.89**	**128.20**
PCAPCD Screening Level Threshold	**1,100**	**1,100**

Notes:
- Rounding may result in small differences in summation.
- It should be noted that emissions related to the proposed emergency generator are presented in Table 5-22 above. The potential inclusion of up to 12 ADUs would not alter such emissions.

Source: CalEEMod, August 2019 (see Appendix C).

Although operational emissions of up to 12 ADUs would be below the PCAPCD's screening level thresholds when considered independently, the ADUs would be additive to the 119 single-family residential units included in the proposed project. Thus, emissions from operation of the ADUs must be considered additively to the operational emissions from the 119 single-family units included in the proposed project. When considered together, operation of the 119 single-family units and the 12 ADUs would result in mitigated emissions of 1,532.63 $MTCO_2e$/yr (1,404.43 $MTCO_2e$/yr + 128.20 $MTCO_2e$/yr = 1,532.63 $MTCO_2e$/yr). Because the ADUs are anticipated to be smaller than the proposed 119 single-family units, a lower person per household rate of 1.91 persons per household is applied to the ADUs. Thus, development of 12 ADUs would likely result in approximately 23 additional residents within the project site. The total population of the project site with 12 ADUs would be 390 residents and the efficiency metric would be 3.93 $MTCO_2e$/yr/capita (1,532.63 $MTCO_2e$/yr / 390 residents = 3.93 $MTCO_2e$/yr/capita). An efficiency metric of 3.93 $MTCO_2e$/yr/capita would be below the PCAPCD's efficiency threshold of 4.5 for urban residential developments. It should be noted that although the ADUs are anticipated to only result in 23 additional residents, based on the land uses

applied in CalEEMod, the default assumptions for CalEEMod anticipated that the 12 ADUs would generate 34 additional residents. Given the nature of the ADUs, 23 additional residents is considered a more accurate estimate. For the purposes of emissions estimation, the default estimate in CalEEMod of 34 additional residents is considered conservative and would result in a higher estimate of emissions as compared to 23 residents used elsewhere in this EIR. Notwithstanding the CalEEMod default estimates, when calculating PCACPD's efficiency metric, Raney used the ADU population of 23 because the inclusion of fewer residents in the efficiency calculation ensures a conservative approach to analysis (i.e., division of the numerator [emissions] by a smaller denominator [population] results in a greater per capita emissions estimate). Consequently, the analysis presented herein represents a worst-case approach, where the emissions estimates for the ADUs have been maximized, but a lower resident count has been used to assess the efficiency of the project.

Conclusion

Therefore, the proposed project would not be considered to generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the project would not result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change and the project's impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

6. Biological Resources

6. BIOLOGICAL RESOURCES

6.1 INTRODUCTION

The Biological Resources chapter of the EIR evaluates the biological resources known to occur or potentially occur within the proposed project site. The Biological Resources chapter describes potential impacts to those resources and identifies measures to eliminate or substantially reduce those impacts to a less-than-significant level. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed for the project region. The information contained in the analysis is primarily based on the Biological Resources Assessment (see Appendix D)[1] prepared by Madrone Ecological Consulting, and an Arborist Report prepared by Sierra Nevada Arborists (see Appendix E).[2] Further information was sourced from the Placer County General Plan,[3] the Placer County General Plan EIR,[4] and the *Dry Creek-West Placer Community Plan* (DCWPCP).[5]

6.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the existing environmental setting and biological resources occurring in the proposed project region.

Regional Setting

The proposed project site is located north of Vineyard Road and southwest of the City of Roseville, in an unincorporated portion of western Placer County, within the DCWPCP. The DCWPCP experiences a Mediterranean type climate with cool, wet winters, and hot, dry summers. Temperatures in the project region fluctuate from average highs in July of 95 degrees Fahrenheit, with average lows in December and January, averaging 39 degrees Fahrenheit for both months. Annual precipitation in the region averages approximately 24 inches, with nearly all precipitation occurring as rainfall between October and April.

The DCWPCP area is predominantly flat with residential, commercial, public use, and industrial developments intermixed with open green spaces. Open green spaces within the DCWPCP area are predominantly associated with Dry Creek, which runs west to east through the DCWPCP area and features adjacent woodlands, and tributaries to Dry Creek. In addition to Dry Creek, large areas of the DCWPCP are comprised of open grassland with interspersed rural single-family lots and residential subdivisions.

The project region is located in the Lower American River watershed (Hydrologic Unit Code 18020111). Rainfall runoff from the project site generally drains east to west, allowing water to flow to the unnamed Dry Creek tributary located within the project site. The unnamed Dry Creek tributary carries water from the vicinity of the project site south through the project site to a confluence with Dry Creek, approximately one mile to the southwest of the project site.

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1 Madrone Ecological Consulting. *Biological Resources Assessment, Brady at Vineyard*. August 2019.
2 Sierra Nevada Arborists. *Dry Creek Community Plan Project Site*. May 22, 2017.
3 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
4 Placer County. *Countywide General Plan EIR*. July 1994.
5 Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.

Stormwater from the project site contributes a small proportion of the total flow through the tributary, with the majority of flow originating from other areas of the drainage shed outside of the project site. For the purposes of this analysis, the unnamed on-site tributary to Dry Creek will hereafter be referred to as the Dry Creek Vineyard Road tributary.

The DCWPCP is located within the Sacramento Valley portion of Placer County. The Sacramento Valley is a broad valley characterized by predominantly agricultural uses and open space, with interspersed urban centers and rural towns. To the east and northeast of the DCWPCP area, the terrain transitions from the relatively flat Sacramento Valley to the foothill region of Placer County, followed by the increasingly steep and rugged Sierra Nevada Mountains. Habitat types within the Sacramento Valley portion of Placer County generally include oak woodland, riparian woodland, annual brome grasslands, and agricultural land.

Project Setting

The study area for the proposed project is depicted in Figure 6-1, and includes areas to be developed as part of the proposed project, as well as the off-site areas identified for widening of Brady Lane and Vineyard Road. It should be noted that although the southwestern corner of the project site is considered “not a part of this subdivision,” the entire 35-acre project site was included in the biological resources studies prepared for the proposed project. The areas analyzed in the biological resources studies are collectively referred to as the Project Area.

The proposed project would include off-site improvements to sewer infrastructure in the Project Area. As part of the proposed project, a new eight-inch sewer line would be constructed off-site within Vineyard Road between the project site and the 15-inch City of Roseville gravity sewer main in Foothills Boulevard. All of the areas that would be disturbed for off-site sewer infrastructure improvements are within the paved right-of-way of Vineyard Road. Thus, the off-site areas that would be disturbed due to sewer infrastructure improvements do not represent habitat areas or areas with any biological significance.

The Project Area is generally flat to gently hilly and primarily comprised of annual brome grassland, and areas consisting of Valley oak (*Quercus lobata*) riparian woodland, and small disturbed areas located along the eastern and southern boundaries of the site. Elevations range from 122 to 152 feet above mean sea level and slopes range from zero to nine percent. As noted previously, the Dry Creek Vineyard Road tributary is located within the Project Area. A Valley oak riparian woodland traverses the project site from north to south in association with the Dry Creek Vineyard Road tributary. In addition, a drainage ditch crosses the site from east to west and conveys irrigation runoff from a residential development east of Brady Lane, towards the Dry Creek Vineyard Road tributary just north of Vineyard Road. A pair of seasonal wetlands and a seasonal wetland swale are located within the annual brome grasslands, and five riparian wetlands abut the Dry Creek Vineyard Road tributary on the west side of the Project Area.

Along Vineyard Road, the Project Area surrounds a rural residential property on three sides. This residence has a number of buildings, scattered Valley oak trees, and ornamental vegetation. The Dry Creek Vineyard Road tributary enters this parcel from the west before exiting the area under Vineyard Road. The rural residential property is not a part of the proposed project, and land within the property would not be disturbed by the proposed development.

Figure 6-1
Project Area and Vegetation Communities

Source: Madrone Ecological Consulting, 2019.

Lands directly to the north, south, and west of the Project Area are in a combination of undeveloped, rural, residential, and agricultural uses. Developed portions of the City of Roseville are located to the east, and a church is located adjacent to the northeast corner of the Project Area off of Brady Lane.

Terrestrial Plant Communities

Madrone Ecological Consulting identified three habitat types on the project site: annual brome grassland, Valley Oak Riparian Woodland, and disturbed. The three vegetation types are shown in Figure 6-1. It should be noted that based on site surveys, valley elderberry shrubs were not found to be present in any of the three habitat types.

Annual Brome Grassland

Approximately 28.5 acres of annual brome grasslands exist within the Project Area; common grass species included soft brome (*Bromus hordeaceus*), ripgut brome (*Bromus diandrus*), perennial ryegrass (*Festuca perennis*), and wild oats (*Avena fatua*). Forbs observed included yellow star-thistle (*Centaurea solstitialis*), which heavily infests much of the uplands in the southeast corner of the Project Area, prickly wild lettuce (*Lactuca serriola*), and wild radish (*Raphanus sativus*). Several isolated specimens of almond (*Prunus dulcis*) and coyote brush (*Baccharis pilularis*) are scattered throughout the Project Area.

Valley Oak Riparian Woodland

Approximately 3.4 acres of Valley oak riparian woodland parallel both sides of the Dry Creek Vineyard Road tributary for most of the tributary's length throughout the Project Area. Common tree species include Valley oak, live oak (*Quercus wislizeni*), Fremont's cottonwood (*Populus fremontii*), Pacific willow (*Salix lucida*), southern catalpa (*Catalpa bignonioides*), and walnut hybrids (*Juglans* sp.). Common understory shrubs include Himalayan blackberry (*Rubus armeniacus*), poison oak (*Toxicodendron diversilobum*), wild rose (*Rosa californica*), purple river hemp (*Sesbania punicea*), and narrow-leaf willow (*Salix exigua*).

Disturbed

Approximately 3.1 acres of heavily disturbed areas occur parallel to Vineyard Road and Brady Lane along the southern and eastern edges of Project Area, respectively. Areas adjacent to the church parking lot appear to have been historically graded within the northeastern corner of the Project Area. Most of the disturbed areas support minimal or ruderal vegetation including yellow star-thistle (*Centaurea solstitialis*), bindweed (*Convolvulus arvensis*), purple sand-spurrey (*Spergularia rubra*), and turkey mullein (*Croton setigerus*).

Aquatic Resources

Madrone Ecological Consulting conducted an aquatic resources delineation of the project site on 14 September 2017. The delineation for the majority of the property was then verified by the United States Army Corps of Engineers (USACE) on 14 February 2018. According to Madrone Ecological Consulting, the delineation verified on 14 February 2018 will not expire. The delineation prepared for Study Area 2, associated with the on-site drainage ditch ("DD1"), received an approved jurisdictional determination, which unlike the Corp's verification process, expires after five years. Thus, the approved jurisdictional determination for Study Area 2 will expire in 2023. For the purposes of the aquatic resources delineation, the Project Area was divided into two Study Areas, each of which was verified separately by the USACE. Aquatic resources mapped within the Study Areas during the survey are depicted in Figure 6-2 and summarized in Table 6-1.

Figure 6-2
Aquatic Resources

Source: Madrone Ecological Consulting, 2019.

Table 6-1
Aquatic Resources Mapped within the Project Site

Resource Type	Acreage
Study Area 1	
Riparian Wetland	0.40
Seasonal Wetland	0.21
Seasonal Wetland Swale	0.07
Intermittent Stream	0.30
Subtotal	*0.98*
Study Area 2	
Drainage Ditch	0.084*
Subtotal	*0.084*
Total Aquatic Resources	**1.064**

* *The Drainage Ditch is not considered to be a jurisdictional Water of the U.S. under Section 404 of the Clean Water Act.*

Source: Madrone Ecological Consulting, March 2019.

A total of 1.064 acres of aquatic resources were mapped and verified within the Project Area. A description of each of the aquatic resources types is included below.

Seasonal Wetlands

Two seasonal wetlands were delineated within the Project Area. Seasonal wetlands inundate and/or saturate during the wet-season and/or irrigation-season, and typically dry by late spring and remain dry through the summer months unless irrigation water is present. The seasonal wetland feature labeled as "SW1" on Figure 6-2 is located on the northern edge of the Project Area and extends out of the Project Area to the north. The portion of SW1 within the Project Area, is slightly higher in elevation than the off-site portion, possesses a thick thatch layer, and is saturated rather than ponded during the wet-season. The portions of this feature north of the Project Area boundary supported persistent ponding throughout the wet-season. All of SW1, including the off-site area located on the neighboring parcel to the north, was surveyed by Madrone Ecological Consulting.

A second seasonal wetland labeled as "SW2" is located along Vineyard Road and receives irrigation run-off from the non-jurisdictional drainage ditch. This feature fills after storm events in the wet-season and ponds sporadically during the dry-season depending on the irrigation habits of, and runoff from, the upstream residential developments off-site.

Plant species commonly occurring in the identified seasonal wetland features include perennial ryegrass (*Festuca perennis*), common spikerush (*Eleocharis palustris*), toad rush (*Juncus bufonius*), rabbit's-foot grass (*Polypogon monspeliensis*), Mediterranean barley (*Hordeum marinum*), annual hair grass (*Deschampsia danthonioides*), and curly dock (*Rumex crispus*). Indicators of wetland hydrology observed included the presence of oxidized rhizospheres along live roots and biotic crust in the form of algal matting.

Seasonal Wetland Swale

One seasonal wetland swale was delineated within the Project Area. The seasonal wetland swale travels north to southwest in the direction of the Dry Creek Vineyard Road tributary, but terminates short of the channel due to site topography. During storm events the seasonal wetland swale discharges to the creek; however, flows through the seasonal wetland swale do not have the

duration or intensity to expand the lower reach of the seasonal wetland swale all the way to the intermittent drainage. Seasonal wetland swales are sloping, linear seasonal wetlands that convey surface runoff while maintaining saturated soil conditions, though ponding often occurs in the deeper reaches. Plant species commonly occurring in the seasonal wetland swale included Mediterranean barley (*Hordeum marinum*), perennial ryegrass (*Festuca perennis*), toad rush (*Juncus bufonius*), rabbit's-foot grass (*Polypogon monspeliensis*), and curly dock (*Rumex crispus*). A thick thatch layer was present due to the lack of grazing.

The most common indicator of wetland hydrology was the presence of oxidized rhizospheres along live roots. The seasonal wetland swale is situated on an approximately 5 percent slope and did not support sustained ponding during protocol wet-season vernal pool branchiopod surveys (vernal pool branchiopods are further discussed below).

Riparian Wetlands

Five riparian wetlands were delineated within Project Area. The riparian wetland features represent depressions or low terraces that receive water from the immediately adjacent Dry Creek Vineyard Road tributary during and after storm events. Plant species commonly occurring in these features included Mediterranean barley (*Hordeum marinum*), perennial ryegrass (*Festuca perennis*), Himalayan blackberry (*Rubus armeniacus*), rabbit's-foot grass (*Polypogon monspeliensis*), and curly dock (*Rumex crispus*). Riparian wetlands deeper within the riparian corridor also supported cottonwood (*Populus fremontii*), black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), and narrow-leaf willow (*Salix exigua*).

The most common indicators of wetland hydrology were the presence of oxidized rhizospheres along live roots and biotic crust in the form of algal matting.

Intermittent Stream

The Dry Creek Vineyard Road tributary is the only intermittent stream delineated within the Project Area. The bed of the Dry Creek Vineyard Road tributary was almost completely unvegetated due to the scouring effects of seasonal flows during the field surveys conducted by Madrone Ecological Consultants. Adjacent vegetation was that typical of the surrounding Valley oak riparian woodland. The boundaries were delineated at the Ordinary High Water Mark (OHWM), which was identified based primarily on the extent of scour and the destruction of terrestrial vegetation.

Drainage Ditch

A drainage ditch in the southern portion of Project Area conveys irrigation run-off from the residential developments east of Brady Lane to the seasonal wetland labeled as SW2 on Figure 6-2. The drainage ditch was apparently constructed concurrent with the adjacent development to the east. Based on historic aerial imagery of the project site the drainage ditch was constructed in an upland portion of the project site and drains upland areas. Following a formal delineation of the drainage ditch, Madrone Ecological Consulting, Inc. determined that the drainage ditch is a non-jurisdictional feature, and on 20 March 2018, the USACE concurred with Madrone's findings.

The ditch runs relatively parallel to the slope contours of the small ridgeline located to the north and possesses an OHWM, which was used to determine its extent. Based on a review of historic aerial photography, periodic vegetation removal is performed along the banks of the drainage ditch. At the time of the field survey several inches of water were present in the eastern portions of the drainage ditch. Vegetation in the eastern portions of the drainage ditch included cattails

(*Typha* spp.) and smartweed (*Persicaria* sp.). Fewer plants were present in the lower reaches of the drainage ditch, consisting mostly of scattered perennial ryegrass (*Festuca perennis*) or tall flat-sedge (*Cyperus eragrostis*).

Special-Status Species

Special-status species are species that have been listed as "threatened" or "endangered" under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or are of special concern to federal resource agencies, the State, or private conservation organizations. A species may be considered special-status due to declining populations, vulnerability to habitat change, or restricted distributions. A description of the criteria and laws pertaining to special-status classifications is described below.

Special-status plant species may meet one or more of the following criteria:

- Plants listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.12 for listed plants and various notices in the Federal Register for proposed species);
- Plants that are candidates for possible future listing as threatened or endangered under the FESA (64 FR 205, October 25, 1999; 57533-57547);
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] 670.5);
- Plants that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) (CEQA Guidelines, Section 15380); or
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in California (Lists 1A, 1B, 2A, 2B, and 3 species in CNPS [2001]).

Special-status wildlife species may meet one or more of the following criteria:

- Wildlife listed as threatened or endangered, or proposed as candidates for listing by the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) under the FESA (50 CFR 17.11 for listed wildlife and various notices in the Federal Register for proposed species);
- Wildlife listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 CCR 670.5);
- Wildlife that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA Guidelines, Section 15380);
- Wildlife identified as Medium or High priority species by the Western Bat Working Group (WBWG);
- Wildlife species of special concern (SSC) to the California Department of Fish and Wildlife (CDFW) (Remsen [1978] for birds; Williams [1986] for mammals); and/or
- Wildlife species that are fully protected in California (California Fish and Game Code, Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Several species of plants and animals within the State of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the State's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described below, State and federal laws have provided the CDFW and the USFWS with a mechanism for conserving and protecting the diversity of plant and animal species native to the State. A number of native plants and animals have been formally designated as threatened or endangered under State and federal endangered species legislation. Others

have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFW. In addition, the CNPS has developed a set of lists of native plants considered rare, threatened, or endangered. Collectively, these plants and animals are referred to as "special-status species."

To determine potentially occurring special-status species, the standard databases from the USFWS, CDFW (the California Natural Diversity Database [CNDDB]), and the CNPS were queried and reviewed. The searches provided a comprehensive list of regionally-occurring special-status species and were used to determine which species have some potential to occur within or near the project site. In addition to the database searches, pedestrian field surveys were conducted of the project site by Madrone Ecological Consulting.

The following table provides a list of special-status species that were evaluated, including their listing status, habitat associations, and their potential to occur in the project site (see Table 6-2).

Potential for occurrence within the project sites was assigned according to the following categories:

- ***Present***: Species occurs on the site based on CNDDB records, and/or was observed on the site during field surveys.
- ***High***: The site is within the known range of the species and suitable habitat exists.
- ***Moderate***: The site is within the known range of the species and very limited suitable habitat exists.
- ***Low***: The site is within the known range of the species and there is marginally suitable habitat.
- ***Absent:*** The species was not observed during protocol-level floristic surveys conducted on-site, the species was not observed during protocol-level wet-season and dry-season large listed vernal pool branchiopod surveys conducted on-site,
- ***Habitat Not Present***: The site does not contain suitable habitat for the species, or the site is outside the known range of the species.

The following sections provide a discussion of all special-status species with potential to occur within the Project Area.

Listed and Special-Status Wildlife

The queries of the CNDDB and USFWS species lists show that four invertebrates, two fish, three amphibians, two reptiles, 13 birds, and five bat species have the potential to occur in the vicinity of the Project Area. Of the 25 species with the potential to occur in the vicinity of the Project Area, Madrone Ecological Consulting considers only 12 species to have the potential to occur within the Project Area. In addition, other protected migratory birds have the potential to occur on-site. The 12 species are discussed in further detail below.

Tricolored Blackbird

Tricolored blackbirds (*Agelaius tricolor*) are not federally listed, but are state listed as threatened. Tricolored blackbirds are colonial nesters preferring to nest in dense stands of cattails, bulrush, or blackberry thickets, often associated with aquatic features.

Table 6-2
Special-Status Species with Potential to Occur within the Project Site

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Plants				
Balsamorhiza macrolepis Big-scale balsamroot	--	CRPR 1B.2	Prefers chaparral, cismontane woodland, and valley and foothill grasslands. Often associated with serpentine soils.	**Absent.** Marginally suitable habitat is present in the annual brome grassland. Protocol-level surveys did not detect this species.
Chloropyron molle ssp. *hispidum* Hispid bird's-beak	--	CRPR 1B.1	Prefers seasonally flooded, saline-alkali soils at elevations below 500 feet.	**Habitat Not Present.** Alkaline soils are not present within the Project Area.
Downingia pusilla Dwarf downingia	--	CRPR 2B.2	Vernal pools and other depressional wetlands.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.
Gratiola heterosepala Bogg's Lake hedge-hyssop	--	CE, CRPR 1B.2	Vernal pools and margins of lakes/ponds.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	--	CRPR 1B.2	Edges of vernal pools and other seasonally ponded features.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.
Juncus leiospermus var. *leiospermus* Red Bluff dwarf rush	--	CRPR 1B.1	Occurs in vernal mesic areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, and vernal pools between 100 and 4,100 feet in elevation.	**Habitat Not Present.** The only documented occurrence in Placer County is, according to the notes on the occurrence, considered to be erroneous (CNDDB 2017).
Legenere limosa Legenere	--	CRPR 1B.1	Vernal pools.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.

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Table 6-2
Special-Status Species with Potential to Occur within the Project Site

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Navarretia myersii ssp. *myersii* Pincushion navarretia	--	CRPR 1B.1	Vernal pools.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.
Orcuttia tenuis Slender Orcutt grass	FT	CE, CRPR 1B.1	Vernal pools and other seasonally ponded features.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.
Orcuttia viscida Sacramento Orcutt grass	FE	CE, CRPR 1B.1	Vernal pools.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species. Protocol-level surveys did not detect this species.
Sagittaria sanfordii Sanford's arrowhead	--	CRPR 1B.2	Emergent marsh habitat, typically associated with drainages, canals, or irrigation ditches.	**Absent.** The intermittent channel and ditch within the Project Area represents suitable habitat for this species; however, protocol-level surveys did not detect this species.
Invertebrates				
Branchinecta conservatio Conservancy fairy shrimp	FE	--	Very large, turbid vernal pools.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species; however, protocol-level wet-season and dry-season surveys did not detect this species.
Branchinecta lynchi Vernal pool fairy shrimp	FT	--	Vernal pools.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species; however, protocol-level wet-season and dry-season surveys did not detect this species.

(Continued on next page)

Table 6-2
Special-Status Species with Potential to Occur within the Project Site

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	FT	--	Dependent upon elderberry *(Sambucus* species) shrubs as primary host species.	**Absent.** No elderberry shrubs are present in the Project Area.
Lepidurus packardi Vernal pool tadpole shrimp	FE	--	Vernal pools.	**Absent.** The seasonal wetlands and seasonal wetland swale within the Project Area represent suitable habitat for this species; however, protocol-level wet-season and dry-season surveys did not detect this species.
Fish				
Hypomesus transpacificus Delta smelt	FT	CE	Adults are found in the brackish open surface waters of the Delta and Suisun Bay. Though never observed, spawning is believed to occur in tidally influenced sloughs and drainages on the freshwater side of the mixing zone.	**Habitat Not Present.** Tidally influenced sloughs or drainages are not present within the Project Area.
Oncorhynchus mykiss irideus Central Valley steelhead	FE	--	Anadromous species requiring freshwater water courses with gravelly substrates for breeding. The young remain in freshwater areas before migrating to estuarine and marine environments.	**Habitat Not Present.** The Dry Creek Vineyard Road tributary lacks gravel spawning substrate and flows too briefly to support this species. Additionally, this tributary appears to have been dammed on the property south of Vineyard Road, thereby presenting a barrier to migration.
Amphibians				
Ambystoma californiense California tiger salamander	FT	CT, CSC	Breeds in ponds or other deeply ponded wetlands, and uses gopher holes and ground squirrel burrows in adjacent grasslands for upland refugia/foraging.	**Habitat Not Present.** The Project Area is outside of the known range of the species.
Rana draytonii California red-legged frog	FT	CSC	Breeds in permanent to semi-permanent aquatic habitats including lakes, ponds, marshes, creeks, and other drainages.	**Habitat Not Present.** The Project Area is outside of the known range of the species.

(Continued on next page)

Table 6-2
Special-Status Species with Potential to Occur within the Project Site

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Spea hammondii Western spadefoot toad	--	CSC	Breeds in vernal pools, seasonal wetlands and associated swales. Forages and hibernates in adjacent grasslands.	**Absent.** The seasonal wetlands within the Project Area represent suitable habitat for western spadefoot toad; however, this species was not detected during protocol-level vernal pool branchiopod wet-season surveys.
Reptiles				
Actinemys marmorata Western pond turtle	--	CSC	Ponds, rivers, streams, wetlands, and irrigation ditches with associated marsh habitat.	**Habitat Not Present.** The aquatic resources within the Project Area are too ephemeral in nature to support this species.
Thamnophis gigas Giant garter snake	FT	CT	Rivers, canals, irrigation ditches, rice fields, and other aquatic habitats with slow moving water and heavy emergent vegetation.	**Habitat Not Present.** The Project Area is outside of the known range of the species.
Birds				
Agelaius tricolor Tricolored blackbird	--	CT	Colonial nester in cattails, bulrush, or blackberries associated with marsh habitats.	**Low.** Blackberry brambles scattered throughout the oak woodland represent marginally suitable nesting habitat for this species.
Aquila chrysaetos Golden eagle	--	CFP	Forages in open areas including grasslands, savannahs, deserts, and early successional stages of shrub and forest communities. Nests in large trees and cliffs.	**Habitat Not Present.** The annual brome grasslands within the Project Area are not sufficiently expansive to support this species.
Athene cunicularia Burrowing owl	--	CSC	Nests in abandoned ground squirrel burrows associated with open grassland habitats.	**Moderate.** Although limited ground squirrel burrows were observed, debris scattered throughout the Project Area could provide surrogate burrows. The annual brome grasslands provide marginally suitable foraging habitat due to high density of yellow star-thistle.

(Continued on next page)

Table 6-2
Special-Status Species with Potential to Occur within the Project Site

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Buteo swainsoni Swainson's hawk	--	CT	Nests in large trees, preferably in riparian areas. Forages in fields, cropland, irrigated pasture, and grassland near large riparian corridors.	**High.** The annual brome grasslands throughout the Project Area represent suitable foraging habitat for Swainson's hawk, and the trees within the Project Area provide suitable nesting habitat.
Circus cyaneus Northern harrier	--	CSC	Nests in emergent wetland/marsh, open grasslands, or savannah habitats. Forages in open areas such as marshes, agricultural fields, and grasslands.	**High.** The annual brome grassland is suitable nesting and foraging habitat for this species.
Elanus leucurus White-tailed kite	--	CFP	Open grasslands, fields, and meadows are used for foraging. Isolated trees in close proximity to foraging habitat are used for perching and nesting.	**Present.** The annual brome grasslands throughout the Project Area represent suitable foraging habitat for white-tailed kite, and the trees throughout the Project Area provide suitable nesting habitat. This species was observed foraging on-site during a field survey.
Geothlypis trichas sinuosa San Francisco Common yellowthroat	--	CSC	Strongly associated with San Francisco Bay including the Napa Sloughs south to San Jose. Favors woody swamp, brackish and freshwater marsh.	**Habitat Not Present.** The Project Area is outside of the known range of the species.
Haliaeetus leucocephalus Bald eagle	FD	CE/CFP	Nest in large trees within one mile of lakes, rivers, or larger streams.	**Low.** The annual brome grasslands represent marginally suitable foraging habitat for this species.
Lanius ludovicianus Loggerhead shrike	--	CSC	Occurs in open areas with sparse trees, shrubs, and other perches.	**High.** The annual brome grasslands throughout the Project Area represent suitable foraging habitat for loggerhead shrike, and the trees and shrubs within the Project Area provide suitable nesting habitat.

(Continued on next page)

Table 6-2
Special-Status Species with Potential to Occur within the Project Site

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Melospiza melodia mailliardi Song sparrow "Modesto" population	--	CSC	Nest in emergent freshwater marshes dominated by tules and cattails as well as riparian willow thickets. This species also nests in riparian forests of valley oak with a blackberry understory, along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites.	**Habitat Not Present.** Although the riparian woodland would otherwise represent suitable nesting habitat for this species, the species has not been documented nesting in Placer County, and only nests in extensive marshes in the Sacramento Valley area, outside of the Project Area.
Pipilo maculatus clementae San Clemente spotted towhee	--	CSC	Occurs in open areas with sparse trees, shrubs, and other perches.	**Habitat Not Present.** The Project Area is outside of the known range of the species.
Progne subis Purple martin	--	CSC	Nests in tall bridges and overpasses near water and open areas.	**Habitat Not Present.** Tall bridges or overpasses are not present within the Project Area.
Seophaga petechia Yellow Warbler	--	CSC	Occupy riparian vegetation in close proximity to water along streams and in wet meadows. This species no longer breeds in the Central Valley, but occurs as a common migrant in the fall and winter months.	**High.** Although the Project Area is outside of this species' breeding range, the species has been documented along Dry Creek just downstream of the Project Area, and suitable winter foraging habitat is present in the Valley oak riparian woodland within the Project Area.
Mammals				
Antrozous pallidus Pallid bat	--	CSC, WBWGH	Day and night roosts include crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of coast redwoods and giant sequoias, bole cavities of oaks, exfoliating bark, deciduous trees in riparian areas, and fruit trees in orchards), and various human structures such as bridges (especially wooden and concrete girder designs), barns, porches, bat boxes, and human-occupied as well as vacant buildings.	**High.** Suitable roosting habitat for this species is present in tree hollows and under exfoliating bark on trees scattered throughout the site.

(Continued on next page)

Table 6-2
Special-Status Species with Potential to Occur within the Project Site

Scientific Name (Common Name)	Federal Status	State Status	Habitat Requirements	Potential for Occurrence
Corynorhinus townsendii Townsend's big-eared bat	--	CC, WBWG H	Roosts in caves and cave analogues, such as abandoned mines, buildings, bridges, rock crevices and large basal hollows of coast redwoods and giant sequoias. Extremely sensitive to human disturbance.	**Habitat Not Present.** The Project Area does not contain caves or cave analogues.
Lasionycteris noctivagans Silver-haired bat	--	WBWG M	Roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. The silver-haired bat forages in open wooded areas near water features.	**High.** Suitable roosting habitat for this species is present in tree hollows and under exfoliating bark on trees scattered throughout the Project Area.
Lasiurus blossevillii Western red bat	--	CSC, WBWG H	Require large leaf trees such as cottonwoods, willows, and fruit/nut trees for daytime roosts. Often associated with wooded habitats that are protected from above and open below. Often found in association with riparian corridors. Require open space for foraging.	**High.** Trees scattered throughout the Project Area are suitable roosting habitat for this species.
Lasiurus cinereus Hoary bat	--	WBWG M	Roosts primarily in foliage of both coniferous and deciduous trees at the edges of clearings.	**High.** Trees scattered throughout the Project Area are suitable roosting habitat for this species.

Status Codes:
CC - CDFW Candidate for Listing; **CSC** - CDFW Species of Concern; **FE** - Federally Endangered; **CE** - CDFW Endangered; **CT** - CDFW Threatened; **FT** – Federally Threatened; **CFP** - CDFW Fully Protected; **FC** - Candidate for Federal Listing; **WBWG H** - Western Bat Working Group High Threat Rank; **CRPR** - California Rare Plant Rank; **FD** - Federally Delisted; **WBWG M** - Western Bat Working Group Medium Threat Rank

Source: Madrone Ecological Consulting, March 2019.

Blackberry brambles in the vicinity of the intermittent stream represent marginally suitable nesting habitat for tricolored blackbird due to the limited extent of the brambles. Tricolored blackbird has not been documented in the CNDDB within five miles of the Project Area. The closest location in the CNDDB is record 330 from 1997. This record is 5.3 miles away and was documented in the City of Roseville within what is now a residential development.

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is not listed pursuant to either the California or federal Endangered Species Acts; however, the species is designated as a Species of Special Concern by the CDFW. They typically inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. The species typically uses burrows created by fossorial mammals, most notably the California ground squirrel, but may also use man-made structures such as culverts; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. The breeding season extends from February 1 through August 31.

Although only a few ground squirrel burrows were observed within the Project Area, debris scattered throughout the Project Area could provide artificial burrows for burrowing owl, and the annual brome grasslands provide suitable foraging habitat for this species. The nearest known occurrence of burrowing owl, CNDDB Occurrence #339, is dated 5 May 2003 and is approximately 3.5 miles northwest of the Project Area in a pasture north of Philip Road. Although Occurrence #339 is the only occurrence of burrowing owl within five miles of the Project Area, an additional occurrence of an overwintering burrowing owl has recently been reported within the Placer Vineyards Specific Plan (PVSP) area, approximately 5.5 miles northwest of the Project area.[6] Nesting within the PVSP has not been documented.

Swainson's Hawk

Swainson's hawk (*Buteo swainsoni*) is a raptor species that is not federally listed but is listed as threatened by CDFW. Breeding pairs typically nest in tall trees associated with riparian corridors, and forage in grassland, irrigated pasture, and cropland with a high density of rodents. The Central Valley populations breed and nest in the late spring through early summer before migrating to Central and South America for the winter.

The annual brome grasslands throughout the Project Area represent suitable foraging habitat for Swainson's hawk, and the trees within the Project Area provide suitable nesting habitat. The nearest documented Swainson's hawk nest classified as extant is CNDDB Occurrence #952, which is located along Pleasant Grove Creek, approximately 5.5 miles northwest of the Project Area.

Northern Harrier

The northern harrier *(Circus cyaneus)* is not listed pursuant to either the CESA or FESA; however, the species is considered to be a species of special concern by the CDFW. The species is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California. The northern harrier is a ground nesting species, and typically nests in emergent wetland/marsh, open grasslands, or savannah habitats. Foraging occurs within a variety of open habitats such as marshes, agricultural fields, and grasslands.

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[6] VonderOhe, Sarah, Principal/Senior Biologist, Madrone Ecological Consulting, Inc. Personal communication [email] with Nick Pappani, Vice President, Raney Planning and Management. June 20, 2019.

The annual brome grasslands throughout the Project Area are suitable nesting and foraging habitat for the species. Occurrences of northern harrier have not been documented in the CNDDB within five miles of the Project Area.

White-tailed Kite

White-tailed kite (*Elanus leucurus*) is not federally or state listed but is a CDFW fully protected species. The species is a yearlong resident in the Central Valley and is primarily found in or near foraging areas such as open grasslands, meadows, farmlands, savannahs, and emergent wetlands. White-tailed kites typically nest from March through June in trees within riparian, oak woodland, and savannah habitats of the Central Valley and Coast Range.

The annual brome grasslands throughout the Project Area represent suitable foraging habitat for white-tailed kite, and the trees within the Project Area provide suitable nesting habitat. The species was observed foraging in the eastern portion of the Project Area during a field survey performed by Madrone Ecological Consulting. Other than the on-site occurrence noted by Madrone, the nearest documented occurrence of white-tailed kite in the CNDDB is Occurrence #56, which is located approximately 2.4 miles northwest of the Project Area, near the Woodcreek Golf Club.

Bald Eagle

The bald eagle (*Haliaeetus leucocephalus*) is a raptor species that is federally delisted, but is listed as endangered under the CESA and is a CDFW fully protected species. In California, nests are mainly located in large trees or on cliff ledges in montane and foothill forests and woodlands near reservoirs, lakes, and rivers.

The annual brome grasslands within the Project Area represent marginally suitable foraging habitat for migrating bald eagle. Bald eagle has not been documented in the CNDDB within five miles of the Project Area.

Loggerhead Shrike

The loggerhead shrike *(Lanius ludovicianus)* is not listed or protected pursuant to either the California or federal Endangered Species Acts; but is a CDFW Species of Special Concern. Loggerhead shrikes nest in small trees and shrubs in woodland and savannah vegetation communities, and forage in open habitats throughout California. The nesting season ranges from March through June.

The trees and annual brome grassland within the Project Area provide suitable nesting and foraging habitat for loggerhead shrike. Loggerhead shrike has not been documented in the CNDDB within five miles of the Project Area.

Yellow Warbler

The yellow warbler *(Setophaga petechia)* is not listed pursuant to either the CESA or FESA; however, the species is classified as a CDFW species of special concern. The yellow warbler is largely extirpated as a breeder in the Sacramento Valley, but the species is a common migrant during the fall and winter months. Yellow warblers generally occupy riparian vegetation in close proximity to streams. Preferred habitat in northern California is dominated by willows (*Salix* spp.), cottonwoods (*Populus* spp.), and Oregon ash (*Fraxinus latifolia*).

Although the Project Area is outside of the species' breeding range, the species has been documented along Dry Creek, which is downstream of the Project Area. Suitable winter foraging habitat is present in the Valley oak riparian woodlands within the Project Area.

Migratory Birds

California Fish and Game Code (Sections 3503, 3503.5) and the Federal Migratory Bird Treaty Act protect special-status birds including the loggerhead shrike and burrowing owl, as well as other passerine birds, also known as perching birds, and their nests. The on-site trees and grassland would represent nesting and foraging habitat for many such species.

Pallid Bat

Pallid bat (*Antrozous pallidus*) is not federally or state listed, but is considered a CDFW species of special concern, and is classified by the WBWG as a High priority species. The species favors roosting sites in crevices in rock outcrops, caves, abandoned mines, hollow trees, and human-made structures such as barns, attics, and sheds. Though pallid bats are gregarious, the species tends to group in smaller colonies of 10 to 100 individuals. Pallid bats are nocturnal hunters and capture prey in flight, but unlike most American bats, the species has been observed foraging for flightless insects, which are seized after the bat lands.

Tree hollows and exfoliating bark on trees throughout the Project Area represent suitable roosting habitat for pallid bat. Pallid bat has not been documented in the CNDDB within five miles of the Project Area.

Silver Haired Bat

Silver-haired bat (*Lasionycteris noctivagans*) is not federally or state listed, but is classified by the WBWG as a Medium priority species. Primarily considered a coastal and montane forest species, the silver-haired bat occurs in more xeric environments during winter and seasonal migrations. The species roosts in abandoned woodpecker holes, under bark, and occasionally in rock crevices. An insectivore, the favored foraging sites of the species include open wooded areas near water features.

Tree hollows and exfoliating bark on trees throughout the Project Area represent suitable roosting habitat for silver-haired bat. Silver-haired bat has not been documented in the CNDDB within five miles of the Project Area.

Western Red Bat

Western red bat (*Lasiurus blossevillii*) is not federally or state listed, but is considered a CDFW species of special concern, and is classified by the WBWG as a High priority species. Western red bat is typically solitary, roosting primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. The species may have an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores).

Trees within the Valley oak riparian woodland represent suitable roosting habitat for western red bat. Western red bat has not been documented in the CNDDB within five miles of the Project Area.

Hoary Bat

The hoary bat (*Lasiurus cinereus*) is not federally or state listed, but is classified by the WBWG as a Medium priority species. The species is considered to be one of the most widespread of all American bats with a range extending from Canada to central Chile and Argentina as well as Hawaii. Hoary bats are solitary and roost primarily in foliage of both coniferous and deciduous trees, near the ends of branches at the edge of clearings. This species may also occasionally roost in caves, beneath rock ledges, in woodpecker holes, in grey squirrel nests, under wood planks, or clinging to the side of buildings.

Trees within the Valley oak riparian woodland represent suitable roosting habitat for hoary bat. Hoary bat has not been documented in the CNDDB within five miles of the Project Area.

Trees

An Arborist Report has been prepared for the proposed project site by Sierra Nevada Arborists, which included a tree survey conducted on May 17, 2017. The tree survey of the project site included field inspection of all protected trees within and/or overhanging the project site. Per Placer County's Tree Preservation Ordinance (Section 12.16.020 of the County Code), surveyed trees included protected trees with a single main stem or trunk measuring at least six inches diameter at breast height (DBH), or multiple trunks with an aggregate measurement of at least 10 inches DBH. Trees that met the Placer County Code's definition of protected were identified by individual tags. Data recorded during the survey included the following: location, tree ID number, species, number of trunks, DBH of each trunk, canopy of dripline radius, height, health, vigor, structure rating, and remarks. A total of 107 trees were surveyed within the project site. Of the 107 trees, there were 23 blue oaks (*Quercus douglasii*), one Fremont cottonwood (*Populus fremontii*), 63 interior live oak (*Quercus wislizeni*), five Pacific willow (*Salix lucida*), and 15 Valley oak (*Quercus lobata*). All of the foregoing trees are protected by the Placer County Tree Preservation Ordinance (Article 12.16 of the Placer County Municipal Code), which regulates both the removal of trees and the encroachment of construction activities into protected tree zones. In addition to the protected trees listed above, the project site contains almond, black locust, black walnut, flowering pear, and holly oak that do not meet the County's definition of protected trees, and, thus, were not further assessed. The location of the inventoried trees noted during the field survey, is shown in Figure 6-3 and Figure 6-4.

Tree health, vigor, and structure were rated as Good, Fair, or Poor. Where conditions were between ratings of Good and Fair or Fair and Poor, intermediate ratings of Fair to Good and Fair to Poor were given. According to the Arborist Report, of all on-site trees, only one tree, tree number 106, which is a Pacific Willow, was recommended for removal due to the nature and extent of defects, compromised health, and/or structural instability.

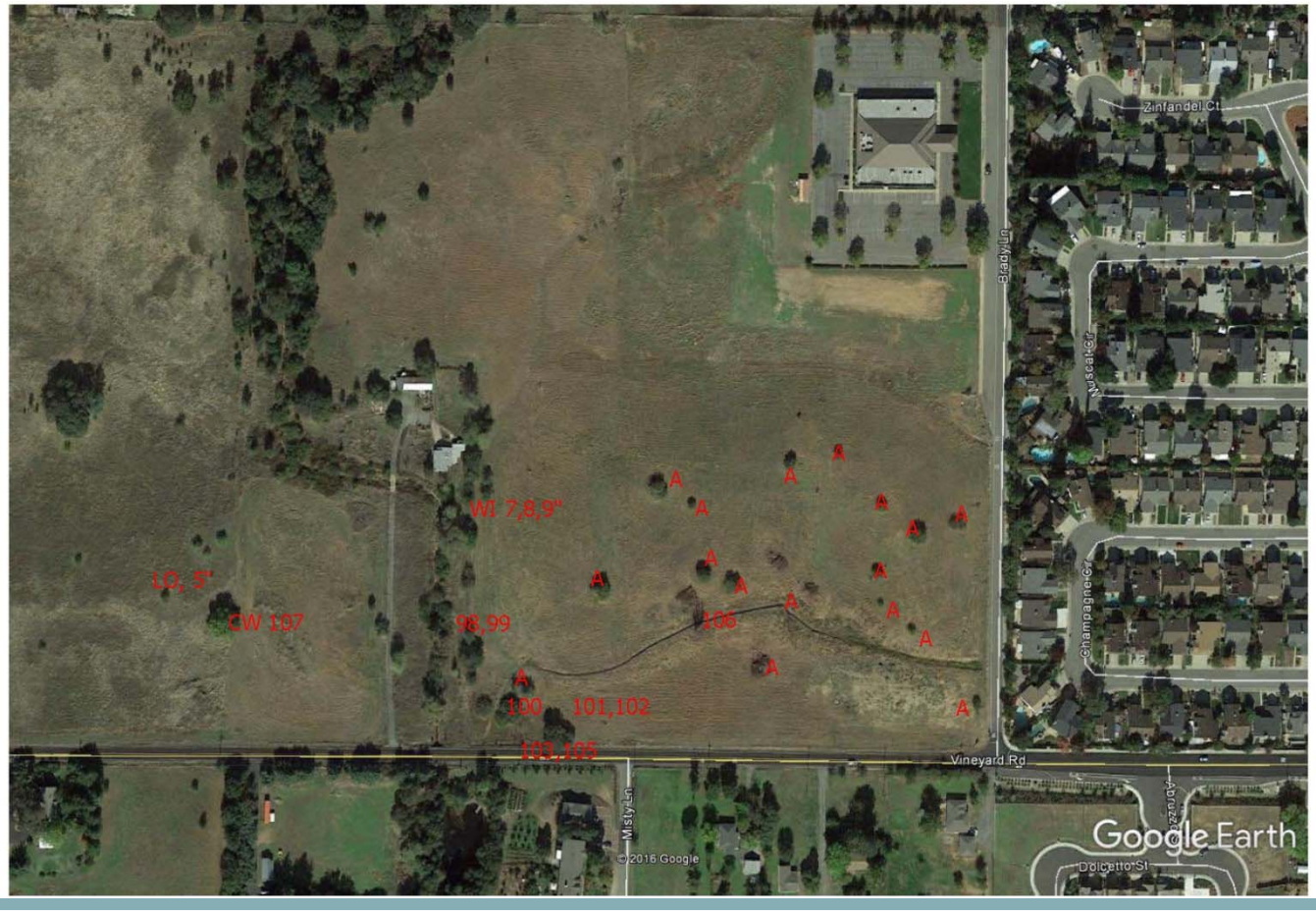
6.3 REGULATORY CONTEXT

A number of Federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the vicinity of the project site.

Federal Regulations

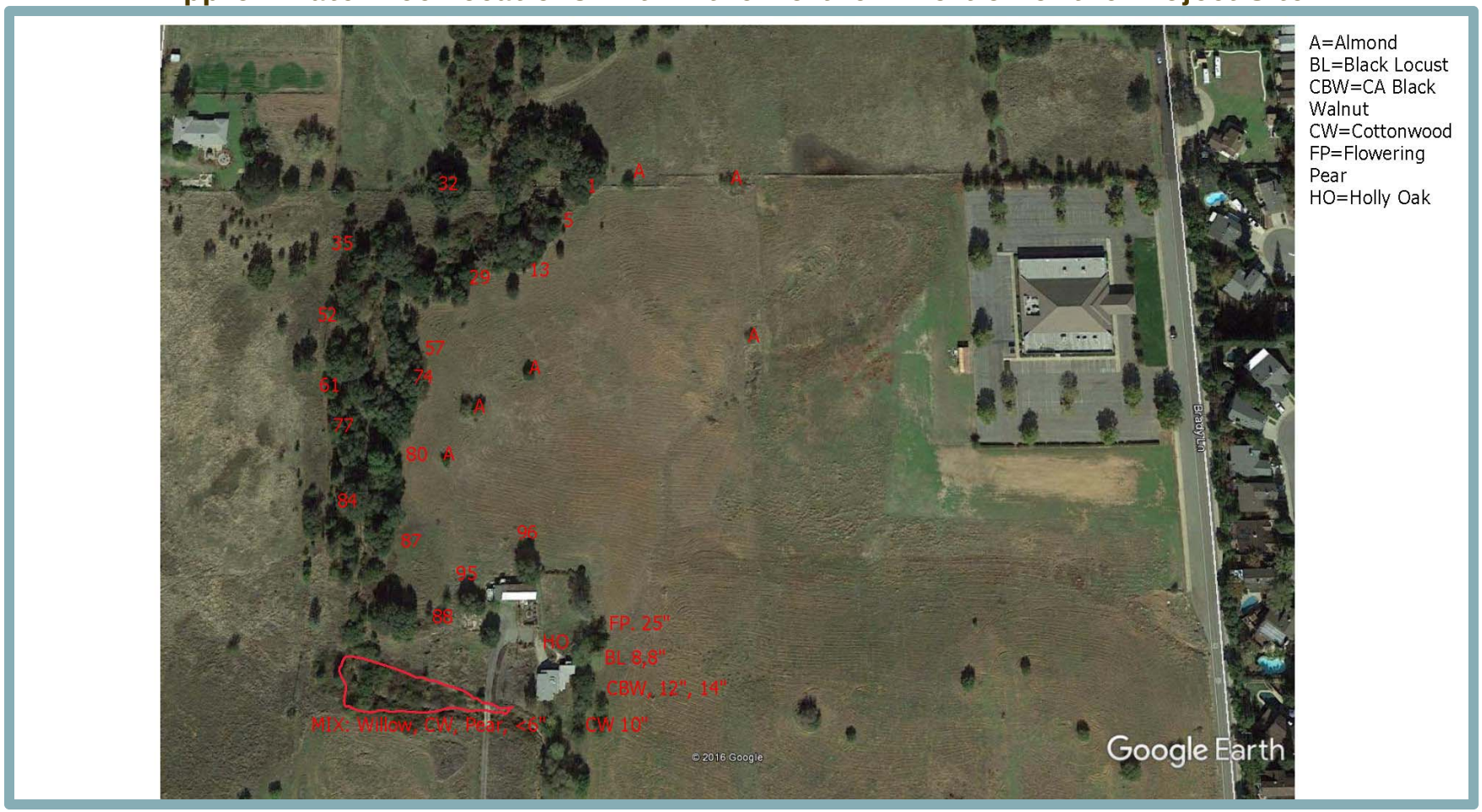
The following are the Federal environmental laws and policies relevant to biological resources.

Figure 6-3
Approximate Tree Locations Within the Southern Portion of the Project Site



Source: Sierra Nevada Arborists. 2017.

Figure 6-4
Approximate Tree Locations Within the Northern Portion of the Project Site



Source: Sierra Nevada Arborists. 2017.

Federal Endangered Species Act

Under the FESA, the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 USC § 1533(c)). Two federal agencies oversee the FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, while the NMFS has jurisdiction over anadromous fish and marine fish and mammals. Section 7 of the FESA mandates that federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species.

Section 10 requires the issuance of an "incidental take" permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan (HCP) that would offset the take of individuals that may occur, incidental to implementation of a proposed project, by providing for the protection of the affected species.

Pursuant to the requirements of the FESA, a federal agency reviewing a project within the jurisdiction of the agency must determine whether any federally listed threatened or endangered species may be present in the project area and whether the proposed project will have a potentially significant impact on such species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC § 1536(3), (4)).

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states, "It is unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the code or any regulation adopted pursuant thereto."

Clean Water Act

The USACE regulates discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act (CWA). "Discharge of fill material" is defined as the addition of fill material into Waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for the construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 C.F.R. §328.2[f]). In addition, Section 401 of the CWA (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the United States include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a

prevalence of vegetation typically adapted for life in saturated soil conditions" (33 C.F.R. §328.3[b]).

Furthermore, Jurisdictional Waters of the United States can be defined by exhibiting a defined bed and bank and OHWM. The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 C.F.R. §328.3[e]).

State Regulations

The following are the State environmental laws and policies relevant to biological resources.

California Department of Fish and Wildlife

CDFW administers a number of laws and programs designed to protect fish and wildlife resources under the California Fish and Game Code (FGC), such as CESA (FGC Section 2050, et seq.), Fully Protected Species (FGC Section 3511) and the Lake or Streambed Alteration Agreement Program (FGC Sections 1600 to 1616). Such regulations are summarized in the following sections.

California Endangered Species Act

The State of California enacted CESA in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that "overriding considerations" exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

CESA prohibits the taking of State-listed endangered or threatened plant and wildlife species. CDFW exercises authority over mitigation projects involving State-listed species, including those resulting from CEQA mitigation requirements. CDFW may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFW requires preparation of mitigation plans in accordance with published guidelines.

Fish and Game Code Section 3505

Birds of prey are protected in California under provisions of the California FGC, Section 3503.5, (1992), which states, "it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "taking" by CDFW.

Lake or Streambed Alteration Program

The CDFW is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code, Section 1602,

requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, the CDFW will require that the parties enter into a Lake or Streambed Alteration Agreement.

CDFW Species of Special Concern

In addition to formal listings under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may by considered for review are included on a list of "Species of Special Concern" developed by CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. Currently 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations, emergencies, and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

Regional Water Quality Control Board

Pursuant to Section 401 of the CWA and EPA 404(b)(1) guidelines, in order for a USACE federal permit applicant to conduct any activity which may result in discharge into navigable waters, they must provide a certification from the RWQCB that such discharge will comply with the State water quality standards. The RWQCB has a policy of no-net-loss of wetlands in effect and typically requires mitigation for all impacts to wetlands before the RWQCB will issue water quality certification.

Under the Porter-Cologne Water Quality Control Act (Cal. Water Code Section 13000-14920), the RWQCB is authorized to regulate the discharge of waste that could affect the quality of the State's waters. Therefore, even if a project does not require a federal permit (i.e., a Nationwide Permit from the USACE), the project may still require review and approval by the RWQCB, in light of the approval of new NWPs on March 9, 2000 and the Supreme Court's decision in the case of the Solid Waste Agency of Northern Cook County (SWANCC) vs. USACE. The RWQCB in response to the above case, issued guidance for regulation of discharges to "isolated" water on June 25, 2004. The guidance states:

> Discharges subject to Clean Water Act section 404 receive a level of regulatory review and protection by the USACE and are also subject to streambed alteration agreements issued by the CDFW; whereas discharges to waters of the State

subject to SWANCC receive no federal oversight and usually fall out of CDFW jurisdiction. Absent of RWQCB attention, such discharges will generally go entirely unregulated. Therefore, to the extent that staffing constraints require the RWQCB to regulate some dredge and fill discharges of similar extent, severity, and permanence to federally-protected waters of similar value. Dredging, filling, or excavation of "isolated" waters constitutes a discharge of waste to waters of the State, and prospective dischargers are required to submit a report of waste discharge to the RWQCB and comply with other requirements of Porter-Cologne.

When reviewing applications, the RWQCB focuses on ensuring that projects do not adversely affect the "beneficial uses" associated with waters of the State. Generally, the RWQCB defines beneficial uses to include all of the resources, services and qualities of aquatic ecosystems and underground aquifers that benefit the State. In most cases, the RWQCB seeks to protect the beneficial uses by requiring the integration of water quality control measures into projects that will result in discharge into waters of the State. For most construction projects, RWQCB requires the use of construction and post-construction Best Management Practices (BMPs). In many cases, proper use of BMPs, including bioengineering detention ponds, grassy swales, sand filters, modified roof techniques, drains, and other features, will speed project approval from RWQCB. Development setbacks from creeks are also requested by RWQCB as they often lead to less creek-related impacts in the future.

Local Regulations

The following are the local environmental laws and policies relevant to biological resources.

Placer County General Plan

The Placer County General Plan biological resource policies that are applicable to the proposed project are presented below:

Water Resources

Goal 6.A To protect and enhance the natural qualities of Placer County's rivers, streams, creeks and groundwater.

Policy 6.A.1. The County shall require the provision of sensitive habitat buffers which shall, at a minimum, be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected, including riparian zones, wetlands, old growth woodlands, and the habitat of special status, threatened or endangered species (see discussion of sensitive habitat buffers in Part I of this Policy Document). Based on more detailed information supplied as a part of the review for a specific project or input from state or federal regulatory agency, the County may determine that such setbacks are not applicable in a particular instance of should be modified based on the new information provided. The County may, however, allow exceptions, such as in the following cases:

1. Reasonable use of the property would otherwise be denied;

2. The location is necessary to avoid or mitigate hazards to the public;
3. The location is necessary for the repair of roads, bridges, trails, or similar infrastructure; or
4. The location is necessary for the construction of new roads, bridges, trails, or similar infrastructure where the County determines there is no feasible alternative and the project has minimized environmental impacts through project design and infrastructure placement

Policy 6.A.3. The County shall require development projects proposing to encroach into a stream zone or stream setback to do one or more of the following, in descending order of desirability:

a) Avoid the disturbance of riparian vegetation;
b) Replace all functions of the existing riparian vegetation (on-site, in-kind);
c) Restore another section of stream (in-kind);
d) Restore another section of stream (in-kind); and/or
e) Pay a mitigation fee for in-kind restoration elsewhere (e.g., mitigation banks).

Policy 6.A.4. Where stream protection is required or proposed, the County should require public and private development to:

a) Preserve stream zones and stream setback areas through easements or dedications. Parcel lines (in the case of a subdivision) or easements (in the case of a subdivision or other development) shall be located to optimize resource protection. If a stream is proposed to be included within an open space parcel or easement, allowed uses and maintenance responsibilities within that parcel or easement should be clearly defined and conditioned prior to map or project approval;
b) Designate such easement or dedication areas (as described in a. above) as open space;
c) Protect stream zones and their habitat value by actions such as: 1) providing an adequate stream setback, 2) maintaining creek corridors in an essentially natural state, 3) employing stream restoration techniques where restoration is needed to achieve a natural stream zone, 4) utilizing riparian vegetation within stream zones, and where possible, within stream setback areas, 5) prohibiting the planting of invasive, non-native plants (such as Vinca major and eucalyptus) within stream zones or stream setbacks, and 6) avoiding tree removal within stream zones;
d) Provide recreation and public access near streams consistent with other General Plan policies;
e) Use design, construction, and maintenance

techniques that ensure development near a creek will not cause or worsen natural hazards (such as erosion, sedimentation, flooding, or water pollution) and will include erosion and sediment control practices such as: 1) turbidity screens and other management practices, which shall be used as necessary to minimize siltation, sedimentation, and erosion, and shall be left in place until disturbed areas; and/or are stabilized with permanent vegetation that will prevent the transport of sediment off site; and 2) temporary vegetation sufficient to stabilize disturbed areas.

f) Provide for long-term stream zone maintenance by providing a guaranteed financial commitment to the County which accounts for all anticipated maintenance activities.

Policy 6.A.5. The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff and to encourage the use of BMPs for agricultural activities.

Wetland and Riparian Areas

Goal 6.B To protect wetland communities and related riparian areas throughout Placer County as valuable resources.

Policy 6.B.1. The County shall support the "no net loss" policy for wetland areas regulated by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.

Policy 6.B.2. The County shall require new development to mitigate wetland loss in both federal jurisdictional and non-jurisdictional wetlands to achieve "no net loss" through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation, including use of a mitigation and conservation banking program that provides the opportunity to mitigate impacts to special status, threatened, and endangered species and/or the habitat which supports these species in wetland and riparian areas. Non-jurisdictional wetlands may include riparian areas that are not federal “waters of the United States” as defined by the Clean Water Act.

Policy 6.B.3 The County shall discourage direct runoff of pollutants and siltation into wetland areas from outfalls serving nearby urban development. Development shall be designed in such a manner that pollutants and siltation will not significantly adversely affect the value or function of wetlands.

Policy 6.B.4. The County shall strive to identify and conserve remaining upland habitat areas adjacent to wetlands and riparian areas that are critical to the survival and nesting of wetland and riparian species.

Policy 6.B.5. The County shall require development that may affect a wetland to employ avoidance, minimization, and/or compensatory mitigation techniques. In evaluating the level of compensation to be required with respect to any given project, (a) on-site mitigation shall be preferred to off-site, and in-kind mitigation shall be preferred to out-of-kind; (b) functional replacement ratios may vary to the extent necessary to incorporate a margin of safety reflecting the expected degree of success associated with the mitigation plan; and (c) acreage replacement ratios may vary depending on the relative functions and values of those wetlands being lost and those being supplied, including compensation for temporal losses. The County shall continue to implement and refine criteria for determining when an alteration to a wetland is considered a less-than significant impact under CEQA.

Fish and Wildlife Habitat

Goal 6.C To protect, restore, and enhance habitats that support fish and wildlife species so as to maintain populations at viable levels.

Policy 6.C.1. The County shall identify and protect significant ecological resource areas and other unique wildlife habitats critical to protecting and sustaining wildlife populations. Significant ecological resource areas include the following:

a) Wetland areas including vernal pools.
b) Stream zones.
c) Any habitat for special status, threatened, or endangered animals or plants.
d) Critical deer winter ranges (winter and summer), migratory routes and fawning habitat
e) Large areas of non-fragmented natural habitat, including blue oak woodlands, valley foothill and montane riparian, valley oak woodlands, annual grasslands, and vernal pool/grassland complexes.
f) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian mammalian migratory routes, and

known concentration areas of waterfowl within the Pacific Flyway

g) Important spawning and rearing areas for anadromous fish.

Policy 6.C.2. The County shall require development in areas known to have particular value for wildlife to be carefully planned and, where possible, located so that the reasonable value of the habitat for wildlife is maintained.

Policy 6.C.3. The County shall encourage the control of residual pesticides to prevent potential damage to water quality, vegetation, fish, and wildlife.

Policy 6.C.4. The County shall encourage private landowners to adopt sound fish and wildlife habitat management practices, as recommended by California Department of Fish and Wildlife officials, the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, the U.S. Army Corps of Engineers, and the Placer County Resource Conservation District.

Policy 6.C.6. The County shall support preservation of the habitats of threatened, endangered, and/or other special status species. Where County acquisition and maintenance is not practicable or feasible, federal and state agencies, as well as other resource conservation organizations, shall be encouraged to acquire and manage endangered species' habitats.

Policy 6.C.7. The County shall support the maintenance of suitable habitats for all indigenous species of wildlife, without preference to game or non-game species, through maintenance of habitat diversity.

Policy 6.C.9. The County shall require new private or public developments to preserve and enhance existing riparian habitat unless public safety concerns require removal of habitat for flood control or other essential public purposes (See Policy 6.A.1.). In cases where new private or public development results in modification or destruction of riparian habitat the developers shall be responsible for acquiring, restoring, and enhancing at least an equivalent amount of like habitat within or near the project area.

Policy 6.C.11. Prior to approval of discretionary development permits involving parcels within a significant ecological resource area, the County shall require, as part of the environmental review process, a biotic resources evaluation of the sites by a wildlife biologist, the evaluation shall be based upon field

reconnaissance performed at the appropriate time of year to determine the presence or absence of special status, threatened, or endangered species of plants or animals. Such evaluation will consider the potential for significant impact on these resources, and will identify feasible measures to mitigate such impacts or indicate why mitigation is not feasible. In approving any such discretionary development permit, the decision-making body shall determine the feasibility of the identified mitigation measures. Significant ecological resource areas shall, at a minimum, include the following:

a) Wetland areas including vernal pools.
b) Stream zones.
c) Any habitat for special status, threatened or endangered animals or plants.
d) Critical deer winter ranges (winter and summer), migratory routes and fawning habitat.
e) Large areas of non-fragmented natural habitat, including blue oak woodlands, valley foothill and montane riparian, valley oak woodlands, annual grasslands, vernal pool/grassland complexes habitat.
f) Identifiable wildlife movement zones, including but not limited to, non-fragmented stream environment zones, avian and mammalian migratory routes, and known concentration areas of waterfowl within the Pacific Flyway.
g) Important spawning and rearing areas for anadromous fish.

Policy 6.C.13. The County shall support and cooperate with efforts of other local, state, and federal agencies and private entities engaged in the preservation and protection of significant biological resources from incompatible land uses and development. Significant biological resources include endangered or threatened species and their habitats, wetland habitats, wildlife migration corridors, and locally important species/communities.

Vegetation

Policy 6.D.3. The County shall support the preservation of outstanding areas of natural vegetation, including, but not limited to, oak woodlands, riparian areas, and vernal pools.

Policy 6.D.4. The County shall ensure that landmark trees and major groves of native trees are preserved and protected. In order to maintain these areas in perpetuity, protected areas shall also include younger vegetation with suitable space for growth and reproduction.

Policy 6.D.5. The County shall require that new development preserve natural woodlands to the maximum extent possible.

Policy 6.D.14. The County shall require that new development avoid, as much as possible, ecologically-fragile areas (e.g., areas of rare or endangered species of plants, riparian areas). Where feasible, these areas should be protected through public acquisition of fee title or conservation easements to ensure protection.

Dry Creek-West Placer Community Plan

The following goals and policies from the DCWPCP related to biological resources are applicable to the proposed project.

Community Development: Land Use

Goal 2 To preserve outstanding visual features, natural resources, and landmarks.

Policy 3 The retention of important open space features is critical to the future quality of life in the Plan area.

Policy 26 Encourage development activities in areas of least environmental sensitivity, and similarly, restrict from development activities those lands which are environmentally sensitive.

Community Development: Community Design

Policy 14 Where possible preserve native trees and support the use of native drought tolerant plant materials in all revegetation/landscaping projects.

Environmental Resources Management: Natural Resources

Goal 1 Provide for the protection of rare, threatened and endangered species and the habitat which supports those species

Goal 2 Conserve the quality of all habitats which support the environment of fish and wildlife species so as to maintain populations at sustainable levels.

Goal 4 Safeguard and maintain natural waterways to ensure water quality, species diversity and unique habitat preservation.

Goal 6 Preserve outstanding areas of natural vegetation.

Policy 1 Any rare, significant, or endangered environmental features and conditions should be identified and programs designed to conserve or enhance their continued existence.

Policy 2 Preserve in their natural condition all stream environment zones, including flood plains, and riparian vegetation areas.

Policy 5	Identify all important fish and wildlife areas within the plan area and where feasible, protect these areas from urban/suburban encroachment.
Policy 6	Identify, preserve and protect areas of unique or significant natural vegetation, including but not limited to vernal pools, riparian areas and native oak groves.
Policy 8	Protect important spawning grounds, migratory routes, water-fowl resting areas, oak woodlands, and other unique wildlife habitats critical to protecting and sustaining wildlife populations.
Policy 12	Conservation of the natural landscape, including minimizing disturbance to natural terrain and vegetation, shall be an overriding consideration in the design of any subdivision or land development project, paying particular attention to the protection and preservation of existing vegetation.
Policy 13	For landscaping which is part of site development where original vegetation has been removed or where additional plantings are included, the emphasis should be on drought tolerant, native species where possible.
Policy 16	Require site specific studies, from qualified consultants, for projects which impact unique or significant fish, wildlife or vegetative resources.
Policy 17	Incorporate a mitigation monitoring program for all projects subject to environmental review where detrimental impacts to an area's natural resources have been identified.
Policy 18	Require field studies as part of project review where vernal pools are noted on the property. These studies shall document the possible occurrence of special status plant and wildlife species and provide a method of protecting, monitoring, replacing or otherwise mitigating development in and around these sensitive habitats.
Policy 19	Support the "no net loss" policy for wetland areas administered by the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service and the State Department of Fish and Game. Continue to coordinate with these agencies at all levels of project review to ensure that their concerns are adequately addressed.
Policy 24	Tracts of undisturbed oak woodlands and valley grasslands that have significant value as wildlife habitat shall be preserved as open space.

Environmental Resources Management: Open Space

Goal 1 To preserve and enhance open space lands to maintain the natural resources and rural characteristics of the area.

Goal 2 To protect and preserve open spaces vital for wildlife habitat and other areas of major or unique ecological significance.

Goal 3 To protect the natural beauty and minimize disturbance of the natural terrain and vegetation.

Goal 4 To conserve and enhance the unique natural environment and open space of the area and to minimize disturbance of the natural terrain because these are unique and valuable assets for the Dry Creek-West Placer Community Plan Area, Placer County and the counties that border the area.

Goal 5 Preserve outstanding areas of natural vegetation including, but not limited to, oak woodlands, riparian areas and vernal pools.

Goal 6 To conserve the visual resources of the community, including the important vistas and wooded area, and in particular, the riparian habitat of Dry Creek and its intermittent streams and natural drainage channels which are important in providing low cost natural flood control.

Goal 7 Provide for the protection of rare, threatened and endangered species and/or the habitat which supports these species.

Goal 10 To provide open space to shape and guide development and to enhance community identity.

- Policy 1 Preserve in their natural condition all stream environment zones, including floodplains, and riparian vegetation areas.
- Policy 3 Identify and, where possible, preserve all soils which are suitable for agricultural uses.
- Policy 4 Encourage both private and public ownership and maintenance of open space.
- Policy 5 Protect natural areas along creeks and canals through the use of non-development setback with setback distances varying according to the significance of the area to be protected.
- Policy 12 Development on private lands should be planned and designed to provide for preservation of open space.
- Policy 13 Because the dominant features of the Planning Area contributing to the open quality are the natural land forms and vegetation, structures should be subordinated thereto.

	Only in the confines of individual sites should structures be allowed to be dominant.
Policy 17	Steam corridors shall be left in an open, natural condition, except for structures or uses which are compatible with stream corridors.
Policy 18	In the design and development of new subdivisions the following types of areas and features shall be preserved as open spaces to the maximum extent feasible: high hazard areas, scenic and trail corridors, streams, streamside vegetation, other significant stands of beneficial native vegetation, and any areas of special ecological significance.
Policy 21	Where impacts to stream environment zones or wetland are unavoidable, project specific mitigation shall include the identification and quantification of vegetation impacted, the preparation or revegetation plans to assure no net loss of riparian or wetland acreage or values, and the specific monitoring of pans to assure compliance and satisfactory results.

Placer County Tree Preservation Ordinance

The Placer County Tree Preservation Ordinance (Article 12.16 of the Placer County Municipal Code) regulates the encroachment of construction activities into protected zones of protected trees and the removal of any protected trees. Per the Placer County Tree Preservation Ordinance, a protected tree is defined as any *landmark tree* or *tree* requiring a tree permit. Per the County's Municipal Code, landmark trees are a tree or grove of trees designated by resolution of the Board of Supervisors to be of historical or cultural value, an outstanding specimen, an unusual species and/or of significant community benefit. Tree permits are required for any development activities within the protected zone (diameter of the longest limb plus one foot) of any tree, as defined in the code, on public or private land. Activities which could harm, destroy, kill or remove any protected tree must be authorized by a tree permit or be permitted pursuant to approval of a discretionary project. Protected trees are defined by the County's Municipal Code as any tall woody plant native to California with a single stem or trunk at least six inches' DBH (54 inches above grade at the base of a tree), or a tall woody plant with a multiple trunk with an aggregate of at least ten inches DBH. In addition, the Placer County Tree Preservation Ordinance prohibits the removal of landmark trees, trees located in designated Tree Preservation Zones, and trees within riparian areas. The County also requires replacement of removed trees to the satisfaction of the planning department.

Exemptions to the Placer County Tree Preservation Ordinance include:

- Foothill pines (*Pinus sabiniana*);
- Trees damaged and determined to be of immediate danger;
- Trees that pose a fire danger, fire hazard, or conflicting with fire department activities;
- Trees grown for commercial tree removal or agricultural purposes; and
- Trees identified by an arborist, forester, or landscape architect as: (1) "dying" or "unhealthy"; (2) dead trees; or (3) trees that are in a hazardous condition presenting an

immediate danger to health and property. In this report, trees assessed with a dead, poor health, poor vigor, poor or fair-poor structure rating were considered exempt.

Placer County Conservation Plan

The draft Placer County Conservation Program (PCCP) was released in 2011, which proposes a streamlined strategy and permitting process for a range of covered activities in western Placer County for the next 50 years. The First Agency Review Draft PCCP establishes a conservation reserve area to protect and conserve special-status species and natural communities. The area covers approximately 212,000 acres, including important biological communities in western Placer County. The project site is located within the boundaries of the draft PCCP, in an area identified by the PCCP as a potential future growth area.

On December 4, 2018, the Placer County Board of Supervisors adopted an interim in-lieu fee program for the PCCP. The interim in-lieu fee program is intended for use in mitigating the impact of development projects on endangered species, wetlands, agriculture, and open space in anticipation of the eventual implementation of the PCCP. Furthermore, on June 21, 2019, the Placer County Community Development Resource Agency, in partnership with the USFWS, released the Notice of Availability for the draft Environmental Impact Statement and Environmental Impact Report (EIS/R), prepared for the PCCP. The public review period for the EIS/R extended from June 21 to August 20 of 2019, during which time the County and USFWS accepted public comments on the EIS/R. The PCCP is expected to be considered for adoption by the Placer County Board of Supervisors in early 2020.

6.4 IMPACTS AND MITIGATION MEASURES

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

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the County's General Plan, and professional judgment, a significant impact would occur if the proposed project would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

- Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan.
- 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 of or restrict the range of an endangered, rare, or threatened species.
- Have a substantial adverse effect on the environment by converting oak woodlands.

Method of Analysis

The information contained in the analysis is primarily based on the Biological Resources Assessment prepared by Madrone Ecological Consulting, as well as the Arborist Report prepared by Sierra Nevada Arborists.

Biological Resource Assessment

A list of special-status species with potential to occur within the Project Area was developed by conducting a query of the following databases:

- CNDDB (CNDDB 2018) query of the Project Area and all of the areas within five miles of the Project Area (see Figure 6-5 and Figure 6-6);
- USFWS Information for Planning and Conservation (IPaC) (USFWS 2018) query for the Project Area (Attachment C of the Biological Resources Assessment available in Appendix D of this EIR);
- CNPS Rare and Endangered Plant Inventory (CNPS 2018) query of the "Citrus Heights, California" USGS topo quadrangle, and the eight surrounding quadrangles (Attachment D of the Biological Resources Assessment available in Appendix D); and
- WBWG Species Matrix.

In addition, any special-status species that are known to occur in the region, but that were not identified in any of the above database searches were also analyzed for potential to occur within the Project Area.

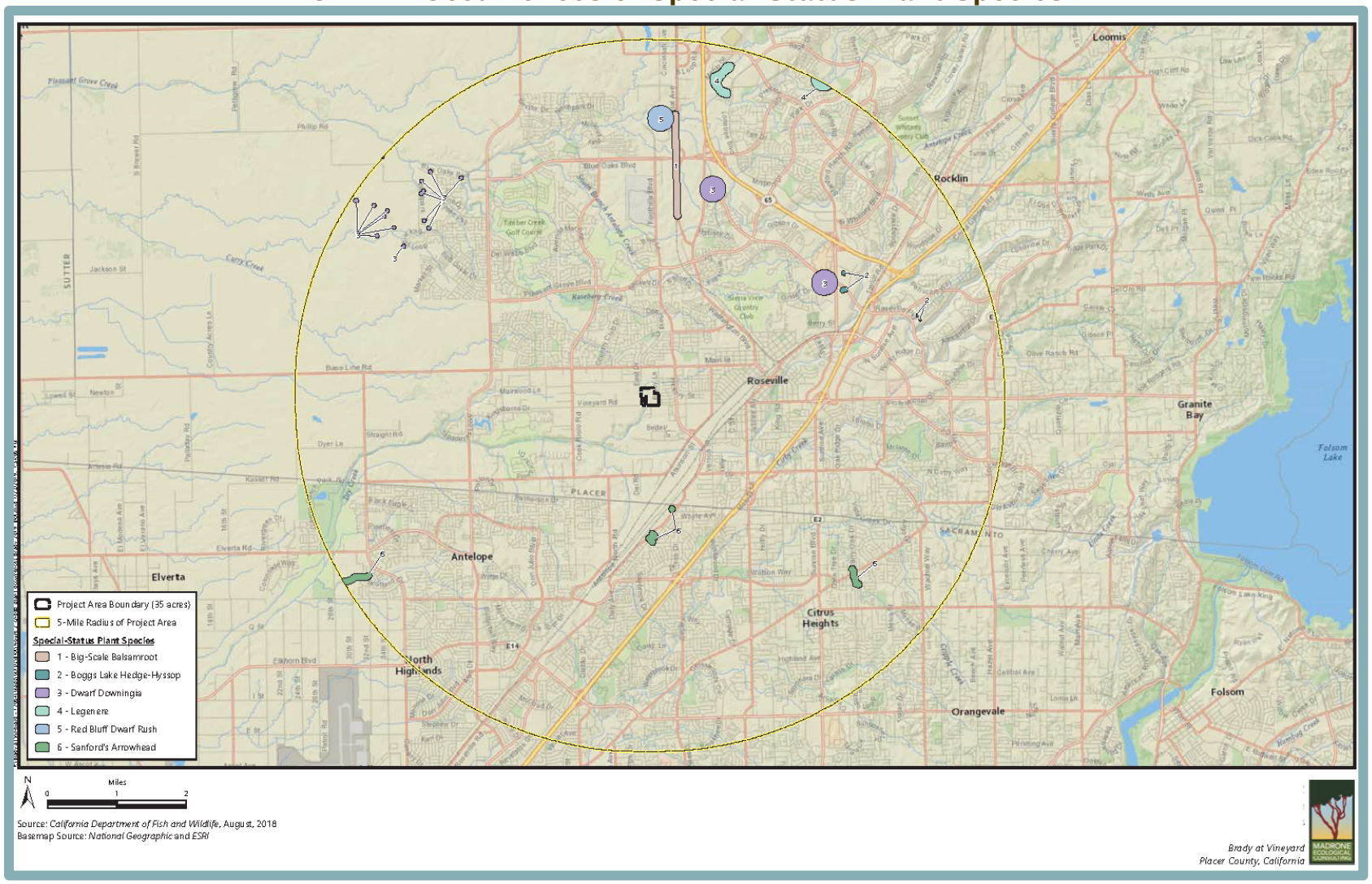
Field Survey

Madrone Ecological Consulting senior biologist Matt Hirkala conducted a field survey of the Project Area on September 14, 2017, May 2, 2018, and July 13, 2018, to assess the suitability of habitats on-site to support special-status species, and to conduct the targeted surveys detailed below. Meandering pedestrian surveys were performed on foot throughout the Project Area, and the entire site was surveyed. A list of all wildlife species observed during the survey is included as Attachment E of the Biological Resources Assessment available in Appendix D of this EIR. Vegetation communities were classified in accordance with *The Manual of California Vegetation, Second Edition*, and plant taxonomy was based on the nomenclature in the *Jepson eFlora*.

In addition, the Biological Resources Assessment prepared for the proposed project incorporates results from the following surveys, completed by Madrone Ecological Consultants:

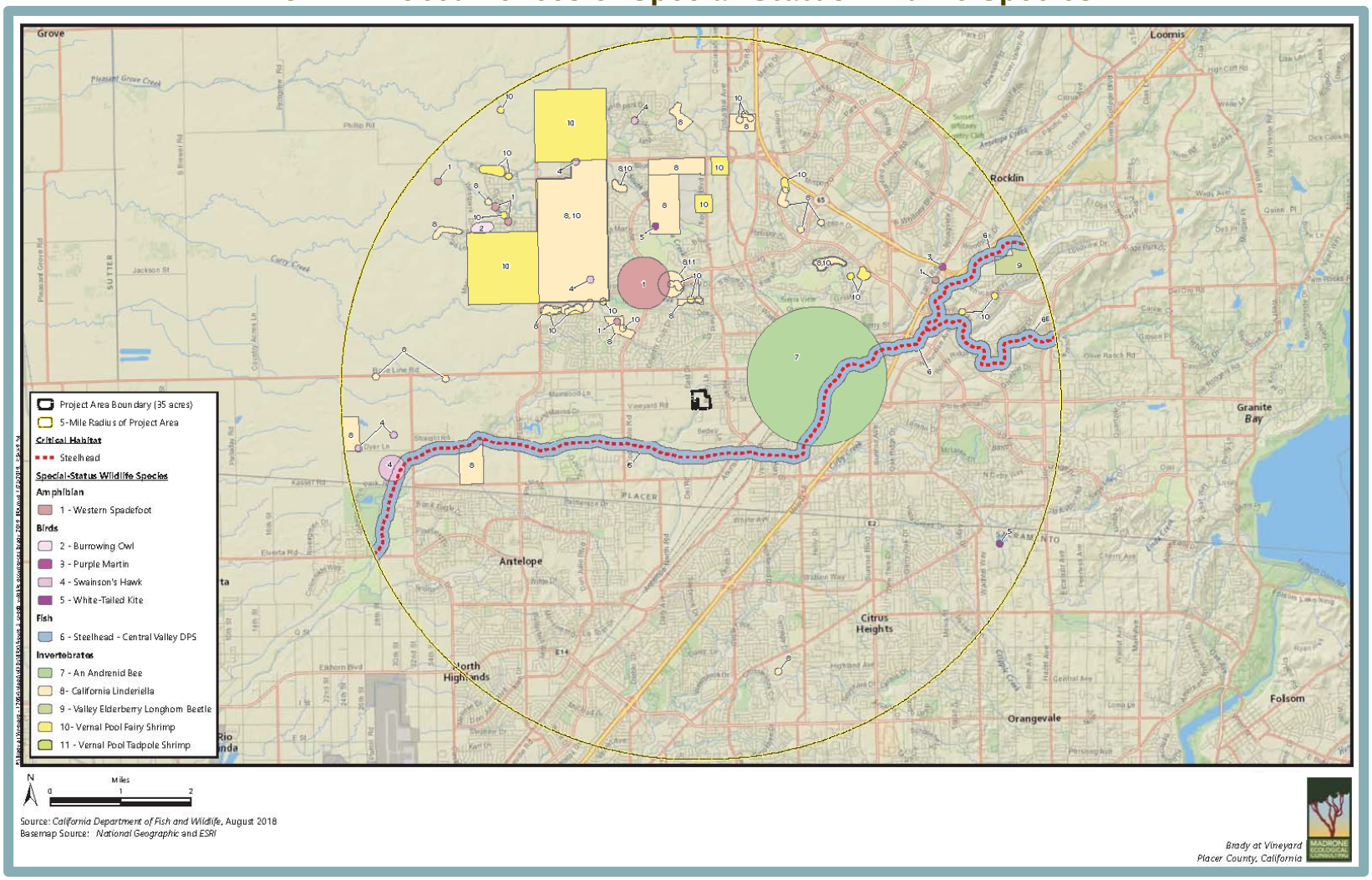
- An aquatic resources delineation conducted for the Project Area in September 2017;
- Protocol-level special-status plant surveys conducted throughout the Project Area, including adjacent areas on the neighboring parcel to the north in May and July of 2018;

Figure 6-5
CNDDB Occurrences of Special-Status Plant Species



Source: Madrone Ecological Consulting, 2019.

Figure 6-6
CNDDB Occurrences of Special-Status Wildlife Species



Source: Madrone Ecological Consulting, 2019.

- Wet-season and dry-season vernal pool branchiopod surveys were conducted between November 2017 and April 2018 in all areas of suitable habitat within the Project Area, including aquatic features that extended onto the adjacent parcel to the north; and
- A Valley elderberry longhorn beetle habitat survey conducted for the Project Area in September 2017.

The aquatic resource delineation was conducted by Madrone Ecological Consulting, senior biologist Matt Hirkala on September 14, 2017. Following mapping of the aquatic resources within the Study Areas, three-parameter data (vegetation, soils, and hydrology) was collected at each data point, documenting wetland/waters or upland status.

Mr. Hirkala conducted protocol-level rare plant surveys of the Study Areas on May 2, 2018 and July 13, 2018, in accordance with the USFWS's *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants*, CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*, and the *CNPS Botanical Survey Guidelines*.

Dry-season and wet-season surveys for vernal pool branchiopod species were conducted under the authority of USFWS Recovery Permits No. TE-89991B-0 and TE-795935-5, respectively, of Section 10(a)(1)(A) of the Endangered Species Act, 16 U.S. Code 1531 et seq. and in accordance with the November13, 2017 *Survey Guidelines for the Listed Large Branchiopods*.

Arborist Report

The purpose of Arborist Report prepared by Sierra Nevada Associates was to document the existing trees within the proposed project site, evaluate impacts within the canopy of protected trees, and provide recommendations for tree preservation. International Society of Arboriculture (ISA) Certified Arborist, Edwin E. Stirtz (WE-0510A), Principal of Sierra Nevada Associates, conducted field reconnaissance of the project site on May 17, 2017. All trees on or overhanging the project site, which meet the Placer County Code requirements for protection under the County's Tree Preservation Ordinance were surveyed. Trees accessible to the arborist and on-site were tagged with square tags inscribed with a unique tree identification number. A tree identification number was established for each tree and matches the number of the tree tag.

Data recorded during the survey included the following: location, tree ID number, species, number of trunks, DBH of each trunk, and the diameter of the canopy of dripline, as well as the condition of the root crown, trunk, limbs, foliage, structure, and perceived vigor of each tree. Tree health, vigor, and structure were rated as Good, Fair, or Poor. The arborist report, included as Appendix E of this EIR, contains general definitions of the rating system.

Project-Specific Impacts and Mitigation Measures

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

6-1 Impacts to special-status plant species either directly (e.g., threaten to eliminate a plant community) or through substantial habitat modifications. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As shown in Table 6-2, the project site contains potentially suitable habitat for nine special-status plant species, including big-scale balsamroot, dwarf downingia, Bogg's Lake hedge-hyssop, Ahart's dwarf rush, legenere, pincushion navarretia, slender Orcutt grass, Sacramento Orcutt grass, and Sanford's arrowhead. Though the site encompasses potential habitat for the nine above-listed species, during the protocol-level, blooming period site surveys conducted on May 2, 2018 and July 13, 2018 by Madrone Ecological Consulting, none of the above identified special-status plant species were observed on the project site.

It should be noted that off-site sewer improvements related to the proposed project would occur within the Vineyard Road right-of-way. Considering the disturbed and paved nature of such areas, the off-site sewer improvements related to the proposed project would not have the potential to result in impacts related to special-status plant species as such species would not be present in any of the off-site areas.

Although special-status plants were not identified within the Project Area during field surveys in 2018, the USFWS only considers plant surveys to be valid for three years. Should project construction not occur within three years from the date of the survey, construction activity could impact special-status plant species that may have colonized the project site. Therefore, impacts related to the disturbance of special-status plant species could be ***significant***.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

6-1 *Protocol-level special-status plant surveys were conducted within the Project Area in May and July of 2018, and no special-status plant species were identified. Survey results are valid for three years. If construction does not commence before Spring of 2021, then new focused plant surveys shall be performed according to CDFW and CNPS protocol, as generally described below. If special-status plant species are not found during appropriately timed focused surveys, then further mitigation is not necessary. The results of the new surveys shall be submitted to the Placer County Community Development Resource Agency.*

Prior to Improvement Plan approval for each phase of the project, focused surveys shall be performed by a qualified botanist in order to determine the presence or absence of the following special-status plant species known to potentially occur on-site: big-scale balsamroot, dwarf downingia, Bogg's Lake hedge-hyssop, Ahart's dwarf rush, legenere, pincushion navarretia, slender Orcutt grass, Sacramento Orcutt grass, and Sanford's arrowhead. Furthermore, should additional plants having the potential to occur on-site be given special-status in the future, the qualified botanist shall also

determine the presence/absence of such species. The survey(s) shall be conducted on-site as well as in any off-site improvement areas, as applicable for each phase, during the identification periods (bloom periods) for all of the special-status plant species listed above. If the special-status plant species are not found to be present during the focused survey(s), then no further action is required. The results of the focused surveys shall be submitted to the Placer County Community Development Resource Agency.

If any special-status plant species are found, a mitigation plan shall be prepared in consultation with the Placer County Community Development Resource Agency. The plan shall detail the various mitigation approaches to ensure no net loss of the special-status plant(s). Mitigation could include, but would not be limited to, avoidance of the plant species, salvage of plant materials where possible, acquisition of credits at an approved mitigation bank, or acquisition and preservation of property that supports the plant species.

6-2 Impacts to special-status vernal pool branchiopods either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below, the impact is *less than significant*.

The on-site seasonal wetlands and seasonal wetland swale represent suitable habitat for Conservancy fairy shrimp, vernal pool fairy shrimp, and vernal pool tadpole shrimp. However, vernal pool branchiopods were not identified during wet and dry season surveys conducted in 2017 by Madrone Ecological Consulting within the project site.

The off-site sewer improvement area does not contain any suitable habitat for special-status vernal pool branchiopods, and implementation of off-site improvements would not have the potential to result in adverse effects to special-status vernal pool branchiopods.

Therefore, development of the proposed project would not have the potential to cause a substantial adverse effect to vernal pool branchiopods, and a ***less-than-significant*** impact would result.

Mitigation Measure(s)
None required.

6-3 Impacts to special-status amphibian species either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications. Based on the analysis below, the impact is *less than significant*.

The seasonal wetlands within the project site represent suitable breeding habitat for western spadefoot toad. However, western spadefoot toads were not identified during

protocol-level wet-season surveys conducted by Madrone Ecological Consulting within the project site. Because adults or tadpoles were not identified by Madrone Ecological Consulting during field surveys of the project site, implementation of the proposed project would not have the potential to result in adverse effects to western spadefoot toad.

The off-site sewer improvement area does not contain any suitable habitat for special-status amphibians, including western spadefoot toad, and implementation of off-site improvements would not have the potential to result in adverse effects to special-status amphibians.

Thus, the proposed project would result in a ***less-than-significant*** impact.

Mitigation Measure(s)
None required.

6-4 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on burrowing owl. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The annual brome grassland throughout the Project Area provides marginally suitable foraging habitat for burrowing owl due to the relatively high density of yellow star-thistle (*Centaurea solstitialis*). In addition, the occasional ground-squirrel burrows and debris throughout the Project Area provide marginally suitable nesting habitat. Development of the proposed project would involve disturbance of the majority of the annual brome grassland areas within the project site and subsequent conversion of such areas to residential and accessory uses (see Figure 6-7). Such development activity would represent a loss of the marginally suitable foraging and nesting habitat throughout the project site.

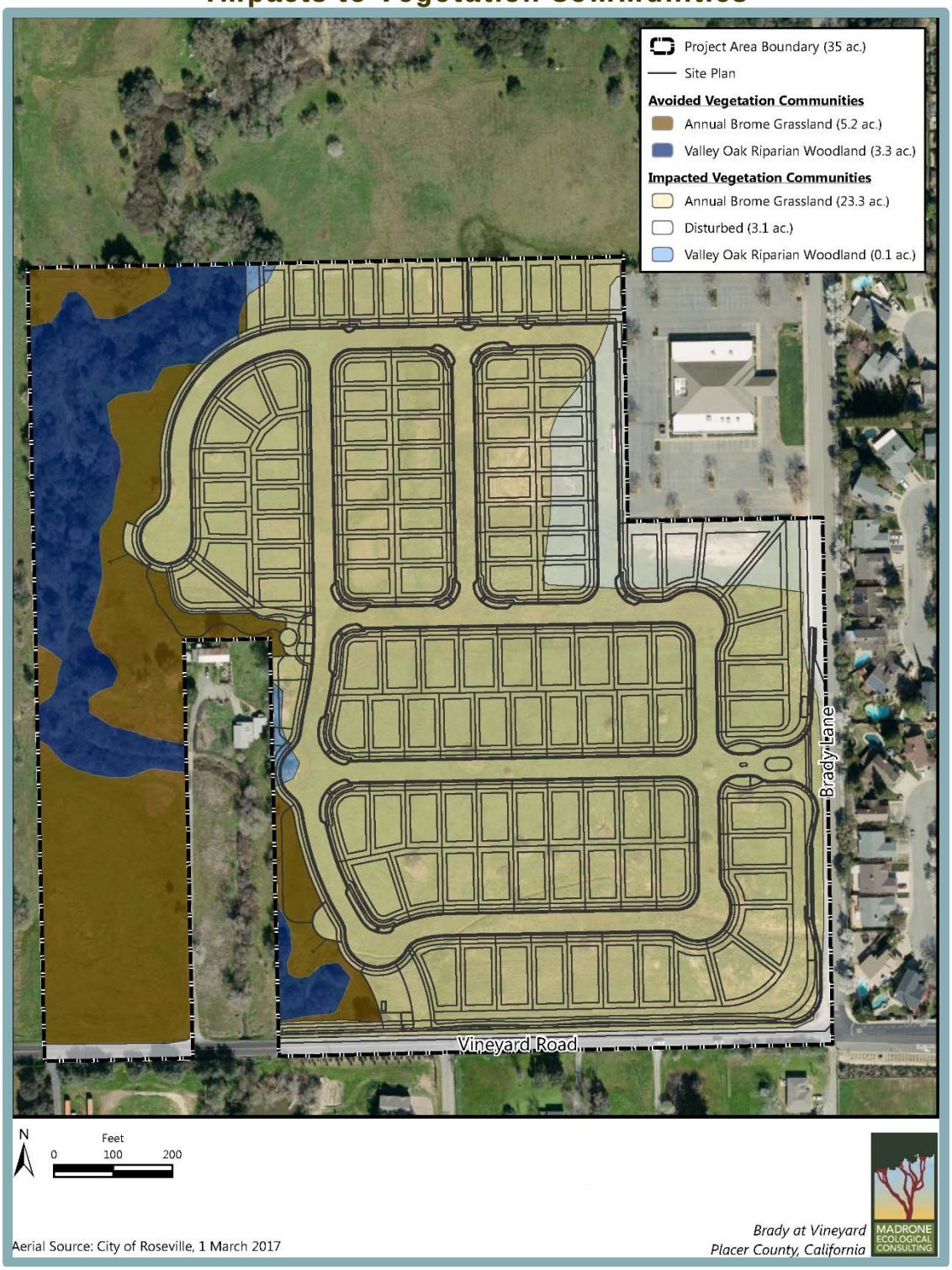
It should be noted that off-site sewer improvements related to the proposed project would occur within the Vineyard Road right-of-way. Considering the disturbed and paved nature of such areas, the off-site sewer improvements related to the proposed project would not have the potential to result in impacts related to individual burrowing owls or the loss of burrowing owl habitat.

Nevertheless, should individual burrowing owls be present within burrows during ground disturbance within the Project Area, project construction could result in loss of individual owls. However, it should be noted that burrowing owls are considered rare in Placer County, and thus, use of the project site for burrowing owl nesting is considered unlikely.[7]

Notwithstanding the rarity of the species within Placer County, the proposed project has conservatively been assumed to have a potential for causing a substantial adverse effect, either directly or through habitat modifications, on burrowing owl and a ***significant*** impact could occur.

[7] Placer County Planning Department. *Placer County Natural Resources Report* [pgs. 183-185]. April 2004.

Figure 6-7
Impacts to Vegetation Communities



Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

6-4 *A pre-construction survey for burrowing owl shall be conducted between 14 days and 30 days prior to commencement of construction and/or maintenance activities of any phase of the proposed project. The survey area shall include an approximately 500-foot (150-meter) buffer around suitable grassland habitats, where access is permitted. If the results of the survey are negative, a letter report documenting the results of the survey shall be provided to the Placer County Community Development Resource Agency, and additional protective measures are not required.*

If active burrows are observed, an impact assessment should be prepared and submitted to CDFW in accordance with the 2012 CDFW Staff Report on Burrowing Owl Mitigation. If project activities could result in impacts to nesting, occupied, and satellite burrows and/or burrowing owl habitat, the project applicant shall delay commencement of construction activities until a qualified biologist determines that the burrowing owls have fledged and the burrow is no longer occupied. If delay of construction activities is infeasible, the project applicant shall consult with CDFW and develop a detailed mitigation plan such that the habitat acreage and number of burrows impacted are replaced. The mitigation plan shall be based on the requirements set forth in Appendix A of the 2012 Staff Report.

Construction shall not commence until CDFW has approved the mitigation plan. Mitigation for the permanent loss of burrowing owl foraging habitat (defined as all areas of suitable habitat within 250 feet of an active burrow) shall be accomplished at a 1:1 ratio. The mitigation provided shall be consistent with recommendations in the CDFW Staff Report on Burrowing Owl Mitigation, and may be accomplished within qualifying Swainson's hawk foraging habitat mitigation area if burrowing owls have been documented using the Swainson's hawk foraging habitat mitigation area, or if the Project biologist, the County, and CDFW collectively determine that the area is suitable.

During the non-breeding season (late September through the end of January), the project applicant may choose to have a qualified biologist conduct a survey for burrows or debris that represent suitable nesting habitat for burrowing owls within areas of proposed ground disturbance, exclude any burrowing owls observed, and collapse any burrows or remove the debris in accordance with the methodology outlined in the CDFW Staff Report on Burrowing Owl Mitigation and in coordination with CDFW.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-4 may be replaced with the PCCP's mitigation fees

and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-5 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on Swainson's hawk. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The annual brome grassland within the Project Area provides suitable foraging habitat for Swainson's hawk, and the trees within the Project Area provide suitable nesting habitat. Implementation of the proposed project would result in loss of annual brome grassland as well as some trees within the Project Area, and ground-disturbance in proximity to other nearby trees.

The CDFW considers five or more vacant acres located within 10 miles of an active nest, including nests that have been active within the last five years, to be significant foraging habitat for Swainson's hawk. The conversion of such foraging habitat is considered a significant impact, in accordance with the *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk (Buteo swainsoni) in the Central Valley of California* (Staff Report).[8] The Staff Report states that foraging habitat loss of five or more acres on projects located more than one mile, but less than five miles, from an active nest tree documented within the last five years shall be mitigated at a 0.75:1 ratio. As shown in Figure 6-7, the proposed project would result in impacts to 23.3 acres of annual brome grassland. Should an active nest be located within 10 miles of the Project Area, the loss of foraging habitat resulting from project implementation could be considered a significant impact. Furthermore, should an active nest be located less than five miles from the project site, mitigation would be required as previously noted.

It should be noted that the off-site sewer improvement area does not represent suitable foraging or nesting habitat for the species.

Based on the above, Swainson's hawk have the potential to occur within the Project Area, including nesting in trees that may be removed as a result of project construction activities, and foraging in annual brome grasslands that would be converted to residential use with implementation of the proposed project. Therefore, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk, and a ***significant*** impact could occur.

[8] California Department of Fish and Wildlife. *Staff Report Regarding Mitigation for Impacts to Swainson's Hawk (Buteo swainsoni) in the Central Valley of California.* November 8, 1994.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

6-5(a) *Within 14 days prior to the commencement of construction and/or maintenance activities during the nesting season for Swainson's hawk (between February 15 and September 1) a targeted Swainson's hawk nest survey shall be conducted of all accessible areas within 0.25 mile of the proposed construction area. If active Swainson's hawk nests are found within 0.25 mile of a construction site, construction shall cease within 0.25 mile of the nest until a qualified biologist determines that the young have fledged or the determination is made that the nesting attempt has failed. If the applicant desires to work within 0.25 mile of the nest, the applicant shall consult with CDFW and the County to determine if the nest buffer can be reduced. The project applicant, the project biologist, the County, and CDFW shall collectively determine the nest avoidance buffer, and what (if any) nest monitoring is necessary. If an active Swainson's hawk nest is found within the project site prior to construction and is in a tree that is proposed for removal, then the project applicant shall either wait until fledging is complete (with agreed-upon construction buffers in place) or obtain an Incidental Take Permit. The results of the survey shall be submitted to the Placer County Community Development Resource Agency and CDFW.*

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-5(a) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-5(b) *Prior to initiation of ground disturbing activity for the project, a qualified biologist shall conduct a review of Swainson's hawk nest data available in the CNDDB and contact the CDFW to determine the most up-to-date Swainson's hawk nesting information for the project area. If desired by the project applicant, the biologist may further conduct a survey of the identified nests to determine the presence or absence of Swainson's hawks. The biologist shall provide the County with a summary of findings of Swainson's hawk nesting activity within 10 miles of the Project Area. If the biologist determines that the project site is within 10 miles of an active Swainson's hawk nest (where an active nest is defined as a nest with documented Swainson's hawk uses within the past five years), the applicant shall mitigate for the loss of suitable Swainson's hawk foraging habitat by implementing one of the following measures as applicable:*

- *If an active nest is identified within one mile of the project site: One acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*
- *If an active nest is identified within five miles (but greater than one mile) of the project site: 0.75 acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*
- *If an active nest is identified within 10 miles (but greater than five miles) of the project site: 0.5 acre of suitable foraging habitat shall be protected for each acre of suitable foraging habitat developed. Protection shall be via purchase of mitigation bank credits or other land protection mechanism acceptable to the County.*

Results of the nesting survey, as well as proof of purchase of mitigation credits as required per the above mitigation options, shall be provided to the Placer County Community Development Resource Agency for review and approval prior to initiation of ground disturbance for any portion of the project site.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-5(b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-6 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on other special-status birds or birds protected under the MBTA. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Special-status birds, migratory birds and other birds of prey, including tricolored blackbird, bald eagle, loggerhead shrike, yellow warbler, northern harrier, and white-tailed kite have the potential to nest within the proposed project site or move through project site, including in areas that would be impacted by construction of the proposed project. Implementation of the proposed project would result in the disturbance of annual brome grassland and riparian woodland, both of which could result in habitat loss for special-status birds or birds protected under the MBTA. Furthermore, should ground disturbance or tree removal occur during the nesting season, such activity could result in the loss of ground nesting birds,

such as the northern harrier, or tree nesting species, such as the white-tailed kite and other MBTA protected species.

As noted in Table 6-2, the on-site Valley oak riparian woodland represents suitable winter foraging habitat for yellow warblers. However, the project site is not within the breeding range of the species, and nesting within the Project Area would not be likely to occur. As shown in Figure 6-7, implementation of the proposed project would result in impacts to a relatively small area of such habitat (0.1 acre). Such impacts would be spatially limited, and would be mitigated, as discussed in further depth in Impacts 6-8 and 6-10 below. Considering the relatively small area of potential impact to Valley oak riparian woodland and the proximity of the project site to other nearby areas of riparian woodland, implementation of the proposed project is not anticipated to impact yellow warblers as individuals of the species would be able to disperse away from project-related disturbance and the species is not anticipated to nest within the site.

The proposed project could result in substantial adverse effects, either directly or through habitat modifications, on raptors, nesting birds, or other birds protected under the MBTA, including tricolored blackbird, bald eagle, northern harrier, white-tailed kite, and loggerhead shrike. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

6-6 *Prior to initiation of ground-disturbing activities for any phase of project construction, if construction is expected to occur during the raptor nesting season (February 15 to September 1), a qualified biologist shall conduct a preconstruction survey prior to vegetation removal. The pre-construction survey shall be conducted within 3 days prior to commencement of ground-disturbing activities. The survey shall be conducted within all areas of proposed disturbance and all accessible areas within 250 feet of proposed disturbance. If the pre-construction survey does not show evidence of active nests, a letter report documenting the results of the survey shall be provided to the Placer County Community Development Resource Agency, and additional measures are not required. If construction does not commence within 3 days of the pre-construction survey, or halts for more than 14 days, an additional pre-construction survey shall be required.*

If any active nests are located within the Project Area, an appropriate buffer zone shall be established around the nests, as determined by the project biologist. The biologist shall mark the buffer zone with construction tape or pin flags and maintain the buffer zone until the end of breeding season or the young have successfully fledged. Buffer zones are typically 100 feet for migratory bird nests and 500 feet for raptor nests and/or tricolored blackbird nesting colonies. If active nests are found within the project footprint, a qualified biologist shall monitor nests weekly during construction to evaluate potential nesting disturbance by construction activities. Guidance from CDFW shall be required if establishing the typical buffer zone is impractical. If construction activities cause the nesting bird(s) to vocalize,

make defensive flights at intruders, get up from a brooding position, or fly off the nest, then the exclusionary buffer shall be increased, as determined by the qualified biologist, such that activities are far enough from the nest to stop the agitated behavior. The exclusionary buffer shall remain in place until the young have fledged or as otherwise determined by a qualified biologist.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-6 may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-7 Have a substantial adverse effect, either directly (e.g., cause a wildlife population to drop below self-sustaining levels, threaten to eliminate an animal community) or through substantial habitat modifications, on special-status bat species. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Trees throughout the Project Area provide suitable habitat for pallid bats, silver-haired bats, western red bats, and hoary bats. Implementation of the proposed project would result in removal of trees within the Project Area, as further discussed in Impact 6-10. Should special-status bat species be present in on-site trees prior to removal, implementation of the proposed project could result in a loss of individual bats.

It should be noted that the area that would be disturbed during off-site sewer related improvements in Vineyard Road does not contain suitable roosting habitat for bats. Thus, off-site sewer improvements would not have the potential to result in impacts to any special-status bat species.

Consequently, the proposed project could result in direct or indirect adverse effects to special-status bat species, and a ***significant*** impact would occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

6-7 *Pre-construction roosting bat surveys shall be conducted by a qualified biologist within 14 days prior to any tree removal occurring during the bat breeding season (April through October) and/or on days with temperatures in excess of 50 degrees Fahrenheit from January through March. Methods may include evening emergence surveys, acoustic surveys, inspecting*

potential roosting habitat with a fiberoptic camera, or a combination thereof. If pre-construction surveys indicate that roosts of special-status bats are not present, or that roosts are inactive or potential habitat is unoccupied, further mitigation is not required. The results of the bat surveys shall be submitted to the Placer County Community Development Resource Agency and CDFW.

If roosting bats are found, exclusion shall be conducted as recommended by the qualified biologist in coordination with CDFW. If cavity roosting bats are found within any of the trees planned for removal, or if presence is assumed, trees should be removed outside of pup season only on days with temperatures in excess of 50 degrees Fahrenheit. Pup season is generally during the months of May through August. Two-step tree removal shall be utilized under the supervision of the qualified biologist. Two-step tree removal involves removal of all branches of the tree that do not provide roosting habitat on the first day, and then the next day cutting down the remaining portion of the tree. A letter report summarizing the survey results should be submitted to the Placer County Community Development Resource Agency within 30 days following the final monitoring event.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-7 may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-8 Have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As shown in Figure 6-7, approximately 0.1-acre of Valley oak riparian woodland would be impacted through implementation of the proposed project, while 3.3 acres of the existing Valley oak riparian woodland would be avoided. Madrone Ecological Consulting has mapped, and the USACE has verified, 1.064-acres of total aquatic resource areas within the project site, 0.98-acre of which is considered jurisdictional (see Table 6-3).

Table 6-3
Aquatic Resources Impacts and Avoidance within the Project Area

Resource Type	Existing (acre)	Impacted (acre)	Avoided (acre)
Riparian Wetland	0.40	0.00	0.40
Seasonal Wetland	0.21	0.08	0.13
Seasonal Wetland Swale	0.07	0.07	0.00
Intermittent Stream	0.30	0.00	0.30
Total – Jurisdictional Under 404 CWA	*0.98*	*0.15*	*0.83*
Drainage Ditch*	0.084*	0.084*	0.00
Project Area Total	*1.064*	*0.234*	*0.83*

* *The Drainage Ditch is not considered to be a jurisdictional Water of the U.S. under Section 404 of the Clean Water Act, but may fall under authority of Section 1602 of the CFGC.*

Source: Madrone Ecological Consulting, March 2019.

The proposed project would include grading and development activities associated with the construction and operation of 119 single-family residential lots, associated infrastructure, and widening of Vineyard Road. Such development activities would have the potential to involve the disturbance, removal, fill or hydrologic interruption of wetlands or other waters of the U.S or state regulated by the USACE, RWQCB and/or the CDFW. As shown in Table 6-3, Table 6-4, and Figure 6-8 implementation of the proposed project would have the potential to directly impact 0.08-acre of seasonal wetland, 0.07-acre of seasonal wetland swale, and 0.084-acre of a non-jurisdictional wetland ditch. The remaining 0.83-acre of jurisdictional wetland area within the Project Area would be avoided.

Table 6-4
Aquatic Resources Impacts by Project Improvement

Impacted Resource	Impacts (acre)	Project Improvement
Riparian Wetland	0	Avoided – project impacts would not occur
Seasonal Wetland	0.04	Mass grading for building pads/subdivision streets
Seasonal Wetland	0.04	Widening of Vineyard Road
Seasonal Wetland Swale	0.07	Mass grading for building pads/subdivision streets
Intermittent Stream	0	Avoided – project impacts would not occur
Total – Jurisdictional Under 404 CWA	*0.15*	-
Drainage Ditch*	0.084*	Mass grading for building pads/subdivision streets
Total Project Impacts	*0.234*	-

* *The Drainage Ditch is not considered to be a jurisdictional Water of the U.S. under Section 404 of the Clean Water Act, but may fall under authority of Section 1602 of the CFGC.*

Source: Madrone Ecological Consulting, March 2019.

Figure 6-8
Project Area and Vegetation Communities

PROJECT AREA AQUATIC RESOURCES						
Waters of the U.S.	Directly Impacted		Avoided		Total Acreage	Total Linear Feet
	(acres)	(linear feet)	(acres)	(linear feet)		
Riparian Wetland	0	-	0.40	-	0.40	-
Seasonal Wetland	0.08	-	0.13	-	0.21	-
Seasonal Wetland Swale	0.07	-	0.00	-	0.07	-
Intermittent Stream	0	-	0.30	1,180	0.30	1,180
Total:	**0.15**	**0**	**0.83**	**1,180**	**0.98**	**1,180**
Non-Jurisdictional	Directly Impacted		Avoided		Total Acreage	Total Linear Feet
	(acres)	(linear feet)	(acres)	(linear feet)		
Drainage Ditch	0.084	945	0	0	0.084	945
Project Area Total:	**0.234**	**945**	**0.83**	**1180**	**1.064**	**2,125**

It should be noted that the off-site sewer improvement area does not contain any wetlands, riparian areas, or other sensitive natural communities, and implementation of the off-site sewer improvements would not have the potential to result in impacts to such resources.

Based on the above, implementation of the proposed project could have a substantial adverse effect on riparian habitat and/or other sensitive natural communities and/or have a substantial adverse effect on State or Federally protected aquatic resources (including, but not limited to, marsh, vernal pool, coastal, etc.), through direct removal, filling, hydrological interruption, or other means. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

6-8(a) *Prior to initiation of ground-disturbing activities, high visibility and silt fencing shall be established at the edge of the construction/maintenance footprint, to the satisfaction of the Placer County Community Development Resource Agency, if work is anticipated to occur within 50 feet of potentially jurisdictional features and riparian areas that are proposed for avoidance. A biological monitor shall be present during the fence installation and during any initial grading or vegetation clearing activities within 50 feet of potentially jurisdictional features and riparian areas which are proposed for avoidance.*

6-8(b) *To the extent feasible, the project shall be designed to avoid and minimize adverse effects to waters of the U.S. or jurisdictional waters of the State of California within the project area. Prior to Improvement Plan approval for the project, a Section 404 permit for fill of jurisdictional wetlands shall be acquired, and mitigation for impacts to jurisdictional waters that cannot be avoided shall conform with the USACE "no-net-loss" policy. Mitigation for impacts to both federal and State jurisdictional waters shall be addressed using these guidelines.*

The applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA). Written verification of the Section 404 permit and the Section 401 water quality certification shall be submitted to the Placer County Community Development Resource Agency.

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-8(b) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological

resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

Alternatively, if the project proceeds before adoption of the PCCP or if the PCCP is not approved, the applicant may choose to utilize the Western Placer County Voluntary Interim In Lieu Fee Program (VIILF) to satisfy USACE and RWQCB mitigation requirements for the project's impacts to aquatic resources. The applicant shall be required to enter into both a Western Placer County In Lieu Fee Program Credit Transfer Agreement and an Interim Fee Credit Agreement with the County. If the VIILF is chosen, then Mitigation Measure 6-8(b) may be replaced with the payment of the interim fee.

6-8(c) *Prior to Improvement Plan approval, the applicant shall apply for a Section 1600 Lake or Streambed Alteration Agreement from CDFW. The information provided shall include a description of all of the activities associated with the proposed project, not just those closely associated with the drainages and/or riparian vegetation. Impacts shall be outlined in the application and are expected to be in substantial conformance with the impacts to biological resources outlined in this EIR (see Table 6-3, Table 6-4, and Figure 6-8). Impacts for each activity shall be broken down by temporary and permanent, and a description of the proposed mitigation for biological resource impacts shall be outlined per activity and then by temporary and permanent. Information regarding project-specific drainage and hydrology changes resulting from project implementation shall be provided as well as a description of storm water treatment methods. Minimization and avoidance measures shall be proposed as appropriate and may include: preconstruction species surveys and reporting, protective fencing around avoided biological resources, worker environmental awareness training, seeding disturbed areas adjacent to open space areas with native seed, and installation of project-specific storm water BMPs. Mitigation may include restoration or enhancement of resources on- or off-site, purchase habitat credits from an agency-approved mitigation/conservation bank, off-site, working with a local land trust to preserve land, or any other method acceptable to CDFW. Written verification of the Section 1600 Lake or Streambed Alteration Agreement shall be submitted to the Placer County Community Development Resource Agency.*

In the event the Placer County Conservation Program is adopted prior to submittal of Improvement Plans for this project or prior to the project's own State and federal permits being obtained for effects associated with listed species and their habitats, waters of the State, and waters of the U.S., then Mitigation Measure 6-8(c) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-9 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Based on the analysis below, the impact is *less than significant*.

Although the project site currently consists of annual brome grassland and Valley oak riparian woodland areas, both of which could be used for wildlife movement, the project site is not located in proximity to large areas of viable habitat. Urbanized areas of the City of Roseville exist to the east of the site, and areas to the north, west, and south of the site have primarily been developed for rural residential uses or agricultural uses. Thus, while wildlife may occasionally move across the site, the site does not provide a movement corridor for substantial wildlife populations, or between significant habitat areas. Finally, the proposed project would avoid development within the majority of the on-site Valley oak riparian woodland area and on-site tributary, and wildlife could continue to use the avoided riparian woodland area for movement within the site. Considering the location of the project site and the avoidance of the majority of the on-site Valley oak riparian woodland area, the proposed project would not have the potential to result in a substantial interference with the movement of any wildlife.

The existing habitats within the Project Area are not considered a substantial native wildlife nursery site; thus, implementation of the proposed project would not have the potential to impede the use of a native wildlife nursery site.

Given the above, the proposed project would not interfere substantially with the movement of any wildlife and a ***less-than-significant*** impact would result.

Mitigation Measure(s)

None required.

6-10 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or have a substantial adverse effect on the environment by converting oak woodlands. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Based on the Arborist Report prepared by Sierra Nevada Arborists, implementation of the proposed project would include removal of seven protected trees, with a combined DBH of 157 inches. In addition to the seven protected trees that would be removed, implementation of the proposed project would include removal of a Pacific Willow, which is in extremely poor condition. Although the Pacific Willow would otherwise qualify as a protected tree, because of the poor health of the tree, the tree is not considered to qualify for protection under Placer County's regulations. Impacts to protected trees are summarized in Table 6-5 below.

Table 6-5
Summary of Project Tree Impacts

Tag Number	Scientific Name (Common Name)	Multi-Stems (DBH inches)	Total DBH (inches)	Dripline (inches)	Vigor
1	*Quercus wislizeni* (Interior Live Oak)	14, 16, 25	55	29	Fair
7	*Quercus douglasii* (Blue Oak)		6	8	Fair
8	*Quercus douglasii* (Blue Oak)	4, 4, 6	14	10	Fair
13	*Quercus douglasii* (Blue Oak)		11	15	Fair
103	*Quercus wislizeni* (Interior Live Oak)		26	28	Fair
104	*Quercus wislizeni* (Interior Live Oak)	5, 6, 6	17	20	Fair
105	*Quercus wislizeni* (Interior Live Oak)	14, 14	28	30	Fair
106	*Salix lucida (Pacific Willow)*	8, 10, 11	29	14	Poor – 90 percent dead

Note: Tree 106 is not considered protected due to the poor vigor of the tree.

Source: Madrone Ecological Consulting, March 2019.

Although the proposed project would result in removal of the protected trees listed in Table 6-5, tree removal would occur in an area of oak woodland removal less than one acre in size. Therefore, impacts related to the removal of on-site oak trees should be assessed on the basis of individual trees.

Considering that the proposed project would involve removal of seven individual protected trees, the proposed project could conflict with local policies and/or ordinances that protect biological resources, including tree resources. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

6-10(a) *Prior to any removal of significant trees (equal to, or greater than, six inches DBH or 10 inches DBH aggregate for multi-trunked trees), the project applicant shall obtain a tree removal permit from Placer County. In conjunction with submittal of a tree removal permit application, the applicant shall submit a site plan showing all protected trees proposed for removal. In accordance with Chapter 12.16.080 of the Placer County Code, the applicant shall comply with any conditions required by the Planning Services Division, which shall include payment of in-lieu fees. In-lieu fees shall be paid into the Placer County Tree Preservation Fund at $100 per DBH removed or impacted.*

In the event the Placer County Conservation Program is adopted prior to submittal of improvement plans for this project, then Mitigation Measure 6-10(a) may be replaced with the PCCP's mitigation fees and conditions on covered activities to address this resource impact and avoidance and minimization measures as set forth in the PCCP implementation document. If PCCP enrollment is chosen and/or required by the State and federal agencies as mitigation for one or more biological resource area impacts, then the PCCP mitigation shall apply only to those species and waters that are covered by the PCCP.

6-10(b) *The Improvement Plans shall include a note and show placement of Temporary Construction Fencing. The applicant shall install a four foot tall, brightly colored (usually yellow or orange), synthetic mesh material fence (or an equivalent approved by the Development Review Committee) at the following locations prior to any construction equipment being moved on-site or any construction activities taking place:*

A. Adjacent to any and all open space preserve areas that are within 50 feet of any proposed construction activity;
B. At the limits of construction, outside the critical root zone of all trees six (6) inches DBH (diameter at breast height), or 10 inches DBH aggregate for multi-trunk trees, within 50 feet of any grading, road improvements, underground utilities, or other development activity, or as otherwise shown on the Tentative Subdivision Map; or,
C. Around any and all "special protection" areas such as open space parcels and wetland features.

Cumulative Impacts and Mitigation Measures

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

For further detail related to the cumulative setting of the proposed project, refer to Chapter 17, Statutorily Required Sections of this EIR.

6-11 Cumulative loss of habitat for special-status species. Based on the analysis below and with implementation of mitigation, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

Implementation of the proposed project, in combination with other development within the DCWPCP area, such as the Placer Vineyards Specific Plan and the Riolo Vineyards Specific Plan, would result in a significant cumulative impact related to the loss of special-status species habitat.

As discussed above, the Project Area contains areas of annual brome grassland along with Valley oak riparian woodland, seasonal wetland, seasonal wetland swale, intermittent stream, and a drainage ditch. Implementation of the proposed project, including widening of Vineyard Road and Brady Lane would result in impacts to the foregoing habitat areas as shown in Table 6-6. The habitats listed represent potential habitat for various special-status species listed in Table 6-2.

Table 6-6
Habitat Area Impacts

Resource Type	Existing (acre)	Impacts (acre)	Avoided (acre)
Riparian Wetland	0.40	0.00	0.40
Seasonal Wetland	0.21	0.08	0.13
Seasonal Wetland Swale	0.07	0.07	0.00
Intermittent Stream	0.30	0.00	0.30
Drainage Ditch[1]	0.084[1]	0.084[1]	0.00[1]
Annual Brome Grassland	28.50	23.30	5.2[2]
Valley Oak Riparian Woodland	3.40	0.10	3.30

[1] *The Drainage Ditch is not considered to be a jurisdictional Water of the U.S. under Section 404 of the Clean Water Act, but may fall under authority of Section 1602 of the CFGC.*
[2] Avoided annual brome grassland includes areas within the NAPOTS.

Source: Madrone Ecological Consulting, March 2019.

This chapter provides a wide range of mitigation to minimize potential adverse effects to habitat for special-status species. For instance, Mitigation Measure 6-8(b) would require that the proposed project conform with the USACE's "no-net-loss" policy for wetland mitigation. Thus, any wetlands lost within the Project Area must be compensated through the protection of existing wetlands, avoidance of wetland impacts, or creation of new wetland habitat elsewhere. Similar compensatory mitigation is included for Swainson's hawk should they be actively nesting within 10 miles of the project site prior to commencement of construction.

It should be noted that while the project would involve loss of some existing on-site habitat, the western portion of the project site, containing the majority of the existing Valley oak riparian woodlands and intermittent stream, remain undeveloped and would be rezoned to Open Space. Such a dedication would ensure that portions of the existing habitat within the project site remain undisturbed, following implementation of the proposed project.

In addition to mitigation measures requiring the compensation of lost habitat, this EIR contains mitigation measures requiring that pre-construction surveys be conducted to reduce the potential for implementation of the proposed project to result in loss of individual special-status species. Such mitigation measures require that should pre-construction surveys identify special-status species within areas to be impacted by the proposed project, avoidance measures must be implemented to prevent the loss of identified special-status species.

It should be noted that the draft PCCP, as currently proposed, is designed to ensure that lands within western Placer County would be managed to continue to support the survival and well-being of the species covered by the PCCP, as well as the survival of hundreds of other species that are dependent on the same habitat. The project site has been designated in both the PCCP and the DCWPCP as an area anticipated for future urban development. The proposed project would not include the conversion of any lands not previously identified for development and would include protection of portions of the project site within designated open space, as discussed above.

As further discussed in Chapter 17 of this EIR, CEQA Guidelines, Section 15064, Subdivision (h)(5) states, "[…]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

In addition, the courts have explicitly rejected the notion that a finding of significance is required simply because a proposed project would result in a net loss of habitat. "[M]itigation need not account for every square foot of impacted habitat to be adequate. What matters is that the unmitigated impact is no longer significant." (*Save Panoche Valley v. San Benito County* (2013) 217 Cal.App.4th 503, 528, quoting *Banning Ranch Conservancy v. City of Newport Beach* (2012) 211 Cal.App.4th 1209, 1233.)

The above discussion provides substantial evidence that, while the combined effects on biological resources resulting from approved/planned development throughout the DCWPCP would be considered significant, the proposed project's incremental contribution to the significant cumulative effect could be reduced with implementation of the mitigation measures required in this EIR. However, without implementation of the required mitigation measures, the proposed project's incremental contribution to the significant cumulative effect could be considered ***cumulatively considerable*** and ***significant***.

Mitigation Measure(s)

Implementation of the following mitigation measures is sufficient to reduce all project-specific impacts to a less-than-significant level. Thus, with implementation of the following mitigation measures, the project's incremental contribution to the significant cumulative impact would be reduced to a *less than cumulatively considerable* level.

6-11 *Implement Mitigation Measures 6-1, 6-4, 6-5(a) and 6-5(b), 6-6, 6-7, 6-8(a) through 6-8(c), and 6-10(a) and (b).*

7. Cultural Resources

7. CULTURAL RESOURCES

7.1 INTRODUCTION

The Cultural Resources chapter of the EIR addresses known and unknown historic and prehistoric cultural resources, including tribal cultural resources, in the vicinity of the project area. Cultural resources can be categorized into prehistoric or historic resources. Prehistoric resources are those sites and artifacts associated with indigenous, non-Euroamerican populations, generally prior to contact with people of European descent. Historic resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region. The chapter summarizes the existing setting with respect to cultural resources, identifies thresholds of significance, evaluates project impacts to such resources, and sets forth mitigation measures. Information presented in the chapter is primarily drawn from the Cultural Resources Inventory and Effects Assessment prepared by Natural Investigations Company,[1] as well as the Placer County General Plan[2], the General Plan EIR[3], and the Dry Creek-West Placer Community Plan (DCWPCP)[4].

7.2 EXISTING ENVIRONMENTAL SETTING

Placer County contains a rich cultural resource heritage that includes archeological and historical sites and resources. Given the rich heritage of the area, many archeological and historical sites and resources remain undiscovered. According to the Placer County General Plan EIR, as of November 1991, a total of 1,235 archeological sites were recorded in Placer County. Of the 634 records reviewed, 456 represented prehistoric archeological sites; 143 represented historical archeological sites; and 35 represented archeological sites with prehistoric and historical components.

The following sections provide further details regarding the prehistoric overview, ethnographic overview, and historic overview of the project area, as well as a description of any identified cultural resources associated with the project site and a discussion of tribal cultural resources.

Prehistoric Overview

A recent summary by Rosenthal et al. of the prehistory of California's Sacramento Valley, Sacramento–San Joaquin Delta, and San Joaquin Valley is based on a compilation of previous research. As devised by Rosenthal and others, and with the timeframes adjusted for modern calibration curves for radiocarbon dates, the chronological sequence for the Central Valley is: Paleo-Indian (11,500–8550 cal [calibrated] B.C.), Lower Archaic (8550–5550 cal B.C.), Middle Archaic (5550–550 cal B.C.), Upper Archaic (550 cal B.C.–cal A.D. 1100), and Emergent or Late Prehistoric Period (cal A.D. 1100–Historic Contact).

Little evidence currently exists of the Paleo-Indian and Lower Archaic periods in the Central Valley. According to Natural Investigations Company, large segments of the Late Pleistocene

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1 Natural Investigations Company. *Cultural and Paleontological Resources Inventory and Effects Assessment for the Brady at Vineyard Project.* May 21, 2018.
2 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.

landscape throughout the central California lowlands have been buried or removed by periodic episodes of deposition or erosion. Earlier studies had also estimated that Paleo-Indian and Lower Archaic sites along the lower stretch of the Sacramento River and San Joaquin River drainage systems had been buried by Holocene alluvium up to 33 feet thick that was deposited during the last 5,000 to 6,000 years. The formation of the Sacramento–San Joaquin Delta began during the early Middle Holocene. After approximately 1,000 calibrated years (cal) B.C. during the Late Holocene, renewed episodes of alluvial fan and floodplain deposition occurred.

The archaeological evidence that is available for the Paleo-Indian Period is comprised primarily by basally thinned, fluted projectile points. Such points are morphologically similar to the well-dated Clovis points found elsewhere in North America. In the Central Valley, only three archaeological localities (Woolfsen Mound in Merced County, Tracey Lake in San Joaquin County, and Tulare Lake basin in Kings County) contain fluted points, which were recovered at each from remnant features of the Pleistocene landscape.

In the Central Valley, the Lower Archaic Period is mainly represented by isolated finds, as the early landscape was buried by natural alluvial fan and floodplain deposition. Cultural material dating to the Lower Archaic Period has been found at only one site in the Central Valley, which is located in present-day Kern County. Stratified cultural deposits at the site have yielded a stemmed projectile point, chipped stone crescents, and the remains of fish, birds, and shellfish. Although abundant milling slabs and handstones have been recovered from Lower Archaic Period foothill sites in eastern Contra Costa County and Calaveras County, milling tools or plant remains have not been found at the valley floor site.

The cultural framework within the greater project region subsequent to the Paleo-Indian and Lower Archaic periods is further divided into three regionally based “patterns.” Specific to the Central Valley prehistory and the current project region, the regionally based patterns are the Windmiller, Berkeley, and Augustine. The patterns mark changes in distinct artifact types, subsistence orientation, and settlement patterns, which began circa 5,550 cal B.C. and lasted until historic contact in the early 1800s. The patterns were initially identified at the following three archaeological sites: the Windmiller site (CA-SAC-107) near the Cosumnes River in Sacramento County; the West Berkeley site (CA-ALA-307) on the east side of the Bay in Alameda County; and the Augustine site (CA-SAC-127) in the Sacramento-San Joaquin Delta. In general, the patterns conform to three temporal divisions: Middle Archaic Period/Windmiller Pattern, Upper Archaic Period/Berkeley Pattern, Late Prehistoric Period/Augustine Pattern.

Middle Archaic Period / Windmiller Pattern

Unlike the foothills, where a number of buried sites have been found, archeological sites on the valley floor were relatively scarce for the first 3,000 years of the Middle Archaic Period, in part due to natural geomorphic processes. The archeological record indicates that people followed a seasonal foraging strategy, and, some researchers suggest that populations may have occupied lower elevations during the winter and moved to higher elevations during the summer. Other researchers suggest that residential stability along Central Valley river corridors increased during the Middle Archaic Period.

Excavations at Windmiller Pattern sites have yielded abundant remains of terrestrial fauna such as deer, tule elk, pronghorn, and rabbits, as well as fish such as sturgeon, salmon, and other smaller fishes. Projectile points with a triangular blade and contracting stems are common at Windmiller Pattern sites. A variety of fishing implements such as angling hooks, composite bone

hooks, spears, and baked clay artifacts, which may have been used as net or line sinkers, are also relatively common. The presence of milling implements such as grinding slabs, handstones, and mortar fragments, indicate acorns or seeds were an important part of the Middle Archaic diet. In the foothills, pine nut and acorn remains have been recovered from sites in Fresno and Calaveras counties.

The variety of artifacts recovered from Windmiller Pattern sites include shell beads, ground and polished charmstones, and bone tools, as well as impressions of twined basketry. Baked clay items include pipes, discoids, and cooking "stones", as well as net sinkers. Burials in cemetery areas, which were separate from habitation areas, were accompanied by a variety of grave goods. The presence of an established trade network is indicated by the recovery of *Olivella* shell beads, obsidian tools, and quartz crystals. Obsidian sources during the Middle Archaic included quarries in the North Coast Ranges, eastern Sierra, and Cascades.

Upper Archaic Period / Berkeley Pattern

The Upper Archaic Period is better understood than any of the preceding periods and is characterized by a shift to the more specialized, adaptive Berkeley Pattern over a 1,000-year period. Excavated archaeological sites signal an increase in mortars, pestles, and archaeobotanical remains, as well as a decrease in slab milling stones and handstones. Archeologists generally agree that mortars and pestles are better suited to crushing and griding acorns, while milling slabs and handstones were used primarily for grinding wild grass grains and seeds. The proportional change indicates a shift during the Berkely Pattern to a greater reliance on acorns as a dietary staple. Innovations such as new types of shell beads, charmstones, bone tools, and ceremonials blades are additional evidence of the more specialized technology present during the upper Archaic period.

The artifact assemblage in Berkeley Pattern sites demonstrates that populations in the area continued to exploit a variety of natural resources. In addition to seeds and acorns, hunting persisted as an important aspect of food procurement. Large, mounded villages that developed around 2,700 years ago in the Delta region included accumulations of habitation debris and features, such as hearths, house floors, rock-lined ovens, and burials. The remains of a variety of aquatic resources in the large shell midden/mounds that developed near salt or fresh water indicate exploitation of shellfish was relatively intensive. Berkeley Pattern artifact assemblages are also characterized by *Olivella* shell beads, *Haliotis* ornaments, and a variety of bone tool types. Mortuary practices continued to be dominated by interment, although a few cremations have been discovered at sites dating to the Upper Archaic Period. Trade networks brought obsidian toolstone to the Central Valley from the North Coast Ranges and the east side of the Sierra Nevada Range.

Late Prehistoric Period / Augustine Pattern

The comprehensive archeological record for the Emergent or Late Prehistoric Period in the Central Valley shows an increase in the number of archeological sites associated with the Augustine Pattern in the lower Sacramento Valley/Delta region, as well as an increase in the number and diversity of artifacts. The Emergent or Late Prehistoric Period was shaped by a number of cultural innovations, such as the bow and arrow and more elaborate and diverse fishing technology, as well as an elaborate social and ceremonial organization. Dart and atlatl technology was effectively replaced by the introduction of the bow and arrow. Additionally, the cultural patterns typical of the Augustine Pattern, as viewed from the archaeological record, are reflected in the cultural traditions known from historic period Native American groups.

The faunal and botanical remains recovered at Emergent or Late Prehistoric Period archaeological sites indicate the occupants relied on a diverse assortment of mammals, fish, and plant parts, including acorns and pine nuts. Hopper mortars, shaped mortars and pestles, and bone awls used to produce coiled baskets are among the variety of artifacts recovered from Augustine Pattern sites. The toolkit during the Emergent or Late Prehistoric Period also included bone fish hooks, harpoons, and gorge hooks for fishing, as well as the bow and arrow for hunting. The appearance of ceramics during the Late Prehistoric/Augustine Pattern period is likely a direct improvement on the prior baked clay industry.

During the Late Prehistoric Period, numerous villages, ranging in size from small to large, were established along the valley floor sloughs and river channels and along the foothills sidestreams. House floors or other structural remains have been preserved at some sites dating to the Emergent or Late Prehistoric Period (e.g., CA-CAL 1180/H, CASAC-29, CA-SAC-267). The increase in sedentism and population growth led to the development of social stratification, with an elaborate social and ceremonial organization. Examples of items associated with rituals and ceremonials include flanged tubular pipes and baked clay effigies representing animals and humans. Mortuary practices changed to include flexed burials, cremation of highstatus individuals, and pre-interment burning of offerings in a burial pit. Currency, in the form of clamshell disk beads, also developed during this period together with extensive exchange networks.

In her Master's thesis, which was completed in 1966, Patti Palumbo (now Johnson) focused on the archaeology of the Dry Creek drainage. She analyzed artifacts from 32 prehistoric archaeological sites between Rio Linda on the west and Roseville on the east. Palumbo concluded four of the sites were permanent village sites with well-developed middens. Palumbo classified the remainder as temporary occupation sites. Diagnostic artifacts found at the Dry Creek sites (e.g., shell beads, projectile points) indicate occupation occurred mainly during the Late Prehistoric Period. One of the village sites (CA-PLA-41) is mapped adjacent to the main Dry Creek channel in the southeast quadrant of Section 9, northeast of, and approximately 0.5-mile from, the project site. One of the temporarily occupied sites along Dry Creek (CA-PLA-67) is located within 0.25-mile of the project site.

Ethnographic Overview

The project site is located in lands historically occupied by the Nisenan (also known as the Southern Maidu). Prior to Euro-American contact, Nisenan territory included the southern extent of the Sacramento Valley, east of the Sacramento River between the North Fork Yuba River and Cosumnes River on the north and south, respectively, and extended east into the foothills of the Sierra Nevada. Neighboring groups included the Plains Miwok on the south, Southern Patwin to the west across the Sacramento River beyond the Yolo Basin, and Konkow and Maidu to the north. Three Maiduan languages, Konkow, Maiduan, and Nisenan are regarded as a subgroup of Penutian stock. Ethnographers have also distinguished three Nisenan dialects: Northern Hill, Southern Hill, and Valley.

Ethnographic Nisenan established central villages and smaller satellite villages along the main watercourses in their territories. Valley Nisenan villages were generally located on low, natural rises along streams and rivers or on gentle, south-facing slopes; and Hill Nisenan villages were located on ridges and large flats along major streams. Semi-permanent or winter villages, as well as seasonally occupied campsites, were used at various times during the seasonal round of subsistence activities associated with hunting, fishing, and gathering plant resources. Historically,

a Nisenan village, known as *Pitsokut* or *Pich-u-gut,* was located in the Roseville area, and may have been at the location of a prehistoric site recorded along Dry Creek.

Village population is reported as ranging from 15 to over 500 individuals with the number of residences ranging from 40 to 50 in larger villages, and only three to seven in smaller villages. Traditional village structures included semisubterranean or aboveground conical, circular, or dome-shaped houses, as well as acorn granaries, winter grinding houses, ceremonial or dance houses, and sweathouses. Nisenan mortuary practices included cremation and burial in a separate cemetery area.

Like the majority of Native Californians, the Nisenan relied on acorns as a staple food, which were collected in the fall and then stored in granaries. These seasonally mobile hunter-gatherers also relied on a wide range of abundant natural resources that were available in their territories. Large and small mammals, such as pronghorn antelope, deer, tule elk, black bear, cottontail, and jackrabbit, among other species, were hunted by individuals or by communal groups. Game birds, waterfowl, and fish, particularly salmon, were also important components of the Nisenan diet. In addition to acorns, plant resources included pine nuts, buckeye nuts, hazelnuts, fruits, berries, seeds, and underground tubers.

Similar to other California Native American groups, the Nisenan employed a variety of tools, implements, and enclosures for hunting and collecting natural resources. The bow and arrow, snares, traps, nets, and enclosures or blinds were used for hunting land mammals and birds. For fishing, the Nisenan made canoes from tule, balsa, or logs, and used harpoons, hooks, nets, and basketry traps. To collect plant resources, the two groups used sharpened digging sticks, long poles for dislodging acorns and pinecones, and a variety of woven tools (seed beaters, burden baskets, and carrying nets).

Foods were processed with a variety of tools, such as bedrock mortars, cobblestone pestles, anvils, and portable stone or wooden mortars that were used to grind or mill acorns and seeds. Tools and implements included knives, anvils, leaching baskets and bowls, woven parching trays, and woven strainers and winnowers. Prior to processing, the acorns were stored in the village granaries. The Nisenan and neighboring groups participated in an extensive east-west trade network between the coast and the Great Basin. From coastal groups marine shell (*Olivella* and abalone) and steatite moved eastward, while salt and obsidian traveled westward from the Sierras and Great Basin. Basketry, an important trade item, moved in both directions.

The traditional culture and lifeways of the Nisenan who inhabited the fertile plains between Sacramento and the Sierra foothills were disrupted beginning in the early 1800s. Although Spanish explorers entered Nisenan territory as early as 1808, record of the forced movement of Nisenan to the missions does not exist. During the Mexican period, native peoples were affected by land grant settlements and decimated by foreign disease epidemics that swept through the densely populated Central Valley. An epidemic that swept the Sacramento Valley in 1833 caused the death of an estimated 75 percent of the Valley Nisenan population, wiping out entire villages.

In the heart of Nisenan territory, the discovery of gold in 1848 at Sutter's Mill on the American River near Coloma had a devastating impact on the remaining Nisenan, as well as other groups of Native Americans in the Central Valley and along the Sierra Nevada foothills. By 1850, with their lands, resources and way of life being overrun by the steady influx of non-native people during the Gold Rush, surviving Nisenan retreated to the foothills and mountains or labored for the growing ranching, farming, and mining industries. Nisenan descendants reside on the Auburn,

Berry Creek, Chico, Enterprise, Greenville, Mooretown, Shingle Springs, and Susanville rancherias, as well as on the Round Valley Reservation.

Historic Overview

The following sections provide an overview of the Spanish, Mexican, and American Periods, as well as local history associated with the project area.

Spanish, Mexican, and American Periods

Post-contact history for the State of California is generally divided into the following three periods: the Spanish Period from 1769 to1822; the Mexican Period from 1822 to1848; and the American Period from 1848 to present. Although brief visits by Spanish, Russian, and British explorers occurred from 1529 to 1769, the beginning of Spanish settlement in California occurred in 1769 at San Diego. The Spanish and Franciscan Order established 21 missions between 1769 and 1823 along the coast between San Diego and San Francisco. The Spanish expeditions into the Central Valley in 1806 and 1808, led by Lieutenant Gabriel Moraga, explored along the main rivers, including the American, Calaveras, Cosumnes, Feather, Merced, Mokelumne, Sacramento, San Joaquin, and Stanislaus. Moraga is credited with naming the lower Sacramento River and valley region, “Sacramento” (“the Holy Sacrament”). In 1813, Moraga led another expedition in the lower portion of the Central Valley and named the San Joaquin River. The abundance of wildlife, such as waterfowl, fish, and fur-bearing animals, within or along the banks of the rivers attracted immigrants to the Central Valley region. The last Spanish expedition into California’s interior was led by Luis Arguello in 1817 and traveled up the Sacramento River, past the future site of the City of Sacramento to the mouth of the Feather River, before returning to the coast.

After the end of the Mexican Revolution (1810 to 1821), the Mexican Period is marked by extensive land grants, most of which were in the interior of the State, as well as by exploration by American fur trappers west of the Sierra Nevada Mountains. Most of the land grants to Mexican citizens in California (*Californios*) were in the interior because the Mexican Republic sought to increase the population away from the more settled coastal areas where the Spanish settlements had been concentrated. The largest land grants in the Sacramento Valley were awarded to John Sutter who had become a Mexican citizen. In 1839, he founded a trading and agricultural empire called New Helvetia that was headquartered at Sutter’s Fort near the divergence of the Sacramento and American rivers in today’s City of Sacramento. Only a small portion of the 48,839-acre New Helvetia land grant was located in Sacramento County; the majority was located in today’s Sutter and Yuba counties on the east and west sides of the Feather River.

The first American trapper to enter California, Jedediah Smith, explored along the Sierra Nevada in 1826 and in 1827, he entered the Sacramento Valley, traveling along the American and Cosumnes rivers. In 1827, Smith also traveled through the San Joaquin Valley. Other trappers soon followed, including employees of the Hudson’s Bay Company in 1832. Between 1830 and 1833, and again in 1837, diseases introduced by the non-indigenous explorers, trappers, and settlers, as well as relocation to the missions, military raids, and settlement by non-native groups, decimated native Californian populations, communities, and tribes in the Sacramento and San Joaquin valleys.

The end of the Mexican-American war, marked by the signing of the Treaty of Guadalupe Hidalgo in 1848, initiated the beginning of the American Period. In the same year, gold was discovered at Sutter’s Mill on the American River in Coloma, and by 1849, nearly 90,000 people had journeyed

to the gold fields. California became the 31st state in 1850, largely as a result of the Gold Rush, and in 1854, Sacramento became the State capital. In contrast to the economic prosperity and population growth associated with statehood, the loss of land and territory, including traditional hunting and gathering locales, as well as malnutrition, starvation, and violence, further contributed to the decline of indigenous Californians in the Central Valley and along the Sierra Nevada foothills.

Local History

Placer County was organized in 1851 from parts of neighboring Sutter and Yuba counties, and named after the County's principal economy at that time, placer mining. The City of Auburn, one of the earliest mining towns in California (first known as Woods Dry Diggings, then North Fork Dry Diggings), was designated the seat of justice when the County was created. Auburn continues to be the County seat today.

The earliest settlers in the general project vicinity arrived in the late 1840s, as miners poured into the region in search of placer deposits. By the mid-1850s, the area was sparsely settled and dotted with small-scale ranches. By the mid-1860s, the construction and development of the railroad industry played a significant role in the region's development. The Central Pacific Railroad (CPRR) had incorporated in 1861 to build the western portion of the First Transcontinental Railroad. The tracks of the CPRR (later Southern Pacific Railroad [SPRR]; now Union Pacific Railroad [UPRR]) reached Roseville, Rocklin, and Newcastle in 1864. A designated California Historical Landmark (No. 780), the First Transcontinental Railroad, has a marker in Old Town Roseville. Roseville prospered as a principal rail head that provided the frontier towns with goods and services. The Southern Pacific Railroad SPRR moved a major locomotive terminal from Rocklin to Roseville in 1908, which caused the town to expand into one of the largest railroad centers in the country.

The presence of the railroad also contributed to the growth of Placer County's agricultural industry, mainly fruits and nuts, because the rail line provided access to a large market east of the Sierra Nevada. Incorporated in 1906, the Pacific Fruit Express Company (PFE) was a joint SPRR and UPRR enterprise. The company operated a number of ice plants and docks, as well as car and repair shops throughout the west, and shipped produce in ice refrigerated railcars. The first units of the Pacific Fruit Express Ice Plant were erected in 1909, and by 1920, the company was known as the world's largest artificial ice plant. The name of present-day PFE Road, whose unnamed precedent is shown on the 1911 Antelope (1:31,650) USGS quadrangle, is derived from the company, which is now a UPRR subsidiary.

Among the early settlers to the Sacramento region were two brothers from Ohio, Curtis J. Hillyer and Edgar Winters Hillyer. Both brothers practiced law in Auburn: Curtis from 1854 until 1863 when he moved to Virginia City, Nevada, to practice law with Mackay, Flood and Fair; and Edgar from 1856 to 1861 when he joined the Army, serving for five years. In 1860, the younger brother, Edgar, purchased 53 acres in Section 3 of Township 10 North, Range 6 East, including the NW ¼ SW ¼ encompassing the project site; however, records indicating he ever built a residence or otherwise occupied the acreage do not exist. The residence in Auburn owned by brother Curtis was destroyed by fire in 1858. When Edgar was elected in 1863 to the State Assembly from Placer County, he was granted a leave of absence from the Army to serve. After practicing law in Nevada from 1866 to 1869, Edgar was nominated by President Ulysses Grant to a seat on the U.S. District Court for the District of Nevada, whereupon he served as a federal judge until his death in 1882.

The town of Antelope on the SPRR route, between Sacramento and Roseville in north-central Sacramento County, was initially settled in the 1860s by many of the transcontinental railroad workers. The area west of the tracks remained rural with scattered residences between the railroad and PFE Road until significant growth occurred during the 1980s.

Off-Site Improvement Areas

As discussed in detail in Chapter 3, Project Description, of this EIR, the proposed project would include off-site roadway improvements at the project frontages with Brady Lane and Vineyard Road, in addition to sewer system improvements within the Vineyard Road right-of-way.

Off-site improvement areas associated with the proposed project would include widening improvements to Brady Lane and Vineyard Road along the project frontages, as well as extension of a new sewer line within Vineyard Road east to Foothills Boulevard. All improvements would occur within the paved right-of-way. Although the Cultural Resources Inventory did not cover the off-site improvement areas, construction activities within the off-site improvement areas would be subject to all applicable mitigation measures prescribed within this EIR.

Known Cultural Resources

Archival research was carried out as part of the Cultural and Paleontological Resources Inventory and Effects Assessment prepared for the Brady Vineyard Subdivision project by Natural Investigations, including review of available historic documents and a records search. In addition, a field survey of the project area was conducted by Natural Investigations on February 1, 2018 to examine indications of surface or subsurface cultural resources.

Based on the records search conducted by Natural Investigations at the North Central Information Center of the California Historical Resources Information System (CHRIS) at California State University, Sacramento, on January 29, 2018, cultural resources have not been previously recorded within the project site. One historic-era archeological site (P-31-002859, CA-PLA-1978H) has been previously documented within 0.25-mile of the project site. At the time of recordation, P-31-002859, CA-PLA-1978H consisted of an outhouse constructed between 1935 and 1941 by the Civilian Conservation Corps (CCC) as part of the Works Progress Administration (WPA) created in 1935 by President Franklin D. Roosevelt during the Great Depression. In 2009, the site was updated and the outhouse had been removed or destroyed. P-31-002859, CA-PLA-1978H is not located within the boundaries of the project site or the proposed off-site improvement areas.

However, the field survey indicated the presence of four historic-era archeological resources on the project site, which included one trash scatter and three isolated finds. Prehistoric archeological resources, ethnographic sites, or historic-era built environment resources were not identified and cultural resources have not been previously recorded on the site. A description of each of the four historic-era archeological resources newly identified within the project site is provided below.

Trash Scatter (NIC-2018-Brady 1)

NIC-2018-Brady 1 is a diffuse, historic-era trash scatter located within the stream bed and cut banks of an unnamed branch of Dry Creek. The debris consists primarily of clear and amber bottles, with a few intact or mostly intact bottles, a seltzer bottle, a trailer hitch, an intact stoneware jug, and a few ceramic fragments. Modern plastic bottles and aluminum cans were also found amongst the debris, and some ceramic fragments appeared to be of recent manufacture.

Among the bottles and debris are several bottles manufactured by the Owens Illinois Glass Company which have a diamond IO base mark that was used between 1929 and 1960. A clear bottle dating to the 1920-1930s is acid etched, "Property of the Roseville Ice Co/Phone 211//Made in Czecho-Slovakia. Considering the range of ages from the diagnostic items, the earliest possible date for the site is 1934.

Overall, the trash scatter is in poor condition and the artifacts are dispersed within the creek bed and banks. The site's location in the streambed indicates that the items within Brady 1 have likely been transported downstream from an unknown location or locations and may represent different periods of dumping. Dry Creek and its tributaries, including the Vineyard Road tributary, are mapped by FEMA as being within the 100-year flood zone and an extensive historic record of flooding in the Roseville area exists. Thus, the debris contained within NIC-2018-Brady 1 was likely transported downstream during one or more flood episodes subsequent to 1934.

NIC-2018-Brady-ISO-1

NIC-2018-Brady-ISO-1 is an isolated finding consisting of a single, clear, historic-era bottle base found within the project site area along the unnamed tributary of Dry Creek. The bottle fragment has an Owens Illinois Glass Company bottle scar and the diamond IO base mark used by the company between 1929 and 1960. The base of the bottle fragment contains a manufacture date code of "7" for the plant in Alton, Illinois, which indicates a production range of between 1930 and 1974. In addition, a date production code of "2" indicates the bottle was produced in 1942.

NIC-2018-Brady-ISO-2

NIC-2018-Brady-ISO-2 is an isolated historic-era find consisting of one colorless alcohol bottle and one amber-colored alcohol bottle found within the project site area at the cut bank of the unnamed tributary of Dry Creek. The heal of the colorless alcohol bottle is embossed with "4/5 QUARTS" and has stippling with the diamond IO base mark "Owens of Illinois" used by the Owen's of Illinois Glass Company from 1929 to 1960. In addition, "Duraglass" is embossed on the base of the bottle, which indicates a production date of between 1940 and 1964. The bottle has a plant code of "23" indicating a plant location of Los Angeles, California, and a production date code of "51", indicating a production date of 1951. The amber alcohol bottle is embossed with "4/5 QUART/FEDERAL LAW FORBIDS SALE OR RE-USE OF THIS BOTTLE" and "MG", indicating the bottle was produced at the Maywood Glass Company, which was in operation from 1930 to 1959.

NIC-2018-Brady-ISO-3

NIC-2018-Brady-ISO-3 is an isolated, historic-era find consisting of a single, colorless alcohol bottle. The bottle was found adjacent to the east bank of an unnamed tributary of Dry Creek. The bottle is embossed with "4/5 QUARTS" along the heal and has stippling with the diamond IO base mark "Owens of Illinois" used by the Owen's of Illinois Glass Company from 1929 to1960. In addition, "Duraglass" is embossed on the base of the bottle, which indicates a production date of between 1940 and 1964. The bottle has a plant code of "23" indicating a plant location of Los Angeles, California, and a production date code of "51", indicating a production date of 1951.

Tribal Cultural Resources

Based on a search of the Native American Heritage Commission (NAHC) Sacred Lands File, as described in further detail in the Method of Analysis section below, recorded Native American sacred sites or traditional cultural properties are not known to exist within the project site. Per the NAHC's suggestion, Natural Investigations contacted each of the Native American tribes or

individuals indicated by the NAHC to potentially have knowledge of cultural resources in the project area.

In addition to the above, the County conducted Assembly Bill (AB) 52 and Senate Bill (SB) 18 tribal consultation for the project, as described in the Method of Analysis section below. Additional tribal cultural resources were not identified for the project site.

7.3 REGULATORY CONTEXT

Federal, State, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The following section contains a summary of basic federal and State laws governing preservation of historic and archaeological resources of national, regional, State, and local significance.

Federal Regulations

The following are the federal environmental laws and policies relevant to cultural resources.

Section 106 for the National Historical Preservation Act of 1966

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historical Preservation Act (NHPA) of 1966. Section 106 of NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places (NRHP). The criteria for determining NRHP eligibility are found in 36 CFR Part 60. Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or uses federal funding.

National Register of Historic Places

NRHP is the nation's master inventory of known historic resources. The NRHP includes listings of resources, including: buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, State, or local level. Resources over 50 years of age could be listed on the NRHP. However, properties under 50 years of age that are of exceptional significance or are contributors to a district could also be included on the NRHP. Four criteria are used to determine if a potential resource may be considered significant and eligible for listing on the NRHP. The criteria include resources that:

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

A resource can be individually eligible for listing on the NRHP under any of the above four criteria, or can be listed as contributing to a group of resources that are listed on the NRHP.

A resource can be considered significant in American history, architecture, archaeology, engineering, or culture. Once a resource has been identified as significant and potentially eligible for the NRHP, the resource's historic integrity must be evaluated. Integrity is a function of seven factors: location, design, setting, materials, workmanship, feeling, and association. The factors closely relate to the resource's significance and must be intact for NRHP eligibility.

Historical buildings, structures, and objects are usually eligible under Criteria A, B, and C based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion D, the potential to yield information important in prehistory or history. An archaeological test program may be necessary to determine whether the site has the potential to yield important data. The lead federal agency makes the determination of eligibility based on the results of the test program and seeks concurrence from the State Historic Preservation Officer (SHPO).

Effects to NRHP-eligible resources (historic properties) are adverse if the project may alter, directly or indirectly, any of the characteristics of an historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

State Regulations

The following are the State environmental laws and policies relevant to cultural resources.

California Environmental Quality Act and California Register of Historic Places

State historic preservation regulations affecting this project include the statutes and guidelines contained in CEQA (Public Resources Code sections 21083.2 and 21084.1 and sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA requires lead agencies to consider the potential effects of a project on historic resources and unique archaeological resources. A "historic resource" includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript that is historically or archaeologically significant (Public Resources Code section 5020.1). Under Section 15064.5 of the CEQA Guidelines, a resource is considered "historically significant" if one or more of the following California Register of Historic Resources (CRHR) criteria have been met:

1. The resource is associated with events that have made a significant contribution to the broad patterns of California history;
2. The resource is associated with the lives of important persons from our past;
3. The resource embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual or possesses high artistic values; or
4. The resource has yielded, or may be likely to yield, important information in prehistory or history.

In addition, the resource must retain integrity. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

CEQA requires preparation of an EIR if a proposed project would cause a "substantial adverse change" in the significance of a historical resource. A "substantial adverse change" would occur if a proposed project would result in physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines Section 15064.5[b][1]).

In addition to historically significant resources, which can include archeological resources that meet the criteria listed above, CEQA also requires consideration of "unique archaeological resources." If a site meets the definition of a unique archaeological resource, the site must be treated in accordance with the provisions of Public Resources Code section 21083.2. Under Public Resources Code section 20183.2(g), an archaeological resource is considered "unique" if it:

1) Is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
2) Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
3) Has a special kind or particular quality such as oldest, best example, largest, or last surviving example of its kind;
4) Is at least 100 years old and possesses substantial stratigraphic integrity; or
5) Involves important research questions that can be answered only with archaeological methods.

CEQA also includes specific guidance regarding the accidental discovery of human remains. Specifically, CEQA Guidelines Section 15064.5(e) requires that if human remains are uncovered, excavation activities must be stopped and that the county coroner be contacted. If the county coroner determines that the remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC identifies the most likely descendant, and that individual or individuals can make recommendations for treatment of the human remains under the procedures set forth in Section 15064.5 of the CEQA Guidelines.

The SHPO maintains the CRHR. Properties that are listed on the NRHP are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Assembly Bill 52

AB 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. "Tribal cultural resources" are defined as either:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
    (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section

> 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under AB 52, a project that may cause a substantial adverse change in the significance of a Tribal Cultural Resource is defined as a project that may have a significant effect on the environment. Where a project may have a significant impact on a Tribal Cultural Resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. AB 52 (PRC 21080.3.1) requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe(s) requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe(s). Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe(s).

Senate Bill 18

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes, when amending or adopting a general plan or specific plan, or designating land as open space, in order to aid in the protection of traditional tribal cultural places ("cultural places"). The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code §65300 et seq.) and specific plans (defined in Government Code §65450 et seq.). The proposed project includes a General Plan/Community Plan Amendment, and, thus, is subject to SB 18 consultation requirements.

Local Regulations

The following are the local government's environmental policies that are intended to protect cultural resources by mitigating the potential impacts of new development in areas containing important archaeological, historic, or paleontological resources.

Placer County General Plan

The Placer County General Plan goals and policies relating to the protection of cultural and historical resources that are applicable to the proposed project are presented below.

Goal 5.D.1. To identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

Policy 5.D.2 The County shall solicit the cooperation of the owners of cultural and paleontological resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.

Policy 5.D.3 The County shall solicit the views of the Native American Heritage Commission, State Office of Historic Preservation, North Central Information Center, and/or the local Native American community in cases where development may result in disturbance to sites containing evidence of Native American activity and/or to sites of cultural importance.

Policy 5.D.4 The County shall coordinate with the cities and municipal advisory councils in the County to promote the preservation and maintenance of Placer County's paleontological and archaeological resources.

Policy 5.D.5 The County shall use, where feasible, incentive programs to assist private property owners in preserving and enhancing cultural resources.

Policy 5.D.6 The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a County-wide cultural resource data base, to be maintained by the Division of Museums.

Policy 5.D.7 The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

Policy 5.D.8 The County shall, within its power, maintain confidentiality regarding the locations of archaeological sites in order to preserve and protect these resources from vandalism and the unauthorized removal of artifacts.

Policy 5.D.9 The County shall use the State Historic Building Code to encourage the preservation of historic structures.

Policy 5.D.10 The County will use existing legislation and propose local legislation for the identification and protection of cultural resources and their contributing environment.

Policy 5.D.11 The County shall support the registration of cultural resources in appropriate landmark designations (i.e., National Register of Historic Places, California Historical Landmarks, Points of

Historical Interest, or Local Landmark). The County shall assist private citizens seeking these designations for their property.

Policy 5.D.12 The County shall consider acquisition programs (i.e. Placer Legacy Open Space and Agricultural Conservation Program) as a means of preserving significant cultural resources that are not suitable for private development. Organizations that could provide assistance in this area include, but are not limited to, the Archaeological Conservancy, the Native American community, and local land trusts.

Dry Creek-West Placer Community Plan

The following goals and policies from the Environmental Resources Management Element of the DCWPCP related to cultural resources are applicable to the proposed project.

Goal 1 Recognize that the Dry Creek West Placer Community Plan Area is a unique community, which should incorporate development standards that enhance the area's separate cultural, sociological and physical identity.

Goal 2 Preserve areas of outstanding historical, cultural, or archaeological significance.

Policy 1 Identify and protect from destruction and abuse all representative and unique historical, cultural and archaeological sites.

Policy 2 Require site specific studies for archaeological or historical sites in all instances where land development has the potential to have a detrimental impact on these sites.

Policy 8 Preserve outstanding visual features and landmarks.

7.4 IMPACTS AND MITIGATION MEASURES

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

Standards of Significance

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

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines, Section 15064.5;
- Disturb any human remains, including those interred outside of dedicated cemeteries;
- Have the potential to cause a physical change which would affect unique cultural values;
- Restrict existing religious or sacred uses within the potential impact area; or

- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resource Code, Section 21074.

Method of Analysis

Preparation of the Cultural and Paleontological Resources Inventory and Effects Assessment included performance of a cultural resources literature search, archival research, consultation with the NAHC, contact with local tribes, and a field survey. The methods of analysis are described in further detail below.

Records Search Methods

A cultural resources literature search for the project area was completed at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) at California State University, Sacramento, on January 29, 2018. The records search was conducted to determine if prehistoric or historic cultural resources were previously recorded within the project area, the extent to which the project area had been previously surveyed, and the number and type of cultural resources within a 0.25-mile radius of the project site. The archival searches of the archaeological and historical records, national and State databases, and historic maps included the following:

- National Register of Historic Places: listed properties;
- California Register of Historical Resources: listed historical resources;
- Historic Property Data File (HPDF) and Archaeological Determinations of Eligibility (ADOE) for Placer County (2012);
- California Inventory of Historical Resources (1976 and updates);
- California Historical Landmarks (1996 and updates);
- California Points of Historical Interest (1992 and updates);
- 1866 General Land Office (GLO) Plat for Township 10 North, Range 6 East; and
- 1951, 1967, and 1975 Citrus Heights USGS 7.5-minute quadrangles.

Other Cultural Archival Sources

Natural Investigations Company searched the land patent records maintained by the Bureau of Land Management and reviewed historical maps and aerial photographs that were not available at the NCIC. The results of the reviews of historic maps and aerial photographs have been incorporated into the Local History section above. The following historic maps and aerial photographs were reviewed:

- 1855 GLO Plat for Township 11 North, Range 6 East;
- 1911 Antelope (13:31,650) USGS quadrangle;
- 1953 and 1967 Roseville USGS 7.5-minute quadrangles; and
- Aerial photographs for 1947, 1957, 1964, 1966, 1993, 1998, 2002, and 2005.

Native American Tribal Consultation

As noted previously, Natural Investigations contacted the NAHC on June 6, 2017 to request a search of the Sacred Lands File for the traditional cultural resources within or near the project area. The Sacred Lands File is populated by members of the Native American community who have knowledge about the locations of tribal resources. In requesting a search of the Sacred Lands File, Natural Investigations solicited information from the Native American community regarding tribal cultural resources; however, the responsibility to formally consult with the Native

American community lies exclusively with the federal and local agencies under applicable State and federal law.

Per the NAHC's suggestion, Natural Investigations contacted each of the following Native American tribes or individuals with the potential to have knowledge of cultural resources in the project area:

- T-si Akim Maidu;
- Shingle Springs Band of Miwok Indians;
- United Auburn Indian Community of the Auburn Rancheria (UAIC); and
- Washoe Tribe of Nevada and California.

A response letter was received from the UAIC dated February 22, 2018, requesting a site visit. An on-site field visit was conducted by Natural Investigations Company and representatives of the UAIC on March 23, 2018. The visit focused primarily on the unnamed tributary of Dry Creek that runs along the western border of the project site. Following the field visit, the determination was made that the project site area has a low probability for prehistoric resources to be unearthed; however, the UAIC requested a subsequent site visit once ground-disturbing activities have commenced and that construction workers undergo a cultural awareness training.

As discussed above, the County conducted tribal consultation consistent with the requirements of AB 52. As part of AB 52 and SB 18 requirements, the County sent project notification letters with offers to consult to the Ione Band of Miwok Indians, Shingle Springs Band of Miwok Indians, UAIC, Washoe Tribe of Nevada and California, and the Wilton Rancheria on July 24, 2018. A request for consultation was received from the Shingle Springs Band of Miwok Indians on September 20, 2018. The UAIC responded, requesting copies of cultural resource assessment information, but did not formally request to initiate consultation under AB 52.

Field Survey Methods

On February 1, 2018, Natural Investigations Company subjected the project area to an intensive-level pedestrian survey using transects spaced at 15 meters or less and following a north-south pattern throughout the 32.5-acre project area. The entirety of the visible ground surface within the project area was examined for cultural material (e.g., flaked stone tools, tool-making debris, stone milling tools, or fire-affected rock), soil discoloration that may indicate the presence of a cultural midden, soil depressions and features indicative of the presence of former structures or buildings (e.g., postholes, foundations), or historic-era debris (e.g., metal, glass, ceramics). Ground disturbances such as creek beds, creek banks, and animal burrows were visually inspected. A digital camera was used to photograph the project parcel to capture ground surface visibility and any items of interest. In addition, a handheld Trimble BE-3300-global position system (GPS) unit with sub-meter accuracy was used to record the locational data of items of interest. Soil color was recorded using a Munsell color chart. All newly identified cultural resources were recorded using California Department of Parks and Recreation (DPR) series 523 forms.

Project-Specific Impacts and Mitigation Measures

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

7-1 Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5. Based on the analysis below, the impact is *less than significant*.

As discussed above, four newly identified historic-era archeological resources were discovered within the project site during the field survey conducted by Natural Investigations. Three of the resources, identified as NIC-2018-Brady-ISO 1, NIC-2018-Brady-ISO 2, and NIC-2018-Brady-ISO-3, are isolated finds consisting of historic-era glass bottles, while one resource, identified as NIC-2018-Brady 1, is described as a trash scatter. The eligibility of each of the resources to be considered historical resources pursuant to NRHP and CRHR criteria is discussed in further detail below.

NRHP Criterion A/CRHR Criterion 1

For eligibility under NRHP Criterion A and CRHR Criterion 1, NIC-2018-Brady 1, NIC-2018-Brady-ISO-1, NIC-2018-Brady-ISO-2, and NIC-2018-Brady-ISO-3 must be associated with one or more event or historic theme of importance. According to the report prepared by Natural Investigations Company, archival research indicates that the trash scatter and bottle finds are not identified in available historical documentation as having any significant historical associations. As such, the trash scatter and isolated finds are not associated with any specific historic event or activity and are not eligible under NRHP Criterion A or CRHR Criterion 1.

NRHP Criterion B/CRHR Criterion 2

Under NRHP Criterion B and CRHR Criterion 2, eligibility would apply only to cultural resources associated with individuals whose specific contributions to history can be identified and documented as significant in our past. Although the area where the trash scatter was discovered was once owned by a federal judge, Edgar Winters Hillyer was not prominently associated with Placer County, nor does a firm association between him and the trash scatter exist. Based on lack of historical documentation, the trash scatter and bottles are not likely to be associated with any significant persons in history and, thus, are not eligible under NRHP Criterion B or CRHR Criterion 2.

NRHP Criterion C/CRHR Criterion 3

Under NRHP Criterion C and CRHR Criterion 3, resources could be eligible for listing on the CRHR or NRHP if the resources illustrate important concepts in design and planning, if the landscape reflects an important historical trend, is distinguished in design or layout, and is the result of skilled craftsmanship. The bottles and trash scatter do not have any significant historical associations and the historical use is typical. Additionally, the bottles and trash scatter are not uniquely artistic or designed with any distinctive engineering characteristics. The bottles and trash scatter do not embody any distinctive characteristics of a type, period, or method of construction, nor do they possess any artistic value. Therefore, the bottles and trash scatter do not possess the potential to provide any information that is not already represented in the archival record and are not eligible under NRHP Criterion C or CRHR Criterion 3.

NRHP Criterion D/CRHR Criterion 4

To be eligible under NRHP Criterion D or CRHR Criterion 4, a resource must have yielded or have the potential to yield important information. The bottles and trash scatter do not possess the potential to yield any additional information or provide any information that is not already represented in the archival record. Therefore, the trash scatter and bottles are not eligible under NRHP Criterion D or CRHR Criterion 4.

Conclusion

Based on the above, NIC-2018-Brady 1, NIC-2018-Brady-ISO-1, NIC-2018-Brady-ISO-2, and NIC-2018-Brady-ISO-3 are not eligible for listing in the NRHP or CRHR, and do not qualify as historic property or historically significant resources. Because the four newly identified resources are not considered historically significant resources, and additional historical resources were not discovered on the project site or off-site improvement areas, the proposed project would not result in a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

7-2 Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Based on the results of the literature search, local ethnographic settlement and subsistence patterns, and the prehistory and history of the area, the project site area would appear to be moderately sensitive for prehistoric and historic-era cultural resources. Archeological resources have not been previously recorded within the project site area; however, prehistoric archeological sites have been documented less than one mile from the project site area, along the main Dry Creek channel.

Nonetheless, given the project site's history of disturbance through agricultural use beginning in 1947, as well as the grading and construction of adjacent roadways, buildings, and parking areas, the potential for buried archeological deposits to occur in the alluvial sediments underlying the project site is low. In addition, the field survey conducted by Natural Investigations Company did not reveal any evidence of archaeological resources. Natural Investigations Company did not recommend construction monitoring of ground-disturbing activity associated with the proposed project. Thus, the potential for the proposed project to cause a substantial adverse change to the significance of an archaeological resource is low.

Although archeological resources have not been identified in the immediate project vicinity and are not anticipated to occur on the project site due to known occurrences in the region, the possibility exists that previously unknown resources could be discovered within the project site or off-site improvement areas during construction activities. Therefore, construction activities associated with buildout of the proposed project, including off-site improvements, could uncover undocumented archaeological resources. As such, the

proposed project could cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

7-2 *If potential archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered during construction activities, all work shall cease within 100 feet of the find (based on the apparent distribution of cultural resources). Examples of potential cultural materials include midden soil, artifacts, chipped stone, exotic (non-native) rock, or unusual amounts of baked clay, shell, or bone.*

A qualified cultural resources specialist and Native American Representative from the traditionally and culturally affiliated Native American Tribe(s) will assess the significance of the find and make recommendations for further evaluation and treatment as necessary. Culturally appropriate treatment that preserves or restores the cultural character and integrity of a Tribal Cultural Resource may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, construction monitoring of further construction activities by Tribal representatives of the traditionally and culturally affiliated Native American Tribe, and/or returning objects to a location within the project area where they will not be subject to future impacts.

If articulated or disarticulated human remains are discovered during construction activities, the County Coroner and Native American Heritage Commission shall be contacted immediately. Upon determination by the County Coroner that the find is Native American in origin, the Native American Heritage Commission will assign the Most Likely Descendant(s) who will work with the project proponent to define appropriate treatment and disposition of the burials.

Following a review of the find and consultation with appropriate experts, the authority to proceed may be accompanied by the addition of development requirements which provide for protection of the site and/or additional measures necessary to address the unique or sensitive nature of the site. The treatment recommendations made by the cultural resource specialist and the Native American Representative will be documented in the project record. Any recommendations made by these experts that are not implemented, must be documented and explained in the project record. Work in the area(s) of the cultural resource discovery may only proceed after authorization is granted by the Placer County Community Development Resource Agency following coordination with cultural resources experts and tribal representatives as appropriate.

7-3 Disturb any human remains, including those interred outside of dedicated cemeteries. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The project site has been previously disturbed by agricultural use beginning in 1947, grading and construction of adjacent roadways (Vineyard Road and Brady Lane), construction of adjacent buildings, and historic flooding. However, the project site is in a portion of the territory once occupied by the Penutian-speaking Nisenan. While field surveys conducted by Natural Investigations Company did not detect human remains, cultural sites, or artifacts of ceremonial significance within the project site or the off-site improvement areas, the potential for human remains to be discovered during construction cannot be eliminated given the known prehistoric occupation of the project vicinity by Native American tribes. As a result, ground-disturbing activities could disturb human remains, including those interred outside of dedicated cemeteries, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

7-3 *If articulated or disarticulated human remains are encountered on the proposed project site during construction activities, all work within 100 feet of the find must cease, and any necessary steps to ensure the integrity of the immediate area must be taken. The Placer County Coroner shall be immediately notified. If the Coroner determines the remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission (NAHC) within 24 hours. The NAHC shall determine and notify a Most Likely Descendant (MLD). Further actions shall be determined, in part, by the desires of the MLD. The MLD shall be afforded 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendant may request mediation by the NAHC.*

7-4 Have the potential to cause a physical change which would affect unique cultural values, restrict existing religious or sacred uses within the potential impact area, or cause a substantial adverse change in the significance of a Tribal Cultural Resource as defined in Public Resources Code, Section 21074. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As part of AB 52 and SB 18 requirements, the County sent project notification letters with offers to consult to the Ione Band of Miwok Indians, Shingle Springs Band of Miwok Indians, UAIC, Washoe Tribe of Nevada and California, and the Wilton Rancheria on July

24, 2018. The UAIC responded, on August 14, 2018, and requested copies of the project's cultural records searches and surveys, which the County has since provided. In addition, the Shingle Springs Band of Miwok Indians responded on September 20, 2018, that their tribe is unaware of any known tribal cultural resources on the project site. At the request of the Shingle Springs Band of Miwok Indians, the County provided the project's cultural records searches and surveys. Furthermore, as a result of Natural Investigations Company's initial efforts to reach out to local tribes, an on-site field visit was conducted, at the request of the UAIC, by Natural Investigations Company and representatives of the UAIC on March 23, 2018. Following the field visit, the UAIC requested a subsequent site visit once ground-disturbing activities have commenced and that construction workers undergo a cultural awareness training, which has been incorporated into this EIR as Mitigation Measure 7-4(b).

As noted previously, records searches of the NAHC Sacred Lands File failed to indicate the presence of Native American sacred lands or traditional cultural properties within the project site vicinity or the proposed off-site improvement areas. Considering the results of the literature search and the prehistory and history of the area, the project site was determined by Natural Investigations Company and the UAIC to have low a probability for buried prehistoric or historic cultural resources, which could include tribal cultural resources. In addition, as discussed above, the proposed project site does not contain any known resources listed or eligible for listing in the CRHR or NRHP, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k) or determined to be significant pursuant to Public Resources Code Section 5024.1(c).

Based on the above, the project site is not associated with any existing religious or sacred uses that would be restricted by the proposed project. However, tribal cultural resources associated with local tribes could potentially occur in the vicinity of the project site and the proposed off-site improvement areas. Thus, ground-disturbing activities associated with the proposed project could have the potential to cause a physical change which would affect unique cultural values or cause a substantial change in the significance of a Tribal Cultural Resource as defined in Public Resources Code, Section 21074, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

7-4(a) *Implement Mitigation Measures 7-2 and 7-3.*

7-4(b) *Prior to initiation of ground-disturbing activities, a consultant and construction worker cultural resources awareness brochure and training program for all personnel involved in project implementation shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training shall be conducted in coordination with qualified cultural resources specialists and Native American Representatives from culturally affiliated Native American Tribes prior to ground-disturbing or construction activities on the project site. The program shall include relevant information regarding sensitive tribal cultural laws and regulations. The worker cultural resources awareness program*

shall describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential archeological resources or artifacts are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native American and for behavior consistent with Native American Tribal values. A copy of the cultural resources awareness brochure and written verification of completion of the training program shall be submitted to the Placer County Community Development Resource Agency.

7-4(c) *The UAIC shall be notified by the applicant at least seven days prior to the start of ground-disturbing activities in the event that the UAIC would like to provide a Tribal representative to inspect the project site area within the first five days of ground-breaking activity. The representative shall provide information to on-site construction personnel regarding tribal cultural resources. Proof of notification shall be submitted to the Placer County Community Development Resource Agency.*

Cumulative Impacts and Mitigation Measures

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

7-5 Cause a cumulative loss of cultural resources. Based on the analysis below, the cumulative impact is *less than significant*.

Generally, while some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site would not generally be made worse by impacts to a cultural resource at another site due to development of another project. Rather, the resources and the effects upon them are generally independent. A possible exception to the aforementioned general conditions would be where a cultural resource represents the last known example of its kind or is part of larger cultural resources such as a single building along an intact historic Main Street. For such a resource, cumulative impacts, and the contribution of a project to them, may be considered cumulatively significant.

As described throughout this chapter, the project site does not contain known historical resources that would be eligible for inclusion on the NRHP or considered significant pursuant to CEQA. Furthermore, implementation of the project-specific mitigation measures set forth in this EIR (Mitigation Measures 7-2 through 7-4(c)) would ensure that any impacts to previously unknown, subsurface resources that are discovered on the project site during construction activities are reduced to less than significant.

Similar to the proposed project, future development projects within the DCWPCP would be required to implement project-specific mitigation to ensure any potential impacts to identified cultural resources are reduced to a less-than-significant level, where possible. Therefore, given that cultural resource impacts are generally site-specific and each future project within the DCWPCP would be required to mitigate such impacts, any potential impacts associated with cumulative buildout of the DCWPCP area would not combine to result in a significant cumulative impact.

Based on the above, the potential for impacts related to a cumulative loss of cultural resources, to which implementation of the proposed project might contribute, is ***less than significant.***

Mitigation Measure(s)

None required.

8. Geology and Soils

8 GEOLOGY AND SOILS

8.1 INTRODUCTION

The Geology and Soils chapter of the EIR describes the geologic and soil characteristics of the project site and evaluates the extent to which implementation of the proposed project could be affected by unstable earth conditions and various geologic and geomorphic hazards. In addition, the chapter evaluates known mineral resources on the project site, any potential adverse effects of the proposed project on the availability of such resources, and any adverse impacts on paleontological resources.

Information from this chapter is primarily drawn from a Geotechnical Engineering Study prepared by Ace Quality Control (Appendix F),[1] a Mineral Resource Determination prepared by RCH Group,[2] a Cultural and Paleontological Resources Assessment performed by Natural Investigations Company,[3] and a Paleontological Records Search performed by Kenneth L. Finger, Ph.D.[4] In addition, information was sourced from the Placer County General Plan,[5] the Placer County General Plan EIR,[6] and the Dry Creek West Placer Community Plan (DCWPCP).[7]

8.2 EXISTING ENVIRONMENTAL SETTING

Background setting information regarding the geology, soils, seismicity, mineral resources, and paleontological resources associated with the project site and the surrounding region is provided below.

Regional Setting

The project site is located within the boundaries of the DCWPCP in Placer County, California. The DCWPCP area lies within the eastern portion of the Sacramento Valley, which extends from Redding in the north to the Sacramento-San Joaquin Delta region in the south. The Sacramento Valley is bordered by the Coast Ranges to the west and the Sierra Nevada foothills to the east. The following section describes the geology and seismicity of the project region.

The project site is located within California's Great Valley Geomorphic Province, a geologically young, large, flat-lying alluvial plain in the central portion of California. The plain is 40 to 60 miles wide and stretches approximately 450 miles from north-northwest to south-southeast, inland from and parallel to the Pacific Ocean Coast Ranges to the west and the Sierra Nevada to the east. The Great Valley has been filled with hundreds to thousands of feet of eroded sediments, ranging in age from Pleistocene to Holocene. Relatively recent alluvial deposits generally consist of poorly

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1 Ace Quality Control. *Preliminary Geotechnical Engineering Study Brady Residential Subdivision.* July 25, 2017.
2 RCH Group. *Mineral Resource Determination, Brady-Vineyard Project, West Placer County*. May 30, 2018.
3 Natural Investigations Company. *Cultural and Paleontological Resources Inventory and Effects Assessment for the Brady at Vineyard Project.* May 21, 2018.
4 Kenneth L. Finger, Ph.D. *Paleontological Records Search: Brady Vineyard Project, Roseville, Placer County.* February 1, 2018.
5 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
6 Placer County. *Countywide General Plan EIR*. July 1994.
7 Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.

sorted silts, fine sands and clays with less extensive lenses of medium to coarse grained sands and gravel.

Regional Geology

The geology of the DCWPCP area is generally categorized by sedimentary or metasedimentary rocks.[8] Such underlying rock formations are primarily composed of alluvium, an unconsolidated sediment of relatively recent geologic age deposited by flowing water. The three general types of rocks found within the DCWPCP area fall into the following categories:

- Riverbank Formation – Pleistocene deposits of alluvium;
- Turlock Lake Formation – Pleistocene deposits of partially consolidated sand, silt, and gravel derived primarily from Sierran granitic and metamorphic rocks, generally found outside the Dry Creek floodplain; and
- Modesto-Riverbank Formation – Pleistocene deposits of alluvium generally found within the Dry Creek floodplain.

Regional Seismicity

A fault is defined as a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side. A fault zone is a zone of related faults that is commonly braided and subparallel, but may be branching or divergent. Movement within a fault causes an earthquake. When movement occurs along a fault, the energy generated is released as waves that cause ground shaking. Ground shaking intensity varies with the magnitude of the earthquake, the distance from the epicenter, and the type of rock or sediment the seismic waves move through.

The potential risk of fault rupture is based on the concept of recency and recurrence. The more recently a particular fault has ruptured, the more likely the fault would rupture again. The California Geological Survey defines an “active fault” as one that has had surface displacement within the past 11,000 years (Holocene). Potentially active faults are defined as those that have ruptured between 11,000 and 1.6 million years before the present (Quaternary). Faults are generally considered inactive if evidence of displacement is not present during the Quaternary. Per the California Department of Conservation, potentially active faults with Holocene-epoch surface displacement are not known to exist within the project region.

According to the Placer County General Plan, Placer County lies within a seismically active area of the western U.S., but beyond the influence of the highly active faults found along California’s coast. The South Placer area is classified by the State Department of Conservation as a low-severity earthquake zone.[9] The western portion and central portions of the County are generally characterized by low seismicity, while the eastern area of the County in the vicinity of Lake Tahoe has relatively higher seismicity.[10] The areas of Placer County with the largest groundshaking risk are in the vicinity of Stampede Valley and Tahoe faults in the Truckee-Tahoe area.

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8 Placer County. *Dry Creek-West Placer Community Plan* [pgs. 101-102]. Amended May 12, 2009.

9 California Department of Conservation. *Regulatory Maps and Reports (Alquist-Priolo and Seismic Hazard Zones).* Available at: https://maps.conservation.ca.gov/cgs/informationwarehouse/regulatorymaps/. Accessed March 2019.

10 Placer County. *Countywide General Plan EIR* [pg. 9-1]. July 1994.

Project Site Characteristics

The project site consists of approximately 35 acres located at the northwest corner of Vineyard Road and Brady Lane. The project site is currently vacant and adjacent to the west of the City of Roseville city limits. The geologic conditions on the project site are discussed below in further detail, including descriptions of existing site geology, soil conditions, seismicity and ground shaking, potential for earthquake-induced liquefaction, and expansive soils. In addition, this section includes a description of known mineral and paleontological resources within the project area.

Site Geology and Subsurface Soil Conditions

The project site is underlain by Pleistocene alluvial deposits consisting of gravels, sands, silts, and clays of the Turlock Lake Formation. Per the Phase I ESA, soils mapped within the project site include the Ramona and Cometa Series. The Ramona series consists of fine and coarse-grained soils, sands, silts, and clays. Ramona series soils are typically found on terraces and fans at elevations ranging from 250 to 3,500 feet above sea level on nearly level areas to moderately steep slopes. Such soils are formed in alluvium derived primarily from granitic and related rock sources. The Cometa series consists of moderately deep, moderately well or well drained soils that formed in alluvium from granitic rock sources. Such soils are typically clayey, have a high-water table, and are found on gently sloping slightly dissected older stream terraces with slopes of zero to 15 percent.

During exploratory borings conducted on the project site by Ace Quality Control, the soil encountered was mainly medium dense to very dense, brown and brown with red and gray discolorations, moist, silty sand with variable gravel and well graded sand to maximum depths explored of approximately 21.5 feet below existing ground surface. Some lenses of dense, brown, moist, silt was encountered at variable depths and thicknesses in some of the explorations.

Seismicity and Ground Shaking

Fault rupture hazards are important near active faults and tend to reoccur along the surface traces of previous fault movements. The site is not located within an Alquist-Priolo Special Studies Zone and the potential for fault rupture, damage from fault displacement, or fault movement directly below the site is considered to be very low. However, the site is located within an area where shaking from earthquake generated ground motion waves should be considered likely.

Liquefaction

Liquefaction occurs when saturated fine-grained sands and/or silts lose physical strength temporarily during earthquake induced shaking and behave as a liquid due to the loss of point-to-point grain contact and transfer of normal stress to the pore water. Liquefaction potential varies with water level, soil type, material gradation, relative density, and probable intensity and duration of ground shaking. Saturated and loose fine sands/silts were not encountered during site explorations. The California Geologic Survey (CGS) has designated certain areas within California as potential liquefaction hazard zones, which are areas considered at risk of liquefaction-related ground failure during a seismic event based upon mapped surficial deposits and the depth to the areal groundwater table. The project site is not currently mapped for potential liquefaction hazard by the CGS. The Geotechnical Engineering Report concluded that the overall potential for liquefaction within Placer County and, consequently, within the project site, is considered to be very low.

Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume change due to variation in moisture content. Compressible materials consisting of surficial organic material, loose soils, undocumented fills, debris, rubble, rubbish, etc., are considered unsuitable materials for support of proposed structures as such materials can differentially settle. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may cause unacceptable settlement of structures. According to the Geotechnical Engineering Study performed for the proposed project, the granular soils encountered on the project site have relatively low plasticity, and are considered to have very low potential for expansion. Additionally, a Web Soil Survey conducted for the project site indicates that the soils present on the project site have a relatively low shrink-swell potential.[11]

Groundwater

Groundwater was encountered in multiple test borings on the project site at approximate depths of 13 to 21 feet below the estimated ground surface. However, groundwater levels at the site might be higher during the winter and spring months. In addition, the potential exists that shallow groundwater might be encountered in low-lying areas and intermittent swales.

Mineral Resources

Department of Conservation maps were reviewed to examine the potential of a mine or prospect being located on the project site.[12] Maps contained in the *Mineral Land Classification of Placer County, California* do not identify any documented mines or prospects on the project site or in the project vicinity. The DCWPCP does not identify any substantial mineral resources within the project area.

Paleontological Resources

A search of the paleontological records on the University of California Museum of Paleontology (UCMP) database was performed by Natural Investigations Company in order to determine the project's potential to impact significant paleontological resources in the vicinity of the project site.[13] The search indicated 64 fossil localities have been recorded within Placer County. Of the identified fossil localities, only three localities have produced vertebrate fossils. A locality near Rocklin yielded a Pleistocene-age mastodon from the Mehrten Formation, while a locality near Lincoln produced three Tertiary-age vertebrates, a bony fish, a mammal, and a reptile. A cartilaginous fish from the Cretaceous was recovered from the third locality in the Sierras. The remaining localities recorded in the UCMP database have produced plant and invertebrate specimens, mainly from the Middle Eocene Ione and Late Cretaceous Chico formations, as well as plant microfossils from Early Holocene lacustrine deposits west of Lake Tahoe. Additionally, a small outcrop of the Chico Formation, now a residential development near Granite Bay, has produced a diverse array of Late Cretaceous fossils, including invertebrates, plants, and dinosaurs. Petrified wood specimens were also unearthed in the Ione Formation during a recent roadway widening project near Granite Bay. None of the above geologic rock units occur in the project area.

According to the Paleontological Records Search performed on February 1, 2018 by Dr. Kenneth L. Finger, geologic maps indicate the project site is underlain by the Early Pleistocene-age Turlock

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[11] U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey.* Available at: https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed February 13, 2019.

[12] RCH Group. *Mineral Resource Determination*. May 30, 2018.

[13] Natural Investigations Company. *Cultural and Paleontological Resources Inventory and Effects Assessment for the Brady at Vineyard Project, Placer County, California.* May 21, 2018.

Lake Formation (Qts). The Modesto Formation (Qm), which underlies the Dry Creek drainage is located within one half mile of the project site. Additionally, four small outcrops of Middle Pleistocene-age Riverbank Formation (Qr) alluvial sediments were mapped at the southeastern extent of Kasenberg Creek, also located less than one half mile northwest of the project.

All three of the above-mentioned formations have a high paleontological potential. However, records of fossils or unique geologic features have not been recorded within the project area.

8.3 REGULATORY CONTEXT

The following section is a brief summary of the regulatory context under which soils, geology, seismic hazards, mineral resources, and paleontological resources are managed at the federal, State, and local levels.

Federal Regulations

The following are the federal environmental laws and policies relevant soils, geology, seismic hazards, mineral, and paleontological resources.

Federal Earthquake Hazards Reduction Act

Passed by Congress in 1977, the Federal Earthquake Hazards Reduction Act is intended to reduce the risks to life and property from future earthquakes. The Act established the National Earthquake Hazards Reduction Program (NEHRP). The goals of NEHRP are to educate and improve the knowledge base for predicting seismic hazards, improve land use practices and building codes, and to reduce earthquake hazards through improved design and construction techniques.

International Building Code

The Uniform Building Code (UBC) was first published in 1927 by the International Council of Building Officials and is intended to promote public safety and provide standardized requirements for safe construction. The UBC was replaced in 2000 by the new International Building Code (IBC), published by the International Code Council (ICC), which is a merger of the International Council of Building Officials' UBC, Building Officials and Code Administrators International's National Building Code, and the Southern Building Code Congress International's Standard Building Code. The intention of the IBC is to provide more consistent standards for safe construction and eliminate any differences between the three preceding codes. All State building standard codes are based on the federal building codes.

State Regulations

The following are the State environmental laws and policies relevant to soils, geology, seismic hazards, mineral resources, and paleontological resources.

Alquist-Priolo Earthquake Fault Zoning Act

The 1972 Alquist-Priolo Earthquake Fault Zone Act was passed to prevent the new development of buildings and structures for human occupancy on the surface of active faults. The Act is directed at the hazards of surface fault rupture and does not address other forms of earthquake hazards. The locations of active faults are established into fault zones by the Alquist-Priolo Zone Act. Local agencies regulate any new developments within the appropriate zones in their jurisdiction.

The Alquist-Priolo Zone Act regulates development near active faults so as to mitigate the hazard of surface fault rupture. The Alquist-Priolo Zone Act requires that the State Geologist (Chief of the California Department of Mines and Geology [CDMG]) delineate "special study zones" along known active faults in California. Cities and counties affected by the special study zones must regulate certain development projects within the special study zones. The Alquist-Priolo Zone Act prohibits the development of structures for human occupancy across the traces of active faults. According to the AP Zone Act, active faults have experienced surface displacement during the last 11,000 years. Potentially active faults are those that show evidence of surface displacement during the last 1.6 million years. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity sometimes is difficult to obtain and may not exist.

Seismic Hazards Mapping Act

The California Seismic Hazards Mapping Act of 1990 (California Public Resources Code Section 1690-2699.6) addresses non-surface rupture earthquake hazards, including liquefaction, induced landslides, and subsidence. A mapping program is also established by this Act, which identifies areas within California that have the potential to be affected by such non-surface rupture hazards. The Seismic Hazards Mapping Act specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

California Building Standards Code

The State of California regulates development within the State through a variety of tools that reduce or mitigate potential hazards from earthquakes or other geologic hazards. The 2016 California Building Standards Code (CBC) (California Code of Regulations, Title 24) governs the design and construction of all building occupancies and associated facilities and equipment throughout California. In addition, the CBC governs development in potentially seismically active areas and contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The California building standards include building standards in the national building code, building standards adapted from national codes to meet California conditions, and building standards adopted to address particular California concerns. It should be noted that the CBC is updated on a triennial cycle. The 2019 CBC, which contains new code changes, will become effective on January 1, 2020.

Local Regulations

Relevant goals and policies from the Placer County General Plan and various other local guidelines and regulations related to soils, geology, seismic hazards, mineral resources, and paleontological resources.

Placer County General Plan

The following goals and policies from the Placer County General Plan are applicable to the proposed project:

Goal 5.D To identify, protect, and enhance Placer County's important historical, archaeological, paleontological, and cultural sites and their contributing environment.

Policy 5.D.2 The County shall solicit the cooperation of the owners of cultural and paleontological resources, encourage those owners to treat these resources as assets rather than liabilities, and encourage the support of the general public for the preservation and enhancement of these resources.

Policy 5.D.4 The County shall coordinate with the cities and municipal advisory councils in the County to promote the preservation and maintenance of Placer County's paleontological and archaeological resources.

Policy 5.D.6 The County shall require that discretionary development projects identify and protect from damage, destruction, and abuse, important historical, archaeological, paleontological, and cultural sites and their contributing environment. Such assessments shall be incorporated into a County-wide cultural resource data base, to be maintained by the Division of Museums.

Policy 5.D.7 The County shall require that discretionary development projects are designed to avoid potential impacts to significant paleontological or cultural resources whenever possible. Unavoidable impacts, whenever possible, shall be reduced to a less than significant level and/or shall be mitigated by extracting maximum recoverable data. Determinations of impacts, significance, and mitigation shall be made by qualified archaeological (in consultation with recognized local Native American groups), historical, or paleontological consultants, depending on the type of resource in question.

Goal 1.J To encourage commercial mining operations within areas designated for such extraction, where environmental, aesthetic, and adjacent land use compatibility impacts can be adequately mitigated.

Policy 1.J.4 The County shall discourage the development of incompatible land uses in areas that have been identified as having potentially significant mineral resources.

Policy 1.K.4 The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines:

a. Limit cuts and fills;
b. Limit grading to the smallest practical area of land;
c. Limit land exposure to the shortest practical amount of time;

d. Replant graded areas to ensure establishment of plant cover before the next rainy season; and
e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development.

Goal 8.A To minimize the loss of life, injury, and property damage due to seismic and geological hazards.

Policy 8.A.2 The County shall require submission of a preliminary soils report, prepared by a California registered civil engineer and based upon adequate test borings, for every major subdivision and for each individual lot where critically expansive soils have been identified or are expected to exist.

Policy 8.A.3 The County shall prohibit the placement of habitable structures or individual sewage disposal systems on or in critically expansive soils unless suitable mitigation measures are incorporated to prevent the potential risks of these conditions.

Dry Creek-West Placer Community Plan

The following policy from the Environmental Resources Management Element of the DCWPCP is applicable to the proposed project.

Policy 23 Require the application of measures which mitigate soil erosion and air and water pollution from earth-disturbing activities related to land development.

Placer County Code

Articles 15.01 and 15.48 of the Placer County Code are applicable to the proposed project and are summarized below.

California Building Codes

Article 15.01, California Building Codes, of the Placer County Code includes definitions, standards, and enforcement guidelines to ensure all new development comply with the latest version of the CBC. Section 15.04.121 outlines the violations and penalties for any person who violates or fails to comply with any of the provisions in Article 15.01 of the Code.

Grading, Erosion and Sediment Control Ordinance

Article 15.48, Grading, Erosion and Sediment Control, of the Placer County Code, establishes regulations to limit the pollution of watercourses with hazardous materials, nutrients, sediments, and/or other earthen materials on or caused by surface runoff. Per Section 15.48.580, all drainage facilities must be designed and engineered consistent with the West Placer Storm Water Quality Design Manual. Section 15.48.630 establishes erosion and sediment controls for grading operations, including, but not limited to, use of stabilization methods to control erosion, preservation of natural features, limiting of runoff discharged from the site, and limiting the transport of dust off the project site or into any drainage course or body of water.

8.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to geology, soils, mineral resources, and paleontological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

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

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault;
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction;
    - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Result in significant disruptions, displacements, compaction or overcrowding of the soil;
- Result in substantial change in topography or ground surface relief features;
- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; and/or
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Method of Analysis

The analysis for the proposed project's geology, soils, and mineral impacts is based primarily on the Geotechnical Engineering Study prepared by Ace Quality Control. The analysis for the proposed project's impact to paleontological resources is based primarily on the Cultural and Paleontological Resources Assessment prepared for the proposed project. In addition, information from the California Department of Conservation, United States Department of Agriculture, the Placer County General Plan, and associated EIR were used for analysis.

Geotechnical Engineering Study Analysis

The Geotechnical Engineering Study relied on a number of analytical tasks. Field exploration included a general geotechnical engineering reconnaissance within the study area, as well as the excavation of subsurface explorations. During explorations, nine samples were taken at 21.5 inches below surface elevation.

The explorations and the soil sampling/logging were performed by a Staff Engineer under the direct supervision of a Geotechnical Engineer. The borings were advanced with a four-inch outer-diameter continuous flight helical solid stem auger powered by a CME 45 truck-mounted drill rig. Relatively undisturbed soil samples were recovered from the borings at selected intervals by a 1.4-inch inner-diameter "standard penetration" sampler advanced with an automatic hammer driving a 140-pound hammer freely falling 30 inches (standard 350-foot/pound striking force).

Samples of the subsurface soil deposits were obtained from the test borings for use in laboratory testing to determine the engineering properties and geotechnical design parameters to be used for future site improvements. The samples were tagged for identification, sealed to reduce moisture loss, and taken to the laboratory for further examination, testing, and classification. A bulk soil sample was recovered directly from excavation cuttings of anticipated pavement subgrade soil and placed in a plastic sample bag. Soil samples were then transported to ACE's laboratory for further testing. Upon completion of drilling, the test borings were backfilled from final test boring depth up to original ground surface with excavated soils.

Cultural and Paleontological Resources Assessment Analysis

The Cultural and Paleontological Resources Assessment relied on historical maps and aerial photographs, patent records, and paleontological records in order to conduct a search of previously recorded paleontological resources in the project area. In addition, an intensive-level pedestrian survey within the project site was conducted by a qualified paleontologist on February 1, 2018. Survey transects were spaced at intervals between one and 15 meters. The entire project site was covered by the survey and carefully examined for the presence of cultural resources and geologic outcrops that may contain paleontological resources. The survey transects followed a north-south pattern within the project site.

All visible ground surface within the project site was carefully examined for paleontological resources, cultural material, soil discoloration, soil depressions, and features indicative of the former presence of structures or buildings. A digital camera was used to take photographs of the project parcel, showing ground surface visibility and items of interest.

Project-Specific Impacts and Mitigation Measures

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

8-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and landslides. Based on the analysis below, the impact is *less than significant*.

According to the Placer County General Plan, Placer County lies within a seismically active area of the western United States, but beyond the influence of the highly active faults found along California's coast. The western portion of the County, in which the proposed project is located, is generally characterized by low seismicity, and is not in an

area at risk for severe ground shaking associated with earthquakes.[14] As discussed above, the project site is not underlain by any active faults and is not located within an Alquist-Priolo Fault Study Zone. While lower-intensity earthquakes could potentially occur at the site, the design of project structures would be required to adhere to the provisions of the 2016 CBC. The 2016 CBC contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. In addition, the Geotechnical Engineering Study determined that the overall potential for liquefaction at the site is very low if a seismic event should occur.

Furthermore, because the project site does not contain any steep slopes and is not located at or near any active or potentially active faults, the risk of landslide, liquefaction, and/or ground failure on the site would not be substantial. Therefore, the proposed project would not expose people or structures to the risk of loss, injury, or death involving rupture of an earthquake fault, strong ground shaking, ground failure, liquefaction, or landslides, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

8-2 Result in substantial soil erosion or the loss of topsoil. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Erosion refers to the removal of soil from exposed bedrock surfaces by wind or water. Although naturally occurring, erosion is often accelerated by human activities that disturb soil and vegetation. The soils present on the project site are considered moderately susceptible to erosion where drainage concentrations occur. Buildout of the proposed project would require grading, excavation, and other construction-related activities, which, during the early stages of construction, could cause topsoil to be exposed, potentially resulting in wind erosion or an accelerated rate of erosion during storm events.

The topography of the project site is relatively level, and upon development of the site with buildings and structures, the amount of exposed soil that may be lost due to wind or stormwater runoff would be minimized.

Improvement Plans provided to the County prior to authorization of construction would conform to provisions of the County Grading Ordinance (Article 15.48 of the Placer County Code) and the Stormwater Quality Ordinance (Article 8.38 of the Placer County Code) that are in effect at the time of submittal. The preparation of and compliance with a stormwater pollution prevention plan (SWPPP) would be part of the projects' National Pollutant Discharge Elimination System (NPDES) construction stormwater quality permit, issued by the Central Valley Regional Water Quality Control Board (CVRWQCB). Before Improvement Plan approval, the Placer County ESD would require evidence of the State-issued Waste Discharge Identification Number or filing of the Notice of Intent and fees. The SWPPP would include strategies to manage stormwater from the construction sites and treat runoff before being discharged from the site. The site-specific SWPPP developed for the proposed project would have protocols to be followed and monitored

[14] Placer County. *Countywide General Plan EIR* [pg. 9-1]. July 1994.

during construction, including effective response actions if necessary. The SWPPP is considered a "living document" that could be modified as construction activities progress.

Although topsoil exposure would be temporary during early construction activities and would cease once development of buildings and structures occurs, after grading and leveling and prior to overlaying the ground surface with structures, the potential exists for erosion to occur. Therefore, short-term, construction related impacts associated with soil erosion and the loss of topsoil would be considered ***significant***.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

8-2(a) *The Improvement Plans shall show water quality treatment facilities/Best Management Practices (BMPs) designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development/ Redevelopment, and for Industrial and Commercial (or other similar source as approved by the Engineering and Surveying Division (ESD).*

Storm drainage from on- and off-site impervious surfaces (including roads) shall be collected and routed through specially designed catch basins, vegetated swales, vaults, infiltration basins, water quality basins, filters, etc. for entrapment of sediment, debris and oils/greases or other identified pollutants, as approved by the ESD. BMPs shall be designed in accordance with the West Placer Storm Water Quality Design Manual for sizing of permanent post-construction Best Management Practices for stormwater quality protection. No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

All permanent BMPs shall be maintained as required to ensure effectiveness. The applicant shall provide for the establishment of vegetation, where specified, by means of proper irrigation. Proof of on-going maintenance, such as contractual evidence, shall be provided to ESD upon request. The project owners/permittees shall provide maintenance of these facilities and annually report a certification of completed maintenance to the County DPW Stormwater Coordinator, unless, and until, a County Service Area is created and said facilities are accepted by the County for maintenance. Prior to Improvement Plan approval or Final Subdivision Map recordation, easements shall be created and offered for dedication to the County for maintenance and access to these facilities in anticipation of possible County maintenance.

8-2(b) *Prior to construction commencing, the applicant shall provide evidence to the ESD of a WDID number generated from the State Regional Water Quality Control Board's Stormwater Multiple Application & Reports Tracking System (SMARTS). This serves as the Regional Water Quality*

Control Board approval or permit under the National Pollutant Discharge Elimination System (NPDES) construction stormwater quality permit.

8-2(c) *The applicant shall prepare and submit Improvement Plans, specifications and cost estimates (per the requirements of Section II of the Land Development Manual [LDM] that are in effect at the time of submittal) to the ESD for review and approval of each project phase. The plans shall show all physical improvements as required by the conditions for the project as well as pertinent topographical features both on and off site. All existing and proposed utilities and easements, on site and adjacent to the project, which may be affected by planned construction, shall be shown on the plans. All landscaping and irrigation facilities within the public right-of-way (or public easements), or landscaping within sight distance areas at intersections, shall be included in the Improvement Plans. The applicant shall pay plan check and inspection fees and, if applicable, Placer County Fire Department improvement plan review and inspection fees, with the 1st Improvement Plan submittal. (NOTE: Prior to plan approval, all applicable recording and reproduction costs shall be paid). The cost of the above-noted landscape and irrigation facilities shall be included in the estimates used to determine these fees. It is the applicant's responsibility to obtain all required agency signatures on the plans and to secure department approvals. If the Design/Site Review process and/or Development Review Committee (DRC) review is required as a condition of approval for the project, said review process shall be completed prior to submittal of Improvement Plans. Record drawings shall be prepared and signed by a California Registered Civil Engineer at the applicant's expense and shall be submitted to the ESD in both hard copy and electronic versions in a format to be approved by the ESD prior to acceptance by the County of site improvements.*

Conceptual landscape plans submitted prior to project approval may require modification during the Improvement Plan process to resolve issues of drainage and traffic safety.

Any Building Permits associated with this project shall not be issued until, at a minimum, the Improvement Plans are approved by the ESD.

8-2(d) *The Improvement Plans shall show all proposed grading, drainage improvements, vegetation and tree removal and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading, clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee (DRC). All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and the ESD concurs with said recommendation.*

The applicant shall revegetate all disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans. It is the applicant's responsibility to ensure proper installation and maintenance of erosion control/winterization before, during, and after project construction. Soil stockpiling or borrow areas, shall have proper erosion control measures applied for the duration of the construction as specified in the Improvement Plans. Provide for erosion control where roadside drainage is off of the pavement, to the satisfaction of the ESD.

The applicant shall submit to the ESD a letter of credit or cash deposit in the amount of 110 percent of an approved engineer's estimate for winterization and permanent erosion control work prior to Improvement Plan approval to guarantee protection against erosion and improper grading practices. One year after the County's acceptance of improvements as complete, if there are no erosion or runoff issues to be corrected, unused portions of said deposit shall be refunded to the project applicant or authorized agent.

If, at any time during construction, a field review by County personnel indicates a significant deviation from the proposed grading shown on the Improvement Plans, specifically with regard to slope heights, slope ratios, erosion control, winterization, tree disturbance, and/or pad elevations and configurations, the plans shall be reviewed by the DRC/ESD for a determination of substantial conformance to the project approvals prior to any further work proceeding. Failure of the DRC/ESD to make a determination of substantial conformance may serve as grounds for the revocation/modification of the project approval by the appropriate hearing body.

8-3 Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Issues associated with unstable geologic units and/or soils, including landslide, lateral spreading, subsidence, liquefaction, and collapse are discussed below.

Expansive Soils

According to the Geotechnical Engineering Study, the soil encountered in the exploratory borings were mainly medium dense to very dense, moist, silty sand with variable gravel. Loose, wet soils were not found in any of the borings. Based on the findings by the Geotechnical Engineering Study, the granular soils on the project site have relatively low plasticity and, thus, are considered to have very low potential for expansion.

Landslide

A landslide is defined as the movement of a mass of rock, debris, or earth down a slope. Almost every landslide has multiple causes. Slope movement occurs when forces acting down-slope exceed the strength of the earth materials that compose the slope. Landslides in California occur mainly due to intense rainfall or are triggered by earthquakes. Based on information available on the CGS website, the project site is not currently within a State of California Seismic Hazard Zone for seismically induced land sliding.[15] In addition, the project area is relatively gently sloping and the slope on the north end of the property does not have any indications of historic slumping. The natural relatively shallow slopes present within the site area are stable under the conditions observed.

Lateral Spreading

Lateral spreading is associated with terrain near free faces such as excavations, channels, or open bodies of water. The project site is relatively level with gentle undulation throughout the property. The site has maximum changes in elevation of approximately 15 feet. The Geotechnical Engineering Study concluded that the soil materials at the site would not create any excavation difficulties, nor would the relatively shallow slopes present within the project site create any slope instability. Given that the proposed development area does not contain any steep slopes or free faces, the proposed project would not be subject to substantial risks related to lateral spreading.

Liquefaction

Liquefaction occurs when saturated fine-grained sand and/or silts lose their physical strength temporarily during earthquake induced shaking and behave as a liquid. The CGS has designated certain areas within California as potential liquefaction hazard zones. The areas considered at risk of liquefaction-related ground failure are based upon mapped surficial deposits and depth to the areal groundwater table. The project site is not currently mapped for potential liquefaction hazard by the CGS. Additionally, saturated and loose, fine sands were not encountered in the exploratory borings conducted as part of the Geotechnical Engineering Study. Thus, the Geotechnical Engineering Study determined that the overall potential for liquefaction at the site is very low.

Collapse

The project site is located on relatively flat ground with a slope of two to nine percent. As discussed above, the design of the project structures would be required to adhere to the provisions of the most recent version of the CBC in effect at the time of building permit issuance. Additionally, the development of the project would follow Article 15.04 of the Placer County Municipal Code. Structures built according to the seismic design provisions of current building codes would be able to resist major earthquakes without collapse, but with some structural, as well as non-structural damage. Given the project's adherence to the CBC requirements, the proposed project would not be subject to substantial risks associated with building collapse.

Conclusion

From a geotechnical standpoint, the project site is preliminarily considered suitable for the proposed construction. Based on the above, the proposed project would not likely be

[15] California Department of Conservation. *CGS Information Warehouse: Landslides*. Available at: http://maps.conservation.ca.gov/cgs/informationwarehouse/. Accessed February 19, 2018.

subject to issues associated with lateral spreading, subsidence, liquefaction, collapse, or expansive soils. However, implementation of the recommendations included in the Geotechnical Engineering Report would be required in order to ensure adequate support of the proposed improvements. Such recommendations include, but are not limited to, overexcavation and recompaction of existing native soils and provision of appropriate drainage at all slope faces. Because a final geotechnical engineering report has not yet been prepared, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

8-3 *The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for Engineering and Surveying Division (ESD) review and approval. The report shall address and make recommendations on the following:*

A. Road, pavement, and parking area design;
B. Structural foundations, including retaining wall design (if applicable);
C. Grading practices;
D. Erosion/winterization;
E. Special problems discovered on-site, (i.e., groundwater, expansive/unstable soils, potential for smectite clays etc.); and
F. Slope stability.

Once approved by the ESD, two copies of the final report shall be provided to the ESD and one copy to the Building Services Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.

If the geotechnical engineering report indicates the presence of critically expansive or other soil problems that, if not corrected, could lead to structural defects, a certification of completion of the requirements of the soils report shall be required for subdivisions, prior to issuance of Building Permits. This certification may be completed on a lot- by-lot basis or on a Tract basis. This shall be so noted on the Improvement Plans, in the Development Notebook (if required), in the Conditions, Covenants and Restrictions (CC&Rs), and on the Informational Sheet filed with the Final Subdivision Map(s).

8-4 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

A paleontological record search for the proposed project was performed as part of the Cultural and Paleontological Resources Assessment by the Natural Investigations Company, as well as by Kenneth L. Finger as part of a paleontological records search, in order to determine the presence of paleontological resources or unique geologic features on the project site. Geologic maps indicate the project is underlain by the Early Pleistocene-age Turlock Lake Formation. The alluvial sediments comprising the Turlock Lake Formation originated from the Sierra Nevada and are deeply weathered and dissected. Results of the search determined that one vertebrate locality, located approximately four miles northeast of the project site, has been discovered. In Placer County, fossil fish, plant fragments, petrified wood, and ichnofossils have been found in the Turlock Lake Formation and the geologic formation is known to have a high paleontological potential. Paleontological resources have not been discovered on or in the vicinity of the project site. Thus, implementation of the proposed project would be considered to have a low potential to uncover or damage fossils or cause significant impacts to any resource that currently qualifies as a significant paleontological resource.

Additionally, the field surveys of the project site included inspection for geologic outcrops that may contain paleontological resources, and none were observed.

Although the project site does not contain any known paleontological resources or unique geologic features, due to the potential for paleontological resources to be found in the Turlock Lake Formation, the potential exists that a unique paleontological resource or site could be unearthed during project construction activities. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

8-4 *Should paleontological resources be discovered during ground disturbing activities, work shall be halted in the area within 50 feet of the find. The applicant shall notify the Placer County Community Development Resources Agency and retain a qualified paleontologist to inspect the discovery. If deemed significant under criteria established by the Society for Vertebrate Paleontology with respect to authenticity, completeness, preservation, and identification, the resource(s) shall then be salvaged and deposited in an accredited and permanent scientific institution (e.g., University of California Museum of Paleontology [UCMP] or Sierra College), where the discovery would be properly curated and preserved for the benefit of current and future generations. The language of this mitigation measure shall be included on any future grading plans, utility plans, and improvement plans approved by the Placer County Engineering and Surveying Division for the proposed project, where excavation work*

would be required. Construction may continue in areas outside of the buffer zone.

8-5 Result in significant disruptions, displacements, compaction or overcrowding of the soil, or substantial change in topography or ground surface relief features. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The most unique topographic feature of the site is the riparian corridor within the western portion of the project site. Aside from the riparian corridor, the topography of the site consists primarily of gently rolling terrain. The proposed project would include removal of existing vegetation within the proposed development area, grading for building pads, roads, and other associated project improvements. However, as discussed in Chapter 3, Project Description, the riparian corridor and the immediate surrounding area would be retained, and protected with a deed restriction, as open space.

Nonetheless, the proposed project would include site preparation, grading, paving, utility placement, and various other construction activities which would disrupt on-site soils. As such, soils on the project site would be reworked as necessary to support the development, potentially resulting in disruptions, displacements, compaction, or overcrowding of the soils. The proposed project would include modifications to the project site that would alter the existing topography and ground surface relief features. Thus, the proposed project could result in significant disruptions, displacements, compaction or overcrowding of on-site soils, and/or substantial change in topography or ground surface relief features, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

8-5 Implement Mitigation Measures 8-2(c), 8-2(d), and 8-3.

8-6 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Based on the analysis below, the impact is *less than significant*.

According to the Mineral Resource Determination performed by RCH Group, as well as the Department of Conservation's *Mineral Land Classification of Placer County*, documented mines or prospects do not exist on the project site or in the project vicinity.[16] Neither the Placer County General Plan nor the DCWPCP identify any substantial mineral resources within the project vicinity. Per the Phase I Environmental Site Assessment prepared for the proposed project, the project site has not been formerly used for mineral

[16] California Department of Conservation, Division of Mines and Geology. *Mineral Land Classification of Placer County, California*. 1995.

resource extraction. Furthermore, the project site is not designated or zoned for any mineral resources. Therefore, development of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

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

8-7 Cumulative increase in the potential for geological related impacts and hazards. Based on the analysis below, the cumulative impact is *less than significant*.

Impacts to geology, soils, seismicity, mineral resources, and paleontological resources related to implementation of the proposed project are analyzed throughout this chapter. As discussed above, existing geological and soil conditions on the site would be adequate to support development of the proposed project. In addition, all recommendations in the Geotechnical Engineering Study would be incorporated to mitigate any potential impacts. While some geologic characteristics may affect regional construction practices, impacts and mitigation measures are primarily site-specific and project-specific. For example, impacts resulting from development on expansive soils at one project site are not worsened by impacts from development on expansive soils or undocumented fill at another project site. Rather, the soil conditions, and the implications of such conditions for each project, are independent.

As such, the potential for cumulative impacts related to geology, soils, seismicity and mineral resources, to which implementation of the proposed project might contribute, is ***less than significant***.

Mitigation Measure(s)
None required.

9. Hazards and Hazardous Materials

9. HAZARDS AND HAZARDOUS MATERIALS

9.1 INTRODUCTION

The Hazards and Hazardous Materials chapter of the EIR describes existing and potentially occurring hazards and hazardous materials within the proposed project area. The chapter includes a discussion of potential impacts posed by such hazards to the environment. In addition, surrounding land uses are discussed in order to provide an assessment of whether the project could impact surrounding land uses. The question of whether surrounding land uses could impact the project's future residents is not a question requiring analysis under CEQA.[1]

The Hazards and Hazardous Materials chapter is primarily based on information drawn from a Phase I Environmental Site Assessment[2] (ESA) (see Appendix G) and a limited Phase II ESA[3] (see Appendix H) prepared for the project site by ACE Quality Control (ACE), as well as the Placer County General Plan[4] and associated EIR,[5] and the Dry Creek-West Placer Community Plan (DCWPCP).[6]

9.2 EXISTING ENVIRONMENTAL SETTING

The following section includes a definition of hazardous materials and descriptions of the existing conditions associated with the project site related to hazards and hazardous materials, including wildfire hazards.

Hazardous Materials

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if the material appears on a list of hazardous materials prepared by a federal, State, or local regulatory agency or if the material has characteristics defined as hazardous by such an agency. The California Environmental Protection Agency (Cal-EPA), California Department of Toxic Substance Control (DTSC) defines hazardous waste, as found in the California Health and Safety Code Section 25141(b), as follows:

> […] its quantity, concentration, or physical, chemical, or infectious characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential

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1 Per the *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (*CBIA*), the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (*Id.* at pp. 377-378.).

2 ACE Quality Control. *Phase I Environmental Site Assessment Brady-Vineyard 36-acre Residential Subdivision NWC Brady Lane and Vineyard Road, Roseville, California.* June 23, 2017.

3 ACE Quality Control. *Limited Phase II Environmental Site Assessment Proposed 35-acre Dry Creek Community Plan Residential Subdivision Brady Lane and Vineyard Road, Roseville, California.* April 2, 2019.

4 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).

5 Placer County. *Countywide General Plan EIR*. July 1994.

6 Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.

> hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

The following discussion focuses on the potential Recognized Environmental Conditions (RECs) associated with the project site. A REC indicates the presence or likely presence of any hazardous substances in, on, or at a property due to any release into the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.[7]

Additionally, the following includes a discussion of historical RECs associated with the project site. A historical REC indicates a past release of hazardous substances or petroleum products that has occurred in connection with a property and has been addressed to the satisfaction of the applicable regulatory authority. A historical REC does not have any property use restrictions, and, thus, does not have any use limitations in respect to future activities on the property.

Project Area Conditions

Currently, the project site consists primarily of ruderal grasses and is absent of structures or other indications of prior development. The site appears to have supported row crops and other agricultural uses prior to the 1940's, as indicated in aerial photos dating back to 1947, but does not appear to have supported any active farming since that time.

The site is located within California's Great Valley Geomorphic Province, a geologically young, large, flat-lying alluvial plain in the central portion of California. The native earth materials underlying the project site are Pleistocene alluvial deposits consisting of gravels, sands, silts, and clay of the Turlock Lake Formation. Surface water on the project site flows southwesterly to westerly in seasonal swales to an unnamed tributary that flows southward to Dry Creek in the western portion of the site. Existing oak trees line both sides of the tributary, and scattered almond trees are located along the drainage ditch. Groundwater in the general Roseville area is between 15 to 25 feet below the ground surface and flows westerly to southwesterly.

The 30-acre parcel immediately west of the project site is vacant and zoned F-DR, similar to the western portion of the project site. The nearest home to the west of the site is approximately 1,000 feet from the site boundary. Immediately north of the project site is a church (The Father's House) fronting Brady Lane. Other properties immediately to the north of the project site are generally vacant, with the exception of one single-family home located approximately 360 feet north of the site on a parcel north of the church. Such properties have the same zoning designation, RS-AG-B-20, as the project site, as do the four properties located on the south side of Vineyard Road, east of the tributary, where the closest house is situated approximately 80 feet from the southern boundary of the project site. Neighboring uses to the east of the site include a single-family residential subdivision located across Brady Lane, within the City of Roseville limits.

A two-acre rectangular-shaped parcel fronting Vineyard Road extends approximately 700 feet north (roughly halfway) into the project site. Currently, the parcel is developed with a house and associated outbuilding, located approximately 25 feet from the parcel's northern property line and

[7] ASTM International. *ASTM E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* 2013.

15 feet from its eastern property line. The existing on-site tributary flows through a culvert crossing under Vineyard Road near the south/center of the two-acre parcel.

The potential hazards associated with the project area identified in the Phase I and Limited Phase II ESAs prepared for the proposed project site by ACE are described in further detail below.

On-Site Recognized Environmental Conditions

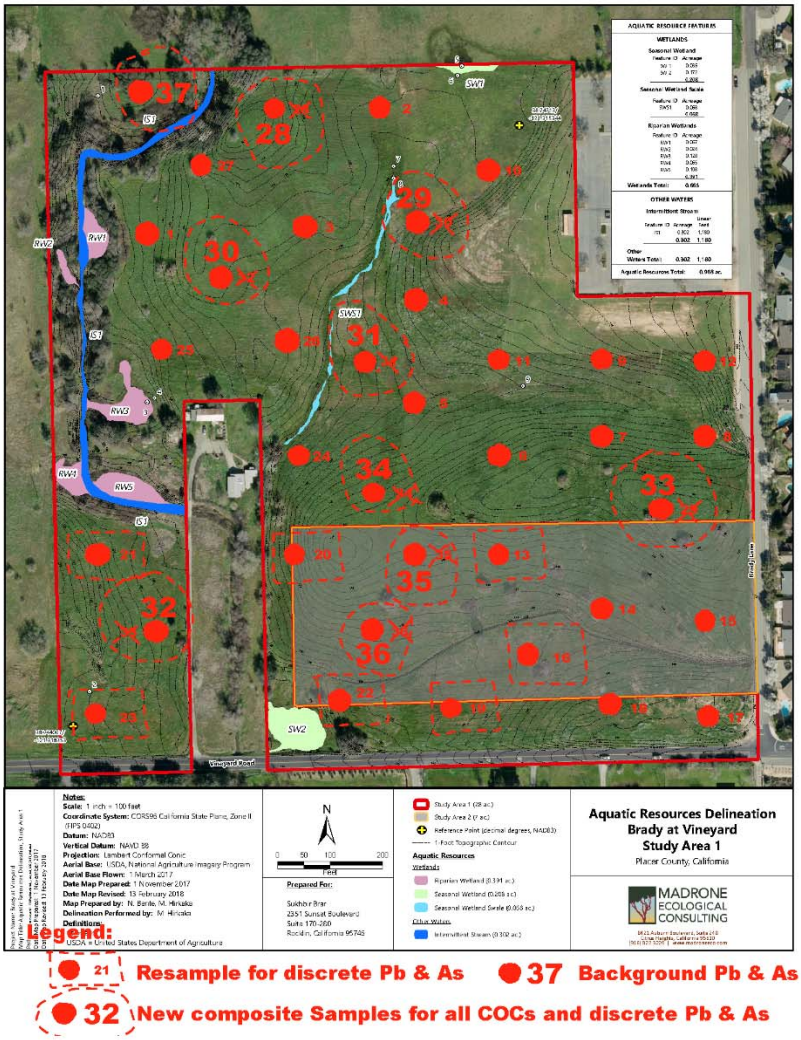
Based on the Phase I ESA prepared for the project site, ACE determined that the project site does not contain any readily discernable RECs, including aboveground storage tanks (ASTs), underground storage tanks (USTs), septic systems/cesspools, or polychlorinated biphenyl (PCB) containing equipment. However, because the project site was previously used for agricultural purposes, the presence of pesticide or herbicide contaminants in surficial soils is not known. Implementation of the proposed project would result in mass grading of the project site prior to being overlain with residential structures, pavement, and landscaping elements. Because the Phase I ESA indicated that the presence of pesticide or herbicide contaminates in surficial soils was unknown, a Phase II ESA was prepared in order to determine whether soils containing pesticide or herbicide contaminants are present within the project site.

The Limited Phase II ESA performed by ACE consisted of soil sampling at 36 locations throughout the project site that were determined to have previously been used for agricultural purposes based on historical aerial images of the site and one background sample location (Sample 37) (see Figure 9-1). The 36 soil samples taken from the project site were analyzed for Contaminants of Potential Concern (COPCs) using Environmental Protection Agency (EPA) methods 8081A and 8151A (or equivalent). In addition, the soil samples were analyzed for the presence of lead and arsenic using EPA method 6010.

The results of the soil samples did not indicate the presence of any pesticide or herbicide analytes at or above the reporting detection limits. In addition, the soil samples tested negative for arsenic; however, lead was detected in about one-quarter of the samples obtained from the southern portion of the site. Further testing of soils was conducted and the results were compared to the California Human Health Screening Levels (CHHSLs), which set forth a lead content threshold of 80mg/kg for residential land uses. The results of the testing indicated that lead was only detected at a relatively high level of 60 mg/kg in one sample (Sample 37), taken from the northwestern portion of the project site which was occupied by a homeless camp, and was not representative of the background lead content on the project site. The remainder of the soil samples contained lead in quantities between 6.0 mg/kg and 9.4 mg/kg, below the applicable CHHSL threshold of 80 mg/kg. Based on the results of the soil testing, ACE determined that further assessment and/or mitigation of the project site for potential contaminants which may have occurred as a result of historical agricultural use is not required. The Placer County Health and Human Services Department has concurred with the determination that further assessment of on-site soils is not required.[8]

[8] Bourgault, West, Technical Specialist, County of Placer Health and Human Services Department. *Subject: Brady Vineyard Subdivision (PLN18-00234), Roseville, CA*. April 9, 2019.

Figure 9-1
Phase II ESA Soil Sampling Locations



NOTE:
Locations of soil samples (shown as ●) are approximate. Source for base map noted above. Samples numbered 1 to 27 obtained 12-10-2018 and 28 to 37 on 3-13-2019, as well as resampled locations 13, 16, and 19 to 23.

Source: ACE Quality Control, Limited Phase II Environmental Site Assessment, 2019.

Nearby RECs

Sites located near the project site that are listed in federal, State, and/or local databases of hazardous materials sites and identified in the Phase I are described in further detail below.

Shell Branded Service Station

The Shell Branded Service Station, located approximately 0.4-mile northeast of the project site at 3998 Foothills Boulevard, was identified as a leaking underground storage tank (LUST) case with a pollution Characterization Status. According to GeoTracker, the case was opened following an unauthorized release of solvent or other non-petroleum hydrocarbons from an underground storage tank (UST) system at the Shell Station site. Corrective action, as directed by the Central Valley Regional Water Quality Control Board (CVRWQCB), and consisting of preliminary site investigation, planning and implementation of remedial action, verification monitoring, or a combination thereof, was implemented for the site from June 1, 2005 to September 21, 2010. As of September 22, 2010, the cleanup status is listed as completed and the case has been closed.

Roseville Rail Yard

The Roseville Rail Yard, operated by Union Pacific Railroad Company, is located approximately one-mile southeast of the project site at 9451 Atkinson Street, and includes four underground storage tanks containing regular unleaded fuel, leaded fuel, diesel fuel, and waste oil. The facility was used to fuel and maintain diesel locomotives and, in the 1960's, on-site fuel disposal activities began. The facility was listed on the federal Corrective Actions (CORRACTS) TSD Facilities list as having an active cleanup status. Potential contaminants of concern on the Roseville Rail Yard site include diesel fuel, volatile organics, and metals such as lead. Per the Phase I ESA, the Roseville Rail Yard has a lower groundwater gradient than the project site and was not considered to be a potential REC.

1940 Vineyard Road

1940 Vineyard Road, located within the two-acre rectangular-shaped parcel fronting Vineyard Road and extending into the project site, was recognized as a potential historic gas station/filling station/service station per a Vapor Encroachment Screen (VES) accessed through Environmental Data Resources (EDR) records. References to the property are not reported in any other reference database and visual signs of fuel tanks or spilled fuel were not evident during the site visit conducted by ACE. As such, 1940 Vineyard Road is not considered a potential REC with regard to the project site.

Off-Site Improvement Areas

Off-site improvement areas associated with the proposed project would include widening improvements to Brady Lane and Vineyard Road along the project frontages, as well as extension of a new sewer line within Vineyard Road east to Foothills Boulevard. All improvements would occur within the paved right-of-way.

Nearest Airports

The closest public use airport to the project site is the McClellan Airport, which is located approximately 7.25 miles southwest of the site. The project site is not located in the vicinity of any private airstrips. McClellan Airport was formerly known as the McClellan Air Force Base, and was operated for more than 60 years as an industrial military facility; however, the airport is currently part of a master-planned community consisting of more than 16 million square feet of industrial, research and development, office, aviation, and mixed-use facilities. McClellan Airport's most

recent Airport Land Use Compatibility Plan was updated in 1987, when the airport was still operated as an Air Force base. The Sacramento Area Council of Governments is currently in the process of developing an Airport Land Use Compatibility Plan Update for the airport.[9] According to the 1987 Comprehensive Land Use Plan for the McClellan Air Force Base, the project site is not located within an airport overflight zone.[10]

Wildfire Hazards

According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program (FRAP), the proposed project is located within an unincorporated Local Responsibility Area (LRA). An LRA is an area that is not under federal or State responsibility and in which the local agencies have sole responsibility for fire suppression activities. The project site is not located within a very high fire hazard severity zone (VHFHSZ).[11] In addition, the project site is not located in or adjacent to a State Responsibility Area (SRA). The nearest SRA is located approximately nine miles to the northeast of the site.[12]

Currently, the project site is neighbored to the east and south by single-family residential development and various other urban development that limits the potential for wildfire risk. However, the areas to the north and west of the site are primarily undeveloped and interspersed with ruderal vegetation and oak woodlands.

9.3 REGULATORY CONTEXT

The following discussion contains a summary of regulatory controls pertaining to hazardous substances, including federal, State, and local laws and ordinances.

Federal Regulations

Federal agencies that regulate hazardous materials include the U.S. Environmental Protection Agency (USEPA), the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the National Institute of Health (NIH). Prior to August 1992, the principal agency at the federal level regulating the generation, transport, and disposal of hazardous waste was the USEPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the California Department of Toxic Substances Control (DTSC) was authorized to implement the State's hazardous waste management program for the USEPA. The USEPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The following federal laws and related regulations govern hazardous materials.

Occupational Safety and Health Act

Congress passed the Occupational and Safety Health Act (29 U.S.C. §651 et seq. [1970]) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research

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9 Sacramento County. *Economic Development, McClellan.* Available at: http://economic.saccounty.net/LocateHere/McClellan/Pages/default.aspx. Accessed May 2, 2019.

10 Airport Land Use Commission. *McClellan Air Force Base Comprehensive Land Use Plan.* Amended December 1992.

11 Cal Fire. *Placer County Fire Hazard Severity Zones in LRA*. November 7, 2007.

12 Cal Fire. *Placer County Fire Hazard Severity Zones in SRA.* November 24, 2008.

institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. OSHA requires 40 hours of training for hazardous materials operators, as well as an annual eight-hour refresher course, which includes training regarding personal safety, hazardous materials storage and handling, and emergency response.

Comprehensive Environmental Response, Compensation, and Liability Act

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (42 U.S.C. §9601 et seq. [1980]) provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the USEPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. The USEPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, USEPA obtains private party cleanup through orders, consent decrees, and other small party settlements. The USEPA also recovers costs from financially viable individuals and companies once a response action has been completed. The USEPA is authorized to implement the Act in all 50 states and U.S. territories.

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Act (SARA) of 1986, (Title III; Section 305(a)) reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. In addition, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). SARA, Title III provides funding for training in emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals. Title III of SARA addresses concerns about emergency preparedness for hazardous chemicals, and emphasizes helping communities meet their responsibilities in preparing to handle chemical emergencies and increasing public knowledge and access to information on hazardous chemicals present in their communities.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) (42 U.S.C. §6901 et seq. [1976]) gives USEPA the authority to control hazardous waste from the "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for USEPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. States have the authority to implement individual hazardous waste programs in lieu of the RCRA as long as the state program is as stringent as federal RCRA requirements and is approved by the USEPA.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. §2601 et seq. [1976]) provides USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paint.

U.S. Department of Transportation

Transportation of hazardous materials is regulated by the DOT's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 CFR Parts 100–185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive required training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections, use of vehicle controls and equipment including emergency equipment, procedures for safe operation of the transport vehicle, training on the properties of the hazardous material being transported, and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 CFR Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

Asbestos Hazard Emergency Response Act

The 1986 Asbestos Hazard Emergency Response Act (AHERA) was signed into law as Title II of the TSCA, requiring the Asbestos Model Accreditation Plan (MAP) for accrediting individuals conducting asbestos inspection and corrective-action activities in schools and public and commercial buildings. The MAP provides guidance on the minimum training requirements for accrediting asbestos professionals such as, procedural entry, exit, sampling, and monitoring, safety hazards, and relevant federal, state, and local regulatory standards.

Lead-based Paint Regulations

Lead pollutants are regulated by several laws administered by the USEPA, including the Toxic Substances Control Act (TSCA), the Residential Lead-Based Paint Hazard Reduction Act of 1992, the California Apartment Association (CAA), the California Waterfowl Association (CWA), the Safe Drinking Water Act (SDWA), the Resource Conservation and Recovery Act (RCRA), and CERCLA. The aforementioned regulations address lead in paint, dust and soil, lead in air and water, and the disposal of lead wastes. Regulations specific to lead-based paint include, but are not limited to, the Lead Renovation Repair and Painting Program Rule, the Lead Abatement Program, the residential Lead-based Paint Disclosure Program, and Residential Hazards of Lead in Paint, Dust and Soil. Such regulations require risk assessments, inspections, and work practices that work to minimize exposure to lead hazards.

State Regulations

The California Environmental Protection Agency (CalEPA) and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Within Cal-EPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL). The following discussion contains the applicable State laws.

Regional Water Quality Control Board

The CalEPA and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in California. Within CalEPA, DTSC has primary regulatory responsibility for hazardous waste management. Enforcement of regulations can be delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law. Along with the DTSC, the Regional Water Quality Control Board (RWQCB) is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. The RWQCB's regulations are contained in Title 27 of the California Code of Regulations (CCR). The DTSC, RWQCB, and/or a local agency typically oversees investigation and cleanup of contaminated sites.

Department of Toxic Substances Control

The DTSC was established to protect California against threats to public health and degradation to the environment and to restore properties degraded by past environmental contamination. Through statutory mandates, DTSC cleans up existing contamination, regulates management of hazardous wastes, and prevents pollution by working with businesses to reduce hazardous waste and use of toxic materials in California. DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. In addition, DTSC's Site Mitigation and Brownfields Reuse Program oversees the cleanup of State Superfund Sites. State Superfund sites are additionally known as Annual Workplan sites, listed sites, or Cortese List sites. Superfund sites demonstrate evidence of a hazardous substance release or releases that could pose a significant threat to public health and/or the environment. DTSC requires responsible parties to cleanup such sites. When responsible parties cannot be found or where they do not take proper and timely action, DTSC may use State funds to undertake the cleanup.

California Code of Regulations

Hazardous waste is characterized and defined in CCR, Title 22, Sections 66261.20-24. Soils that meet the descriptions of the characteristics of hazardous waste defined in Sections 66261.20-24 and contain contaminants above regulatory screening levels are considered hazardous waste and must be handled and disposed of as such. The CCR includes the California Health and Safety Code.

California Health and Safety Code

The handling and storage of hazardous materials is regulated on the federal level by the USEPA under CERCLA as amended by the SARA. Under SARA Title III, a nationwide emergency planning and response program was established that imposed reporting requirements for businesses which store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a

comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

Ammonia is an example of an acutely hazardous material (AHM) that is regulated by the California Office of Emergency Services under the California Accidental Release Program (CalARP), the USEPA under the Risk Management Program (40 CFR 68), and the OSHA under the Process Safety Management Program (OSHA 1910.119). The CalARP and Risk Management Program require that all facilities that store, handle, or use AHMs above a minimum quantity, known as the threshold planning quantity, are required to develop a plan and prepare supporting documentation that summarizes the facility's potential risk to the local community and identifies safety measures to reduce potential risks to the public.

The HWCL, Chapter 6.5 of the California Health and Safety Code, is administered by the Cal-EPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

In California, the underground storage of hazardous materials is regulated by Chapter 6.7 of the California Health and Safety Code per the Underground Storage of Hazardous Substances Act. Under section 25280, the USTs used for the storage of substances hazardous to the public health and safety and to the environment are stored prior to use or disposal in thousands of underground locations in the State. The USTs used for storage are potential sources of contamination of the ground and underlying aquifers, and may pose other dangers to public health and the environment. Chapter 6.7 establishes orderly procedures that will ensure that newly constructed USTs meet appropriate standards and that existing tanks be properly maintained, inspected, tested, and upgraded so that the health, property, and resources of the people of the state will be protected.

California Vehicle Code Section 31303

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. California Vehicle Code Section 31303 regulates the transport of hazardous materials.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the Governor's Office of Emergency Services (OES), which coordinates the responses of other agencies, including CalEPA, CHP, California Department of Fish and Wildlife (CDFW), Central Valley RWQCB, and Placer County Fire.

Unified Hazardous Materials Management Regulatory Program

On January 1, 1996, Cal-EPA adopted implementing regulations and implemented a unified hazardous waste and hazardous materials management regulatory program (Unified Program), to consolidate the administration of specified statutory requirements for the regulation of hazardous wastes and materials. The Unified Program is implemented at the local level by government agencies certified by the Secretary of Cal-EPA. The Certified Unified Program Agency (CUPA) is responsible for implementation of the Unified Program. CUPA is certified and responsible for oversight of the following consolidated programs: Hazardous Materials Release Response Plans and Inventories (Business Plans); California Accidental Release Program; Underground Storage Tank Program; Aboveground Petroleum Storage Act; Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements.

Local Regulations

Relevant goals and policies from the Placer County General Plan and various other local guidelines and regulations related to hazards and hazardous materials, including wildfire, are discussed below. The DCWPCP does not contain specific goals or policies related to hazards and hazardous materials.

Placer County General Plan

The following goals and policies from the Placer County General Plan are applicable to the proposed project:

Goal 8.C — To minimize the risk of loss of life, injury, and damage to property and watershed resources resulting from unwanted fires.

- Policy 8.C.3 — The County shall require that new development meets state, County, and local fire district standards for fire protection.
- Policy 8.C.5 — The County shall ensure that existing and new buildings of public assembly incorporate adequate fire protection measures to reduce the potential loss of life and property in accordance with state and local codes and ordinances.
- Policy 8.C.11 — The County shall continue to work cooperatively with the California Department of Forestry and Fire Protection and local fire protection agencies in managing wildland fire hazards.

Goal 8.D — To minimize the risk of loss of life, injury, damage to property, and economic and social dislocations resulting from airport hazards.

- Policy 8.D.1 — The County shall ensure that new development around airports does not create safety hazards such as lights from direct or reflective sources, smoke, electrical interference, hazardous chemicals, or fuel storage in violation of adopted safety standards.

Goal 8.G To minimize the risk of loss of life, injury, serious illness, damage to property, and economic and social dislocations resulting from the use, transport, treatment, and disposal of hazardous materials and hazardous materials wastes.

Policy 8.G.1 The County shall ensure that the use and disposal of hazardous materials in the County complies with local, state, and federal safety standards.

Policy 8.G.2 The County shall discourage the development of residences or schools near known hazardous waste disposal or handling facilities.

Placer County Environmental Health Department

The Placer County Environmental Health Department (PCEHD) is the CUPA for local implementation of the California Accidental Release Prevention Program and several other hazardous materials and hazardous waste programs. PCEHD is responsible for regulating hazardous materials business plans and chemical inventory, hazardous materials storage, hazardous materials management plans, and risk management plans. The hazardous materials business plan program requires businesses in Placer County to prepare business emergency response plans if hazardous materials storage equals or exceeds 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas. The goal of PCEHD is to protect human health and the environment by ensuring that hazardous materials and hazardous waste are properly managed.

The PCEHD distributes the information in the hazardous materials business plans and business emergency response plans to emergency response agencies, such as fire departments and Hazardous Materials Response Teams. The PCEHD helps to facilitate the resources necessary for first responders to emergency incidents using emergency response plans and training responders for preparedness.

Placer County Local Hazard Mitigation Plan

The 2016 LHMP was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 so that Placer County would be eligible for the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation and Hazard Mitigation Grant Programs as well as lower flood insurance premiums. The LHMP is a multi-jurisdictional plan that geographically covers the entire area within Placer County's jurisdictional boundaries. The six goals of the multi-hazard mitigation plan are as follows:

- Prevent future hazard related losses of life and property;
- Increase public awareness/action of vulnerability of hazards;
- Improve community emergency services/management capability;
- Implement and complete identified high priority projects listed in the plan;
- Pursue Multi-Objective Opportunities (MOO) whenever possible; and
- Maintain FEMA eligibility/position jurisdictions for grant funding.

The purpose of this plan is to guide hazard mitigation planning and to better protect the people and property of the County from the effects of hazard events. The LHMP demonstrates the community's commitment to reducing risks from hazards and serves as a tool to help decision

makers direct mitigation activities and resources. Placer County completed an update of the LHMP in March 2016.[13]

Placer County and Placer Operational Area Emergency Operations Plan

The *Placer County and Placer Operational Area Emergency Operations Plan* (EOP) provides the guidelines needed for emergency response planning, preparation, training and execution throughout unincorporated Placer County.[14] The EOP is applicable to any natural disaster or manmade emergency occurring in or in the proximity of Placer County that affects, or may affect, the unincorporated area of the County (or the entire operational area, should response require coordination of the emergency response efforts of multiple agencies or jurisdictions). Emergency events range from minor oil spills, brush fires and minor flooding to severe winter storms, floods, wildland fires, earthquakes to countywide public health emergencies all of which have potentially catastrophic long-term public safety, economic, social and political implications.

9.4 IMPACTS AND MITIGATION MEASURES

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

Standards of Significance

In accordance with CEQA Guidelines Appendix G, an impact is considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (see Chapter 16, Effects Not Found to be Significant);
- 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 (see Chapter 16, Effects Not Found to be Significant);
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area (see Chapter 16, Effects Not Found to be Significant);
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires; and/or

[13] Placer County. *Local Hazard Mitigation Plan Update.* March 2016.
[14] Placer County Office of Emergency Services. *Placer County and Placer Operational Area Emergency Operations Plan.* Adopted December 14, 2010.

- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
    - Substantially impair an adopted emergency response plan or emergency evacuation plan;
    - Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
    - Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
    - Expose people or structures to significant risks, including downslope or downstream flooding, mudslides, or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

As noted above, impacts related the emission of hazardous materials within one-quarter mile of an existing or proposed school, location of the proposed project on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and safety hazards associated with airports and private airstrips are discussed in Chapter 16, Effects Not Found to be Significant, of this EIR.

Method of Analysis

The following sections describe the methods of analysis used to determine the presence of RECs for the Phase I and Limited Phase II ESAs performed for the project site by ACE.

Phase I ESA

Site conditions and impacts for this chapter are based primarily on the Phase I and Limited Phase II ESAs conducted for the proposed project. The goal of a Phase I ESA is to identify whether RECs exist at a property, where RECs are defined by ASTM as “the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. […].” The Phase I ESA meets or exceeds the requirements of the ASTM “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-05.”

The Phase I ESA included a review of federal, State, and local environmental databases for information regarding documented and suspected releases of regulated materials within the project site vicinity based upon reference to an environmental database search performed by EDR, an environmental database search firm. Additional historical use information regarding the project site and surrounding properties was pulled from the following sources:

- Due Diligence Environmental Questionaire;
- Historical telephone directories;
- Historical aerial photographs;
- Historical topographical maps; and
- Sanborn Fire Insurance Maps.

Historical photographs of the project site dating to 1947 and historic topographic maps dating to 1891 were reviewed to provide a historical context of the project site. In addition, a site reconnaissance of the project site was conducted on June 15, 2017 by ACE. The site reconnaissance consisted of walking the project site and driving by nearby adjacent properties from public vantages to observe apparent uses. Photographs of the site were taken during the site reconnaissance.

Limited Phase II ESA

The scope of the Limited Phase II ESA consisted of the following:

- Review of the Phase I ESA (ACE job 10-17049E) prepared by ACE for the project site, dated June 23, 2017;
- Preparation and submittal to the PCEHD of a workplan, which was in substantial accordance with the DTSC "Interim Guidance for Sampling Agricultural Properties";
- Collection of representative surficial soil samples from the project site in substantial accordance with the DTSC "Interim Guidance for Soil Sampling Agricultural Properties" in order to evaluate the presence of Contaminants of Potential Concern (COPC) identified as medals of concern (arsenic and lead) and organochlorine pesticides (OCPs) for agricultural properties that are above relevant laboratory reporting limits;
- Submittal of soils samples to a State Certified Analytical Laboratory to perform analytical tests on the representative samples for COCPs; and
- Assessment and preparation of the Limited Phase II ESA letter report.

The Limited Phase II ESA prepared by ACE for the project site included obtaining field samples of the uppermost site soils. The samples were sent to a State approved analytical laboratory where analytical tests were conducted on representative soil samples. ACE performed sampling at 36 locations that had been historically used for agricultural purposes in addition to one background sample. On December 10, 2018, 27 (locations 1 through 27 in Figure 9-1) discreet grab soils samples were obtained from 0 to 0.5-feet below the existing ground surface. On March 13, 2019, samples were obtained from eight locations (locations 28 through 36), one background location (location 37), and seven previously sampled locations (locations 13, 16, and 19 through 23) were re-sampled.

ACE obtained the grab samples from on-site surficial soils and one background sample from an area outside the limits of the historical agricultural usage area. The December 10th soil samples were collected using an AMS split spoon tube sampler fitted with stainless steel sample tubes. The sampler was driven into the soil with a 10-pound hand actuated slide hammer. The stainless-steel tube containing the soil sample was capped with plastic end caps, labelled, placed in a plastic bag and immediately placed on ice in an insulated ice chest. The March 13th soil samples were obtained using a shovel. The soil samples collected were placed in laboratory provided sampling jars, capped and placed in an ice chest. Standard environmental QA/QC protocol was maintained throughout all the sampling activities. The soils were sampled, logged and classified by a staff geologist/technician. All samples placed in the insulated ice chests were transported under chain-of-custody protocol to a State certified analytical laboratory. Each soil sample was taken of the earth material following standard environmental sampling protocols. Excavation and sampling equipment were cleaned using Alconox (or equivalent) detergent wash and potable water rinse prior to beginning the sampling. Non-dedicated sampling equipment was cleaned using an Alconox (or equivalent) detergent wash and potable water rinse prior to subsequent sampling operations.

All samples were submitted by ACE to SunStar Laboratories, Inc. of Lake Forest, California, a state-certified analytical laboratory (ELAP Certificate No.: 2250) under chain-of-custody protocol. The samples were analyzed by the analytical laboratory for COCPs by USEPA methods 8081A and 8151A (or equivalent) and arsenic and lead by USEPA 6010.

Project-Specific Impacts and Mitigation Measures

The project site conditions, as well as conditions at off-site improvement areas, have been compared to the standards of significance presented above in order to determine the project's impact significance. If significant impacts are identified for the construction and operational phases of the proposed project, recommended mitigation measures have been included to reduce the identified impacts to less-than-significant levels.

9-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Based on the analysis below, the impact is *less than significant*.

A significant hazard to the public or the environment could result from the routine transport, use, or disposal of hazardous materials. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. The proposed project would not be industrial in nature. Operations of the proposed 119 lot single-family residential project would not include any activities that would involve the routine transport, use, disposal, or generation of substantial amounts of hazardous materials. During operations, hazardous material use would be limited to landscaping products such as fertilizer, pesticides, as well as typical commercial and maintenance products (cleaning agents, degreasers, paints, batteries, and motor oil). Proper handling and usage of such materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not result. Thus, operations of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Construction activities associated with implementation of the proposed project, including the proposed off-site sewer and road widening improvements, would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. The project contractor is required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b),[15] the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, PCEHD) in accordance with the regulations adopted pursuant to Section 25510(a). The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractors are required to notify the PCEHD in the event of an accidental release of a hazardous material,

[15] Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

who would then monitor the conditions and recommend appropriate remediation measures.

Based on the above, the project would not create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

9-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Based on the analysis below, the impact is *less than significant*.

As mentioned previously, the western portion of the project site was determined to have been previously used for agricultural purposes. Although the Phase I ESA determined that readily discernable REC's did not exist on the project site, pesticides or herbicides which may have been used for agricultural purposes could have contaminated surficial soils within the project site. The results of the Phase II ESA and soil analysis determined that project site soils did not contain pesticide/herbicides analytes or arsenic at or above the reporting detection limits per EPA methods 8081A and 8151A. Although lead was detected within a small number of soil samples taken from the southern portion of the project site, the amount of lead present in the soils was between 6.8 mg/kg and 9.4 mg/kg, and not near or above the threshold of 80 mg/kg for residential land set forth by the CHHSL. Lead content in sample 37 was detected at a relatively high level of 60mg/kg compared to the other sample test results. However, Sample 37 was obtained from the northwestern corner of the project site which was occupied by a homeless camp, and the lead result is not considered representative of the background lead content. In addition, per the Phase I ESA, existing RECs or properties within the site vicinity would not pose a substantial risk to the proposed project. Specifically, the cleanup statuses of potential hazardous sites in the project area are either listed as closed or the sites are located at a lower groundwater gradient relative to the project site. The Phase II ESA concluded that further assessment of the project site for potential contaminants was not required.

Based on the above, implementation of the proposed project 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. As a result, impacts would be considered ***less than significant***.

Mitigation Measure(s)
None required.

9-3 Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Based on the analysis below, the impact would be *less than significant.*

Placer County does not have an adopted emergency evacuation plan. However, as noted previously, the County maintains a LHMP, the purpose of which is to reduce or eliminate long-term risk to people and property from hazards consistent with the requirements of the Disaster Mitigation Act of 2000.

The proposed project would include roadway improvements to Vineyard Road and Brady Lane. The proposed roadway improvements would result in the widening of both Vineyard Road and Brady Lane along the project frontages which, once completed, would result in improved circulation and emergency access in the project site vicinity. During project construction, temporary lane closures on Vineyard Road and Brady Lane may be required; however, any temporary lane closures would be coordinated with County emergency services and complete closure of the roadways is not anticipated. In addition, during project operation, implementation of County emergency response plans would not be impaired and emergency access throughout the project site would be provided by internal circulation throughout the project site with primary access from Brady Lane and emergency vehicle access on Vineyard Road.

The project, as designed, would not interfere with or impair implementation of an adopted emergency response plan. Therefore, impacts related to the potential for the project to impair implementation of emergency response plans would be ***less than significant.***

Mitigation Measure(s)
None required.

9-4 Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires, or be located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Based on the analysis below, the impact is *less than significant*.

As stated above, the proposed project is located within an unincorporated LRA, which is an area that is not under federal or State responsibility and in which the local agencies have sole responsibility for fire suppression activities. The nearest VHFHSZ is located approximately 15 miles northeast of the project site.[16] In addition, the project is not located within an SRA, the nearest of which is located approximately nine miles northeast.[17] As such, the project site is not located in or near SRAs or lands classified as VHFHSZs, which indicates that implementation of the proposed project would not be expected to result in the following wildfire hazards identified in CEQA guidelines Appendix G: emergency response or evacuation; exacerbation of wildfire or other fire risks; or wildfire related flooding, mudslides, or landslides, slope instability, or drainage changes.

[16] Cal Fire. *Placer County Fire Hazard Severity Zones in LRA*. November 7, 2007.
[17] Cal Fire. *Placer County Fire Hazard Severity Zones in SRA.* November 24, 2008.

The project site currently consists primarily of ruderal vegetation and some oak woodlands. As part of the proposed project, a total of 5.95 acres in the northwestern portion of the site would be retained as open space. Implementation of the proposed project would include site clearing activities which would remove much of the on-site vegetation and would create a buffer between lands designated for open space and residential development. Development of the site for residential uses would reduce the risk of wildland fire because site improvements, such as roadways, driveways, and irrigated landscaping, would reduce readily combustible vegetation. In addition, residential development is located to the east of the project site, across Brady Lane, and south of the project site, across Vineyard Road. The Father's House church is located adjacent to the northeastern portion of the project site. The adjacent residential development and roadways would act as fire breaks, reducing the potential for fire to spread to the project site. Furthermore, the open space portions of the project site would be maintained as necessary by the project homeowner's association (HOA) to control the fuel load, thereby limiting associated fire hazards.

Development of the proposed project would also include the installation of fire suppression systems (e.g., fire hydrants, automatic fire sprinklers, smoke detectors). Furthermore, the project would be designed in accordance with the latest requirements of the California Fire Code and Placer County. As discussed in Chapter 13, Public Services and Recreation, of this EIR, the project site is within the service area of the Placer County Fire Department, and existing fire protection services would be adequate to serve the proposed project. Improvement plans for the proposed project would be routed to the PCF for review and approval. The PCF would ensure that the proposed project complies with all relevant State and local fire regulations, thereby reducing potential hazards associated with wildland fires.

Based on the above, the proposed project would not be expected to expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires and the project is not located in or near a state responsibility area or lands classified as very high fire hazard severity zones. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

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

9-5 Cumulative exposure to potential hazards, including wildfire, and increases in the transport, storage, and use of hazardous materials. Based on the analysis below, the cumulative impact is *less than significant*.

As discussed, project-level impacts associated with hazardous materials related to implementation of the proposed project were found to be less than significant. Hazardous materials and other public health and safety issues are generally site-specific and/or project-specific, and would not be significantly affected by other development within the project area. Cumulative development projects would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community. Therefore, cumulative impacts associated with hazardous materials transport, storage, and use associated with implementation of past, present, and reasonably foreseeable future projects, as well as the proposed project, would be ***less than significant***.

Mitigation Measure(s)

None required.

10. Hydrology and Water Quality

10. HYDROLOGY AND WATER QUALITY

10.1 INTRODUCTION

The Hydrology and Water Quality chapter of the EIR describes existing drainage patterns on the proposed project site, current stormwater flows and stormwater infrastructure. The chapter also evaluates potential impacts of the proposed project with respect to increases in impervious surface area and associated stormwater flows, degradation of water quality, and increases in on- and off-site flooding. Information used for this chapter was primarily drawn from reports prepared for the proposed project by RFE Engineering, Inc (RFE), which include the following: a Preliminary Drainage Study & Stormwater Quality Plan[1]; a Memorandum constituting an addendum to the Preliminary Drainage Study & Stormwater Quality Plan;[2] and the Dry Creek Vineyard Road Tributary Basin Ultimate Development Drainage Study[3] (see Appendix I). In addition, information was drawn from the Placer County General Plan,[4] the Placer County General Plan EIR,[5] the Dry Creek-West Placer Community Plan (DCWPCP),[6] the *Dry Creek Watershed Coordinated Resource Management Plan* (DCWCRMP),[7] and the *Update to the Dry Creek Watershed Flood Control Plan*.[8] It should be noted that issues associated with water supply availability are addressed in Chapter 15, Utilities and Service Systems, of this EIR.

10.2 EXISTING ENVIRONMENTAL SETTING

The section below describes regional hydrology, the existing drainage patterns within the project site, including peak flows, existing water quality, and groundwater conditions.

Regional Hydrology

The project site is located within the DCWPCP plan area within Placer County, California. According to the DCWPCP, the hydrologic characteristics in the plan area are largely affected by seasonal rainfall. The majority of the watercourses in the area are seasonal, and only support flows during the rainy season. However, Dry Creek, the largest water feature within the DCWPCP area, flows year-round. In all, the Dry Creek watershed drains approximately 101 square miles.[9] The watershed begins west of Auburn and drains into Steelhead Creek. Flows from Steelhead Creek discharge to the American River, and ultimately to the Sacramento River.

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1 RFE Engineering, Inc. *Preliminary Drainage Study & Stormwater Quality Plan for Brady-Vineyard Subdivision*. April 2, 2019.
2 RFE Engineering, Inc. *Memorandum: Brady Vineyard Post-Project vs. Pre-Project Drainage Addendum*. October 25, 2019.
3 RFE Engineering, Inc. *Dry Creek Vineyard Road Tributary Basin Ultimate Development Drainage Study for Brady Vineyard Subdivision*. October 11, 2019.
4 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
5 Placer County. *Countywide General Plan EIR*. July 1994.
6 Placer County. *Dry Creek-West Placer Community Plan*. Amended May 12, 2009.
7 Placer and Sacramento Counties. *Dry Creek Watershed Coordinated Resource Management Plan.* December 31, 2003.
8 Placer County Flood Control and Water Conservation District. *Update to the Dry Creek Watershed Flood Control Plan.* November 2011.
9 Placer and Sacramento Counties. *Dry Creek Watershed Coordinated Resource Management Plan*. December 31, 2003.

According to the DCWCRMP, higher peak flows and total storm flows are not being adequately conveyed through stream channels (and structures) within the Dry Creek watershed that were originally developed (or were modified) for conveyance of lower flows. This results in localized flooding. Additionally, several areas within the watershed have degrading/unstable banks, incising streams, and are experiencing sedimentation of the streambed due, in part, to the modified flow regime caused by increases in impervious surface area that have occurred as a result of development activities in the area.

Modification of watershed hydrology is also compounded by modification of the instream configuration by channelization, levees, dredging, structures (dams, bridges, other), and reduced floodplain area. Such modifications also result in altered stream flow where flow is faster in some areas, contributing to erosion and faster peak flow timing, but slower in other areas (behind dams and other impeding structures), contributing to flooding and sediment deposition.

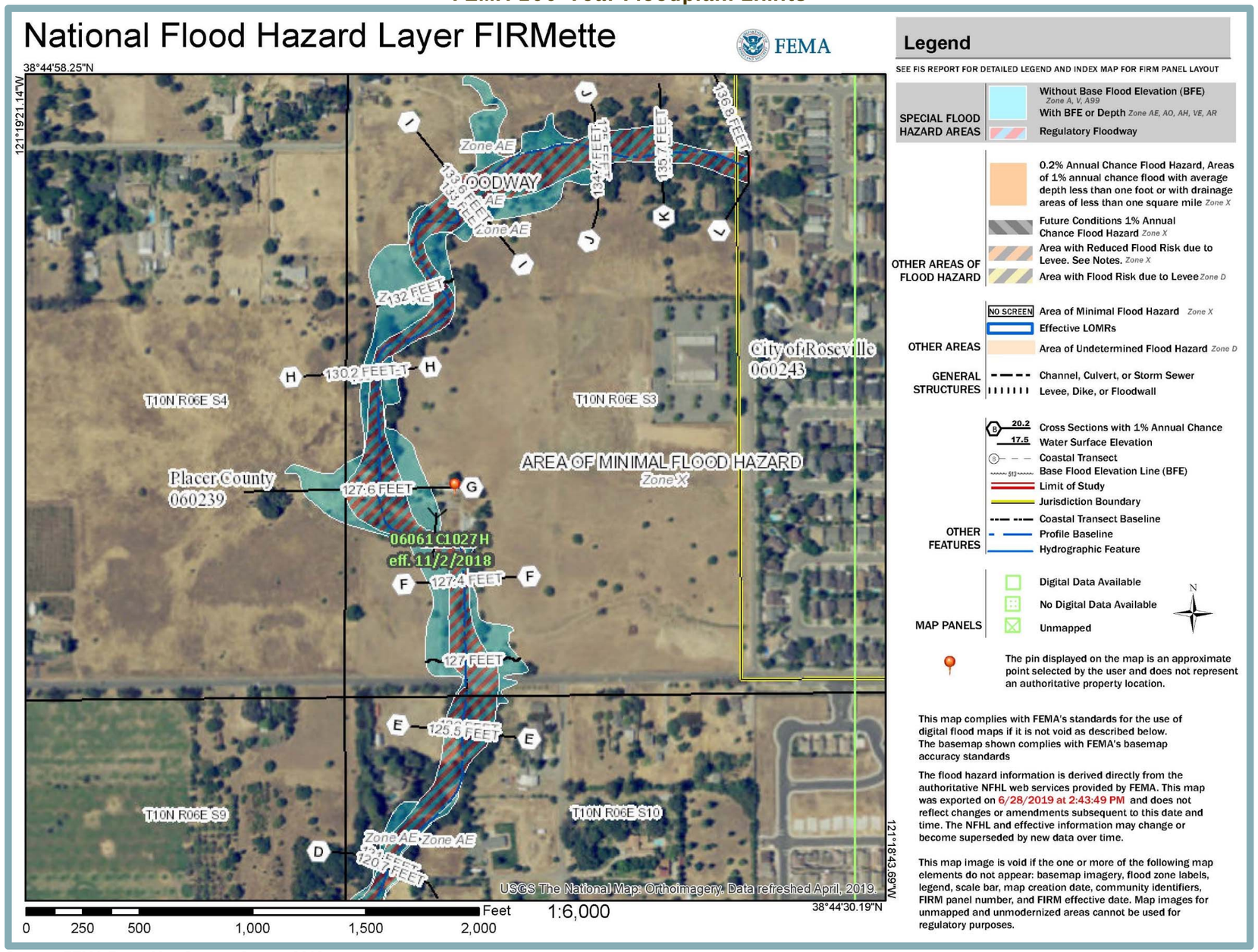
Dry Creek has an extensive record of flooding and flood damage to areas within the lower portion of the creek's watershed. Historic flooding in the area occurred in 1986, 1995, and 1997. Flooding generally occurs from October through April, when soils become saturated during winter rain events followed by high intensity storm systems. The lower portion of Dry Creek is characterized by high peak flows of moderate duration. Flooding from cloudburst storms of high intensity can occur from late spring to early fall; however, runoff resulting from the summer storms tends to be significantly less in peak and volume. Though significant progress has been made towards reducing flood risks in the Dry Creek watershed through the implementation of local improvement projects, including bridge replacements, flow bypasses, building elevation projects and residential buyouts, numerous flood hazard areas and roadway stream crossings still do not have adequate capacity.[10]

Project Site and Surrounding Area Drainage

The western edge of the project site contains an unnamed creek that runs southward. For the purposes of this analysis, the unnamed creek is hereafter referred to as the Dry Creek Vineyard Road tributary. Prior to entering the northern boundary of the project site, the Dry Creek Vineyard Road tributary receives drainage from approximately 500 acres of land within unincorporated portions of Placer County and the City of Roseville. After leaving the southwestern portion of the project site, the Dry Creek Vineyard Road tributary flows approximately one mile southwest before draining into Dry Creek. By the time the Dry Creek Vineyard Road tributary discharges to Dry Creek, the Dry Creek Vineyard Road tributary receives drainage from a total of 1,000 acres. The stretch of the Dry Creek Vineyard Road tributary between the project site and Dry Creek passes in close proximity to several existing residential structures, as well as the Dry Creek Wastewater Treatment Plant. The entirety of the Dry Creek Vineyard Road tributary within the project site is within a Federal Emergency Management Agency (FEMA) mapped AE floodplain zone (see Figure 10-1). The FEMA AE zone is defined as being areas subject to inundation by the one percent annual chance flood event, and FEMA provides base flood elevations for such areas.

[10] Placer County Flood Control and Water Conservation District. *Update to the Dry Creek Watershed Flood Control Plan* [pg. ES-2]. November 2011.

Figure 10-1
FEMA 100-Year Floodplain Limits



Source: FEMA Flood Map Service Center, 2019.

The majority of the project site slopes toward the Dry Creek Vineyard Road tributary; however, several small, shallow linear depressions exist within the project site as well. As a result of the existing slopes and small valleys within the site, stormwater within the site either sheet flows to the Dry Creek Vineyard Road tributary or is intercepted by one of the valleys and directed toward the Dry Creek Vineyard Road tributary. Some of the valleys within the project site contain depressions where stormwater collects, creating seasonal wetlands.

In addition to drainage of stormwater falling on the project site, the project site currently receives stormwater from several off-site sources. A portion of Brady Lane, as well as a portion of the existing subdivision opposite the project site across Brady Lane, direct stormwater into a stormwater pipe beneath Brady Lane, which outlets into an open drainage ditch on the east side of the project site. The open drainage ditch travels westward through the project site prior to intersecting with the on-site portion of the Dry Creek Vineyard Road tributary. Portions of the vacant parcel to the north of the project site and the developed church site to the northeast of the project site drain onto the project site and sheet flow to the Dry Creek Vineyard Road tributary.

A six-foot by 15-foot box culvert runs underneath Vineyard Road, south of the project site, and the Dry Creek Vineyard Road tributary is directed through the culvert prior to exiting the project site. After flowing through the Vineyard Road culvert, runoff flows unobstructed within the Dry Creek Vineyard Road tributary to the confluence of the Dry Creek Vineyard Road tributary and Dry Creek. The entire length of the Dry Creek Vineyard Road tributary from the beginning of the tributary at Brady Lane to the confluence with Dry Creek is approximately two miles, with the first mile stretching from Brady Lane, northeast of the project site, to the southwest corner of the project site. The second mile continues from the southwest corner of the site to Dry Creek.

To provide an accurate model of the entirety of the Dry Creek Vineyard Road tributary, RFE Engineering, Inc. (RFE) used Placer County's Dry Creek Hydrologic Engineering Center (HEC) Model and extracted the applicable sheds that contribute to the Dry Creek Vineyard Road tributary. RFE concluded that twelve drainage sheds drain to the Dry Creek Vineyard Road tributary. For analysis purposes, three of the drainage sheds were split into multiple sheds in order to separate the off-site and on-site areas of the sheds. A summary of the drainage sheds draining to the Dry Creek Vineyard Road tributary is provided in Table 10-1 below.

Table 10-1
Dry Creek Vineyard Road Tributary Drainage Sheds

Drainage Shed ID	Drainage Area (Square Feet)	Drainage Area (Square Miles)
DC25B	388.605	0.6072
DC25e	16.075	0.0251
DC25C	47.798	0.0747
DC25D	35.247	0.0551
DC25F-offsite	12.388	0.0194
DC25F-onsite	5.544	0.0087
DC25G	41.825	0.0654
DC25L-offsite north	7.065	0.0110
DC25L-offsite south	8.722	0.0136
DC25L-onsite	29.253	0.0457
DC25N-onsite	2.820	0.0044
DC25N-offsite	31.386	0.0490

(Continued on next page)

Table 10-1 Dry Creek Vineyard Road Tributary Drainage Sheds		
Drainage Shed ID	**Drainage Area (Square Feet)**	**Drainage Area (Square Miles)**
DC25I	110.582	0.1728
DC25H	43.582	0.0681
DC25M	88.585	0.1384
DC25K	195.828	0.3060
Source: RFE, 2019.		

Figure 10-2 depicts the major sheds in proximity to the project site. In addition, the stormwater runoff estimates for existing conditions on the project site are summarized in Table 10-2 below.

Table 10-2 On-site Peak Flow Characteristics – Existing Condition (cubic feet per second)					
Drainage Shed	**10-Year Peak Flow**	**25-Year Peak Flow**	**50-Year Peak Flow**	**100-Year Peak Flow**	**500-Year Peak Flow**
DC25F-onsite	2.1	2.8	3.5	4.0	5.9
DC25L-onsite	7.2	10.3	12.9	14.8	22.5
DC25N-onsite	0.8	1.1	1.4	1.8	2.6
Source: RFE, 2019.					

Water Quality

Activities and/or conditions that have the potential to degrade water quality include but are not limited to, construction activities and urban stormwater runoff.

Construction activities have the potential to cause erosion and sedimentation associated with groundbreaking and clearing activities, which could cause unstabilized soil to be washed or wind-blown into nearby surface water. In addition, the use of heavy equipment during construction activities, especially during rainfall events, have the potential to cause petroleum products and other pollutants to enter nearby drainages.

Water quality degradation from urban stormwater runoff is primarily the result of runoff carrying pollutants from the land surface (i.e., streets, parking lots, etc.) to the receiving waters (i.e., streams and lakes). Pollutants typically found in urban runoff include facility maintenance and lawn-care/landscaping chemicals (insecticides, herbicides, fungicides and rodenticides), heavy metals (such as copper, zinc and cadmium), oils and greases from automobiles and other mechanical equipment, and nutrients (nitrogen and phosphorus). Per the Phase I and limited Phase II Environmental Site Assessments prepared for the project site, the project site does not contain any known hazardous materials and past agricultural uses on the site did not result in contamination of the project site with any materials that could act as pollutants in nearby waterways.[11]

[11] ACE Quality Control. *Limited Phase II Environmental Site Assessment*. April 2, 2019.

Figure 10-2
Dry Creek Vineyard Road Tributary Drainage Sheds

Source: RFE, 2019.

Groundwater

The proposed project site is located within the North American Subbasin and the jurisdiction of the West Placer Groundwater Sustainability Agency (WPGSA). The WPGSA was formed in 2017 as a partnership between Placer County, the cities of Roseville and Lincoln, the Placer County Water Agency, and the California American Water Company in order to comply with the requirements of the Sustainable Groundwater Management Act (SGMA). The goal of the WPGSA is to manage portions of the North American Subbasin by protecting against overdraft and creating sustainable water supplies.

Groundwater levels in southwestern Placer County and northern Sacramento County have generally decreased in recent history, with many wells experiencing declines at a rate of approximately 1.5 feet per year.[12] However, per the San Juan Water District *2015 Urban Water Management Plan*, the North American Subbasin, within which the project site is located, is not identified by the California Department of Water Resources (DWR) as being in a state of overdraft.[13] Groundwater overdraft is a condition within a developed groundwater basin in which the amount of water pumped from the basin exceeds the sustainable yield of the basin over the long term.

During soil explorations completed by ACE Quality Control, as part of the Preliminary Geotechnical Engineering Study prepared for the project site, groundwater was observed at approximate depths ranging between 13 and 21 feet below ground surface.[14]

10.3 REGULATORY CONTEXT

The following is a description of federal, State, and local environmental laws and policies that are relevant to the review of hydrology and water quality under the CEQA process.

Federal Regulations

The following section includes federal environmental goals and policies relevant to the CEQA review process pertaining to the hydrology and water quality aspects of the proposed project.

Federal Emergency Management Agency (FEMA)

The FEMA is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers (USACE) studies. FEMA is also responsible for distributing the Flood Insurance Rate Maps (FIRMs), which are used in the National Flood Insurance Program (NFIP). The FIRMs identify the locations of special flood hazard areas, including the 100-year floodplains.

FEMA allows non-residential development in the floodplain; however, construction activities are restricted within flood hazard areas, depending upon the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations (CFR). These standards are implemented at the State level through construction codes and local ordinances; however, these regulations only apply to residential and non-residential structure improvements. Although roadway construction or modification is not explicitly addressed in the FEMA regulations, the California Department of Transportation

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12 California Department of Water Resources. *California's Groundwater, Bulletin 118, Sacramento Valley Groundwater Basin, North American Subbasin*. January 20, 2006.
13 San Juan Water District. *2015 Urban Water Management Plan* [pg. 6-3]. June 2016.
14 ACE Quality Control. *Preliminary Geotechnical Engineering Study Brady Residential Subdivision*. July 25, 2017.

(Caltrans) has also adopted criteria and standards for roadway drainage systems and projects situated within designated floodplains. Standards that apply to floodplain issues are based on federal regulations (Title 23, Part 650 of the CFR). At the State level, roadway design must comply with drainage standards included in Chapters 800-890 of the Caltrans Highway Design Manual. CFR Section 60.3(c)(10) restricts cumulative development from increasing the water surface elevation of the base flood by more than one foot within the floodplain.

Federal Clean Water Act

The National Pollutant Discharge Elimination System (NPDES) permit system was established in the federal Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the U.S. Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that the Environmental Protection Agency (EPA) must consider in setting effluent limits for priority pollutants.

Nonpoint sources are diffuse and originate over a wide area rather than from a definable point. Nonpoint pollution often enters receiving water in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such nonpoint sources are generally exempt from federal NPDES permit program requirements. However, two types of nonpoint source discharges are controlled by the NPDES program – nonpoint source discharge caused by general construction activities, and the general quality of stormwater in municipal stormwater systems. The 1987 amendments to the CWA directed the federal EPA to implement the stormwater program in two phases. Phase I addressed discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by EPA that are not included in Phase I.

Section 402 of the CWA mandates that certain types of construction activities comply with the requirements of the NPDES stormwater program. The Phase II Rule, issued in 1999, requires that construction activities that disturb land equal to or greater than one acre require permitting under the NPDES program. In California, permitting occurs under the General Permit for Stormwater Discharges Associated with Construction Activity, issued to the State Water Resources Control Board (SWRCB), implemented and enforced by the nine Regional Water Quality Control Boards (RWQCBs).

As of July 1, 2010, all dischargers with projects that include clearing, grading or stockpiling activities expected to disturb one or more acres of soil are required to obtain compliance under the NPDES Construction General Permit Order 2009-0009-DWQ. The General Permit requires all dischargers, where construction activity disturbs one or more acres, to take the following measures:

1. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to include a site map(s) of existing and proposed building and roadway footprints, drainage patterns and stormwater collection and discharge points, and pre- and post- project topography;
2. Describe types and placement of Best Management Practices (BMPs) in the SWPPP that will be used to protect stormwater quality;
3. Provide a visual and chemical (if non-visible pollutants are expected) monitoring program for implementation upon BMP failure; and

4. Provide a sediment monitoring plan if the area discharges directly to a water body listed on the 303(d) list for sediment.

To obtain coverage, a SWPPP must be submitted to the RWQCB electronically and a copy of the SWPPP must be submitted to Placer County. When project construction is completed, the landowner must file a Notice of Termination (NOT).

State Regulations

The following section includes the State regulations relevant to the CEQA review process pertaining to the hydrology and water quality aspects of the proposed project.

State Water Resources Control Board

The SWRCB and the RWQCBs are responsible for ensuring implementation and compliance with the provisions of the federal CWA and California's Porter-Cologne Water Quality Control Act. The project site is situated within the jurisdictional boundaries of the Central Valley RWQCB (CVRWQCB) (Region 5). The CVRWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within their jurisdiction.

Central Valley Regional Water Quality Control Board

As authorized by the Porter-Cologne Water Quality Control Act, the CVRWQCB primary function is to protect the quality of the waters within its jurisdiction for all beneficial uses. State law defines beneficial uses of California's waters that may be protected against quality degradation to include, but not be limited to: domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

The CVRWQCB implements water quality protection measures by formulating and adopting water quality control plans (referred to as basin plans, as discussed below) for specific groundwater and surface water basins, and by prescribing and enforcing requirements on all agricultural, domestic, and industrial waste discharges. The CVRWQCB oversees many programs to support and provide benefit to water quality, including the following major programs: Agricultural Regulatory; Above-Ground Tanks; Basin Planning; CALFED; Confined Animal Facilities; Landfills and Mining; Non-Point Source; Spills, Leaks, Investigations, and Cleanups (SLIC); Stormwater; Total Maximum Daily Load (TMDL); Underground Storage Tanks (UST), Wastewater Discharges (including the NPDES); Water Quality Certification; and Watershed Management.

The CVRWQCB is responsible for issuing permits for a number of varying activities. Activities subject to the CVRWQCB permitting requirements include stormwater, wastewater, and industrial water discharge, disturbance of wetlands, and dewatering. Permits issued and/or enforced by the CVRWQCB include, but are not limited to, the NPDES Construction General Permit, NPDES Municipal Stormwater Permits, Industrial Stormwater General Permits, Clean Water Act Section 401 and 404 Permits, and Dewatering Permits.

Basin Plans and Water Quality Objectives

The Porter-Cologne Water Quality Control Act provides for the development and periodic review of water quality control plans (basin plans) that are prepared by the regional water quality control boards. Basin plans designate beneficial uses of California's major rivers and groundwater basins, and establish narrative and numerical water quality objectives for those waters. Beneficial uses

represent the services and qualities of a water body (i.e., the reasons why the water body is considered valuable), while water quality objectives represent the standards necessary to protect and support those beneficial uses. Basin plans are primarily implemented through the NPDES permitting system and by issuing waste discharge regulations to ensure that water quality objectives are met.

Basin plans provide the technical basis for determining waste discharge requirements and taking regulatory enforcement actions if deemed necessary. The proposed project site is located within the jurisdiction of the CVRWQCB. A basin plan has been adopted for the Sacramento and San Joaquin River Basin (Basin Plan), which covers all of the project area.

The Basin Plan sets water quality objectives for the surface waters in its region for the following substances and parameters: ammonia, bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, radioactivity, salinity, sediment, settleable material, suspended material, taste and odor, temperature, toxicity, turbidity, and pesticides. For groundwater, water quality objectives applicable to all groundwater have been set for bacteria, chemical constituents, radioactivity, taste, odors, and toxicity.

Senate Bill 5

In 2007, the State of California set the 200-year event as the Urban Level of Flood Protection (ULOP) for the State through a series of laws included in Senate Bill (SB) 5. Along with other related legislation, SB 5 established a mandate for local governments to amend their general plans and zoning codes to be consistent with State law on floodplain management. Specifically, SB 5 requires all cities and counties within the Sacramento-San Joaquin Valley, as defined in California Government Code Sections 65007(h) and (j), to make findings related to an ULOP or the national FEMA standard of flood protection before: (1) entering into a development agreement for any property that is located within a flood hazard zone; (2) approving a discretionary permit or other discretionary entitlement, or a ministerial permit that would result in the construction of a new residence, for a project that is located within a flood hazard zone; or (3) approving a tentative map, or a parcel map for which a tentative map was not required, for any subdivision that is located within a flood hazard zone. The primary purpose of the law is to ensure that appropriate flood protection is provided in urban and urbanizing areas. Placer County has amended the County's flood management policies to bring the County into compliance with State law and provide for increased flood protection for urban areas, consistent with SB 5.[15]

A project would be subject to the requirements of SB 5 if the project would meet all of the following five criteria:

1. Located within an urban area that is a developed area, as defined by Code of Federal Regulations Title 44, Section 59.1, with 10,000 residents or more, or an urbanizing area that is a developed area or an area outside a developed area that is planned or anticipated to have 10,000 residents or more within the next 10 years.
2. Located within a flood hazard zone that is mapped as either a special hazard area or an area of moderate hazard on FEMA's official (i.e., effective) FIRM for the NFIP.
3. Located within the Sacramento-San Joaquin Valley.
4. Located within an area with a potential flood depth above 3.0 feet, from sources of flooding other than localized conditions that may occur anywhere in a community, such as localized

[15] Placer County. *Placer County moves to meet state flood standards for urban areas.* Available at: https://www.placer.ca.gov/news/2015/nov/placer-meets-state-flood-standards. November 5, 2015.

rainfall, water from stormwater and drainage problems, and water from temporary water and wastewater distribution system failure.

5. Located within a watershed with a contributing area of more than 10 square miles.

The proposed project would meet criteria 1-4; however, because the project site is located within the Dry Creek Vineyard Road tributary subwatershed, which is approximately 1.67 square miles, the project does not meet Criterion 5. Thus, the proposed project would not be subject to the requirements of SB 5. It should be noted that with respect to Criterion 4, only within the limits of the on-site tributary would there be flood depths in excess of 3.0 feet.

Local Regulations

Relevant goals and policies from the Placer County General Plan and the DCWPCP, as well as various other local guidelines and regulations related to hydrology and water quality, are discussed below.

Placer County General Plan

The following policies from the Placer County General Plan related to hydrology and water quality are applicable to the proposed project:

Goal 4.E To collect and dispose of stormwater in a manner that least inconveniences the public, reduces potential water-related damage, and enhances the environment.

Policy 4.E.1 The County shall encourage the use of natural stormwater drainage systems to preserve and enhance natural features.

Policy 4.E.2 The County shall support efforts to acquire land or obtain easements for drainage and other public uses of floodplains where it is desirable to maintain drainage channels in a natural state.

Policy 4.E.4 The County shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County Land Development Manual.

Policy 4.E.8 The County shall consider recreational opportunities and aesthetics in the design of stormwater ponds and conveyance facilities.

Policy 4.E.9 The County shall encourage good soil conservation practices in agricultural and urban areas and carefully examine the impact of proposed urban developments with regard to drainage courses.

Policy 4.E.10 The County shall strive to improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation

basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).

Policy 4.E.11 The County shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the unincorporated area and on properties in jurisdictions within and immediately adjacent to Placer County.

Policy 4.E.12 The County shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.

Policy 4.E.13 The County shall require that new development conforms with the applicable programs, policies, recommendations, and plans of the Placer County Flood Control and Water Conservation District.

Policy 4.E.14 The County shall require projects that have significant impacts on the quantity and quality of surface water runoff to allocate land as necessary for the purpose of detaining post-project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff.

Policy 4.E.15 The County shall identify and coordinate mitigation measures with responsible agencies for the control of storm sewers, monitoring of discharges, and implementation of measures to control pollutant loads in urban storm water runoff (e.g., California Regional Water Quality Control Board, Placer County Division of Environmental Health, Placer County Department of Public Works, Placer County Flood Control and Water Conservation District).

Goal 4.F To protect the lives and property of the citizens of Placer County from hazards associated with development in floodplains and manage floodplains for their natural resource values.

Policy 4.F.1 The County shall require that arterial roadways and expressways, residences, commercial and industrial uses and emergency facilities be protected, at a minimum, from a 100-year storm event.

Policy 4.F.4 The County shall require evaluation of potential flood hazards prior to approval of development projects. The County shall require proponents of new development to submit accurate topographic and flow characteristics information and depiction of the 100-year floodplain boundaries under fully-developed, unmitigated runoff conditions.

Policy 4.F.5 The County shall attempt to maintain natural conditions within the 100-year floodplain of all rivers and streams except under the following circumstances:

a. Where work is required to manage and maintain the stream's drainage characteristics and where such work is done in accordance with the Placer County Flood Damage Prevention Ordinance, California Department of Fish and Game regulations, and Clean Water Act provisions administered by the U.S. Army Corps of Engineers; or
b. When facilities for the treatment of urban runoff can be located in the floodplain, provided that there is no destruction of riparian vegetation.

Goal 6.A To protect and enhance the natural qualities of Placer County's streams, creeks and groundwater.

Policy 6.A.2 The County shall require all development in the 100-year floodplain to comply with the provisions of the *Placer County Flood Damage Prevention Ordinance*.

Policy 6.A.4 Where creek protection is required or proposed, the County should require public and private development to:

a. Preserve creek corridors and creek setback areas through easements or dedication. Parcel lines (in the case of a subdivision) or easements (in the case of a subdivision or other development) shall be located to optimize resource protection. If a creek is proposed to be included within an open space parcel or easement, allowed uses and maintenance responsibilities within that parcel or easement should be clearly defined and conditioned prior to map or project approval;
b. Designate such easement or dedication acres (as described in a. above) as open space;
c. Protect creek corridors and their habitat value by actions such as: 1) providing an adequate creek setback, 2) maintaining creek corridors in an essentially natural state, 3) employing creek restoration techniques where restoration is needed to achieve a natural creek corridor, 4) utilizing riparian vegetation within creek corridors, and where possible, within creek setback areas, 5) prohibiting the planting of invasive, non-native plants (such as Vinca major and eucalyptus) within creek corridors or creek setbacks, and 6) avoiding tree removal within creek corridors;
d. Provide recreation and public access near creeks consistent with other General Plan policies;

e. Use design, construction, and maintenance techniques that ensure development near a creek will not cause or worsen natural hazards (such as erosion, sedimentation, flooding, or water pollution) and will include erosion and sediment control practices such as: 1) turbidity screens and other management practices, which shall be used as necessary to minimize siltation, sedimentation, and erosion, and shall be left in place until disturbed areas; and/or are stabilized with permanent vegetation that will prevent the transport of sediment off site; and 2) temporary vegetation sufficient to stabilize disturbed areas.
f. Provide for long-term creek corridor maintenance by providing a guaranteed financial commitment to the County which accounts for all anticipated activities.

Policy 6.A.5 The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff and to encourage the use of BMPs for agricultural activities.

Policy 6.A.7 The County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.

Goal 8.B To minimize the risk of loss of life, injury, damage to property, and economic and social dislocations resulting from flood hazards.

Dry Creek-West Placer Community Plan

The following goals and policies from the Community Development and Environmental Resources Management Elements of the DCWPCP related to hydrology and water quality are applicable to the proposed project:

Community Development Element: Land Use

Policy 25 Continue to implement zoning policies which minimize potential loss of property and threat to human life caused by flooding and prohibit the creation of new building sites within the floodplain.

Policy 29 Review proposed developments for their potential adverse affect on air and water quality.

Policy 30 Encourage application of measures to mitigate erosion and water pollution from earth disturbing activities such as grading and road construction.

Community Development Element: Public Services

Goal — Flood Control: Protect the lives and property of the citizens of the Dry Creek West Placer area from unacceptable impacts from development in the Dry Creek drainage basin or other watershed in the Plan Area.

Policy 2 — Evaluate potential flood hazards in an area prior to approval of any future development by requiring submittal of accurate topographic information and depiction of the 100-year floodplain boundaries.

Policy 4 — Maintain natural conditions within the 100-year floodplain of all streams except where work is required to maintain the stream's drainage characteristics and where such work is done in accordance with the Placer County Flood Damage Prevention Ordinance, Department of Fish and Game regulations and Clean Water Act provisions administered by the U.S. Army Corps of Engineers, or when facilities for the treatment of urban runoff can be located in the floodplain providing that there is no destruction of riparian vegetation.

Policy 5 — Designate the 100-year floodplain of Dry Creek, including the major tributaries as open space, and provide for some compatible use of these areas in order to encourage their preservation.

Policy 9 — Provide storm drains which can collect water for appropriate conveyance to Dry Creek for developing areas with a higher density than Rural-Residential.

Policy 11 — Require a water quality analysis for all projects which have a density in excess of one unit per acre and/or have the potential of contaminating surface waters or the aquifer.

Policy 12 — Require a feasibility analysis of improving the water quality of urban run-off for all commercial and industrial projects and those residential projects with densities of 1 d.u./acre or greater before run-off enters the Dry Creek watercourse. Said analysis shall consider all feasible mitigation measures including, but not limited to, artificial wetlands, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, or other effective means, where appropriate.

Policy 13 — Require the allocation of land, when necessary, for all projects which have significant impacts on the quantity and quality of surface water runoff, for the purpose of detaining post project flows and/or for the incorporation of mitigation measures for water quality impacts related to urban runoff.

Policy 14 — Identify and coordinate mitigation measures with responsible agencies for the control of storm sewers, monitoring of discharges and implementation of measures to control pollutant loads in urban

storm water runoff (e.g., California Regional Water Quality Control Board, Placer County Division of Environmental Health, Placer County Department of Public Works, etc.).

Environmental Resources Management: Natural Resources

Goal 3 Manage the groundwater resource in such a way as to protect it from degradation and to maintain the water table.

Goal 4 Safeguard and maintain natural waterways to ensure water quality, species diversity, and unique habitat preservation.

- Policy 2 Preserve in their natural condition all stream environment zones, including floodplains, and riparian vegetation areas.
- Policy 3 Seek to maintain or improve the quality of water in the major creeks, especially Dry Creek and its tributaries.
- Policy 4 Make every attempt to maintain the existing high quality of the groundwater and preserve aquifer recharge areas.
- Policy 10 Improve water quality in the aquifer and the Dry Creek watershed by eliminating existing water pollution sources and by discouraging activities which include the use of hazardous materials around wetland and recharge areas.
- Policy 25 Intermittent streams often become permanent streams concurrent with the development of an area. Therefore, these waterways shall be protected from land development activities which have a potential for detrimental impacts (e.g., grading, channelization, etc.).

NPDES Small Municipal Separate Storm Sewer System (MS4) General Permit

The NPDES Municipal Stormwater Permitting Program regulates stormwater discharges from separate storm sewer systems. NPDES Municipal Stormwater Permits are issued in two phases. Phase I regulates stormwater discharges from large- and medium-sized municipal separate storm sewer systems (those serving more than 100,000 persons). Most Phase I permits are issued to a group of co-permittees encompassing an entire metropolitan area. Phase II provides coverage for smaller municipalities, including nontraditional small storm sewer systems, which include governmental facilities such as military bases, public campuses, and prison and hospital complexes. The NPDES Municipal Stormwater Permits require the discharger to develop and implement a Stormwater Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable.

The CVRWQCB issued the NPDES General Permit No. CAS000004 Waste Discharge Requirements for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems, which became effective on July 1, 2013. An “MS4” is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) designed or used for collecting or conveying stormwater;

(ii) which is not a combined sewer; and (iii) which is not part of a Publicly Owned Treatment Works (POTW). Both Placer County and the City of Roseville are Phase II MS4 permittees. Projects subject to the requirements of the Phase II MS4 NPDES permit must submit the appropriate Post-Construction Stormwater Plan based on the project type/development category. Regulated Projects include projects that create or replace 5,000 sf or more of impervious surface. Regulated Projects that create and/or replace one or more acres of impervious surface are considered regulated hydromodification management projects. The proposed project would create more than one acre of impervious area, and, thus, is considered a Regulated Hydromodification Management Project subject to Phase II MS4 NPDES permit post-construction stormwater treatment requirements.

Regulated Projects are required to divide the project area into Drainage Management Areas (DMAs) and implement and direct water to appropriately-sized Site Design Measures (SDMs) and Baseline Hydromodification Measures to each DMA to the Maximum Extent Practicable (MEP). Regulated Projects must additionally include Source Control Best Management Practices (BMPs) where possible. SDMs and Baseline Hydromodification Measures include, but are not limited to:

- Rooftop and impervious area disconnection;
- Porous pavement;
- Rain barrels and cisterns;
- Vegetated swales;
- Bio-retention facilities;
- Green roofs; or
- Other equivalent measures.

A detailed description of the requirements for Regulated Hydromodification Management Projects, such as the proposed project, is included in the *West Placer Storm Water Quality Design Manual.*[16]

Placer County Flood Control and Water Conservation District

Formed by SB 1312, the Placer County Flood Control and Water Conservation District (PCFCWCD) is responsible for regional strategies for flood control management. A Stormwater Management Manual (SWMM) was developed by the PCFCWCD to relate the policies, guidelines, and specific criteria for evaluating hydrologic conditions associated with new development projects. In 2011, the PCFCWCD published the *Update to the Dry Creek Watershed Flood Control Plan*, which identifies potential flooding issues associated with the Dry Creek Watershed and provides recommendations for feasible means to reduce future flood damages.[17]

Placer County Land Development Manual

Section 5 of the Placer County Land Development Manual (1996) provides supplemental design considerations for drainage facilities, and includes specific criteria used for preparation of drainage reports identical to those in the SWMM (as described above under Placer County Flood Control and Water Conservation District). The Land Development Manual states that in case of conflict with the SWMM, the most stringent requirement shall apply. The Land Development

[16] Placer County, City of Roseville, City of Lincoln, City of Auburn, Town of Loomis. *West Placer Storm Water Quality Design Manual.* April 2016.

[17] Placer County Flood Control and Water Conservation District. *Update to the Dry Creek Watershed Flood Control Plan.* November 2011.

Manual also contains general information with regard to erosion control and BMPs for stormwater drainage.

Placer County Code

Chapter 15, Building and Development, of the Placer County Code includes ordinances associated with hydrology and water quality. The applicable ordinances are discussed in further detail below.

Stormwater Quality Ordinance

Article 8.28, Stormwater Quality Ordinance, is intended to ensure that Placer County is compliant with State and federal laws related to stormwater quality by enhancing and protecting the quality of waters of the State in Placer County through reducing pollutants in stormwater discharges to the maximum extent practicable and controlling non-stormwater discharges to the storm drain system. The Stormwater Quality Ordinance requires the use of BMPs to reduce adverse effects of polluted runoff discharges on waters of the State, and prohibits illicit discharges to the storm drain system. The Stormwater Quality Ordinance establishes the County's authority to adopt requirements for stormwater management, including source control requirements, to reduce pollution to the maximum extent practicable; requirements for development projects to reduce stormwater pollution and erosion both during construction and after the project is complete; and enable the County to implement and enforce any stormwater management plan adopted by the County.

Grading, Erosion and Sediment Control Ordinance

Article 15.48, Grading, Erosion and Sediment Control Ordinance, of the Placer County Code regulates grading on property within the unincorporated area of Placer County in order to safeguard life, limb, health, property and public welfare; to avoid pollution of watercourses with hazardous materials, nutrients, sediments, or other earthen materials generated on or caused by surface runoff on or across the permit area; and to ensure that the intended use of a graded site is consistent with the Placer County General Plan, any specific plans adopted thereto and applicable Placer County ordinances including the Zoning Ordinance, Flood Damage Prevention Ordinance (Article 15.52 of the Placer County Code), Environmental Review Ordinance (Chapter 18 of the Placer County Code), and applicable chapters of the California Building Code. In the event of conflict between applicable chapters and Article 15.48, the most restrictive shall prevail. Part 6 of Article 15.48 sets forth design standards for grading activities such as excavation, slopes, fill soil, setbacks, and drainage.

Dry Creek Watershed Drainage Improvement Zone Ordinance

The Dry Creek Watershed Drainage Improvement Zone Ordinance (Article 15.32 of the Placer County Code) establishes a drainage improvement zone for the Dry Creek watershed. In addition, the Ordinance requires the payment of specified fees and annual assessments as a condition of new development within the watershed area; such fees and assessments are used for the installation and maintenance of roadway drainage and stormwater drainage improvements. Mitigation fees are required for new development, and the expansion of existing development, within portions of the Dry Creek watershed that impose a burden on the creeks and drainage infrastructure within the watershed by adding additional impervious surface and accelerating runoff, thereby increasing discharge rates.

Flood Damage Prevention Ordinance

Article 15.52, Flood Damage Prevention Ordinance, is intended to minimize public and private losses due to flood conditions in specific areas by provisions designed to protect human life and health; minimize the need for rescue and relief efforts associated with flooding; minimize prolonged business interruptions; minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard; provide for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas; ensure that potential buyers are notified that property is in an area of special flood hazard; and ensure that those who occupy areas of special flood hazard assume responsibility for their actions. The Flood Damage Prevention Ordinance provides methods for reducing flood losses, and sets forth standards for construction in all areas of special flood hazards.

10.4 IMPACTS AND MITIGATION MEASURES

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

Standards of Significance

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

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality;
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;
    - 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 either during construction or in the post-construction condition; or
    - Impede or redirect flood flows;
- Place housing or improvements within a 100-year flood hazard area either as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map which would:
    - Impede or redirect flood flows;
    - Expose people or structures to risk of loss, injury or death involving flooding; or
    - risk release of pollutants due to project inundation; and/or
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The proposed project's impacts associated with erosion or siltation on- or off-site are discussed in Chapter 8, Geology and Soils, of this EIR.

Method of Analysis

The impacts analysis for this chapter is based primarily on the Preliminary Drainage Study & Stormwater Quality Plan prepared for the proposed project by RFE. The Drainage Report included hydrologic modeling for the proposed project (both pre-project and post-project conditions) using the HEC computer program. In particular, RFE used a combination of the HEC Hydrologic Modeling System (HEC-HMS) and HEC River Analysis System (HEC-RAS) software. The HEC-HMS was used to calculate peak flows for individual drainage sheds for the pre-construction and post-construction conditions. The 10-, 25-, 50-, 100- and 500-year frequency storm events were analyzed.

Using the peak flows from each shed calculated through the HEC-HMS software, RFE created a HEC-RAS model of the Dry Creek Vineyard Road tributary and added the HEC-HMS hydrographs to the HEC-RAS model as lateral inflows. The HEC-RAS model relied on light detection and ranging (LiDAR) remote sensing topographical data provided to RFE by the County to model cross-cut sections of the Dry Creek Vineyard Road tributary. The LiDAR data allowed RFE to model cross sections of the Dry Creek Vineyard Road tributary every 100 feet from the beginning of the open channel, east of Brady Lane, to the tributary's confluence with Dry Creek. Downstream conditions at the tributary's confluence with Dry Creek were modeled under two conditions. Under the first condition, the downstream boundary condition was set to a normal depth based on a flat 0.001 slope to represent the existing conditions. Based on comments from the County, RFE modeled a second scenario, which created duplicate unsteady flow data with downstream boundary conditions set to a constant-elevation stage hydrograph, where the elevation was set to 114-feet to represent the Dry Creek Base Flood Elevation (BFE) at the confluence of the tributary and Dry Creek. The BFE Scenario was modeled according to a pending FEMA Flood Insurance Study and revised floodplain mapping. The BFE Scenario provides a conservative analysis by assuming that Dry Creek has reached BFE prior to peak flow inputs from the project.

In addition to the two scenarios related to downstream boundary conditions, RFE analyzed potential impacts under two improvement scenarios for the widening of Vineyard Road. Scenario 1 included the placement of approximately 500 cubic yards (CY) of fill added to the west property line shared with APN 473-020-001 – representing the proposed Vineyard Road widening. Scenario 2 included placement of approximately 700 CY fill added including through the neighboring parcel (APN 473-020-001), and to the west property line of the not a part of this subdivision (NAPOTS) portion of the project parcel, which is shared with APN 474-070-015 – representing Vineyard Road's ultimate widening condition. Only one cross section – tributary station 7492.13 – in the HEC-RAS model changed as a result of the two foregoing fill conditions. Results of the HEC-RAS modeling for the two fill conditions were compared to modeling results representing 100-year flow conditions, post-construction without fill, under the Dry Creek BFE boundary condition.

Furthermore, RFE performed a floodplain analysis by comparing the outputs of the HEC-RAS model with the floodplain limits from the pending FEMA Flood Insurance Study. To prepare the Flood Model Exhibits in Appendix B of the Preliminary Drainage Study & Stormwater Quality Plan, RFE combined the outputs of the more precise HEC-RAS model with the floodplain limits from the pending FEMA Flood Insurance Study to create a worst-case map of floodplains. However, as noted in the addendum to the Preliminary Drainage Study prepared by RFE on October 25,

2019, upon reevaluation of the methods implemented in preparation of the figures included in Appendix B of the Preliminary Drainage Study, RFE concluded that including only WSEs from their HEC-RAS model would provide a more accurate depiction of the potential flood plains. Consequently, the analysis within this chapter, and the figures presented herein, rely on outputs solely from the HEC-RAS model. Thus, for the project-level analysis presented in this Chapter, the floodplain elevation figures presented in this Chapter originate from the addendum to the Preliminary Drainage Study.

RFE assumed that development of the project site would include development of each residential lot with an overlay of approximately 65 percent impervious surfaces, in addition to the impervious roads. Although RFE included this assumption in their model, the actual impervious surface coverage of each lot may be less, depending on whether the proposed residences are one- or two-stories, include more than the typical amount of concrete patios, etc.

It should be noted that in addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order to meet the County's affordable housing requirements. However, the total number of proposed residential lots, as well as the overall disturbance area associated with the project, would remain unchanged and the overall amount of impervious surfaces would not be anticipated to be substantially different than what was analyzed by RFE. Therefore, the potential inclusion of additional Accessory Dwelling Units on-site would not result in new impacts or substantially more severe impacts beyond the analysis presented herein.

The County has reviewed the technical analysis prepared for the proposed project and preliminarily concurs with the methodology applied by RFE, as well as the conclusions provided therein.

Cumulative Analysis

To analyze potential impacts related to implementation of the proposed project in the cumulative scenario, RFE prepared a supplemental report that estimated future conditions in the Dry Creek Vineyard Road tributary drainage shed. Future conditions in the drainage shed were estimated by adjusting the HEC-RAS modeling used for the project-level analysis to reflect potential future development in the surrounding area. Potential future development of the area was based on average development densities derived from existing zoning for parcels within the drainage shed, after accounting for the amount of existing development in each drainage shed. Based on the average development densities, model parameters, such as the percent of impervious surfaces in each drainage shed, were updated. The existing zoning designations for areas within the drainage shed provide the most accurate estimation of future development within the drainage shed area. The specific assumptions used by RFE are presented in the supplemental report included as part of Appendix I to this EIR.

For the cumulative analysis RFE used the Dry Creek BFE as a constant downstream boundary condition. As discussed above, the use of the Dry Creek BFE as a constant downstream boundary condition represents a worst-case scenario, and the water surface elevations (WSE) results should represent a conservative scenario when compared to actual realistic conditions under a 100-year storm event. Because use of the Dry Creek BFE was assumed to represent a conservative, but realistic, downstream condition, RFE only modeled downstream cumulative

conditions under the single BFE scenario (unlike the project-level analysis, which evaluated both a BFE scenario and a normal depth condition).

Project Impacts and Mitigation Measures

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

10-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Construction of the proposed project would include grading, excavation, trenching for utilities, and other construction-related activities that could cause soil erosion at an accelerated rate during storm events. In addition, soil would be disturbed during construction of the proposed widening of Vineyard Road and Brady Lane, as well as during construction of the proposed sewer line in Vineyard Road to Foothills Boulevard. All such activities have the potential to affect water quality and contribute to localized violations of water quality standards if impacted stormwater runoff from construction activities enters the Dry Creek Vineyard Road tributary, which eventually drains to Dry Creek.

Soils exposed by the aforementioned types of construction activities have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. Discharge of polluted stormwater or non-stormwater runoff could violate waste discharge requirements. However, in general, impacts from construction-related activities would generally be short-term and of limited duration.

Because the proposed project would require construction activities that would result in a land disturbance of approximately 30 acres (greater than one acre), the project applicant would be required by the State to comply with the most current Construction General Permit requirements. Per the requirements, a SWPPP would be prepared for the overall project, which would include the site map, drainage patterns and stormwater collection and discharge points, BMPs, and a monitoring and reporting framework for implementation of BMPs, as necessary. In addition, a Notice of Intent (NOI) would be filed with RWQCB.

As discussed in further depth in Chapter 8, Geology and Soils, of this EIR, the proposed project would be subject to State guidelines, Articles 8.28 and 15.48 of the Placer County Code, and Policy 6.A.5 of the Placer County General Plan, which require project implementation of BMPs designed to control erosion and other non-stormwater

management and materials management BMPs. Implementation of BMPs to control erosion, and thus sediment related pollution, is further mandated by Mitigation Measures 8-2(a) through 8-2(d) within Chapter 8 of this EIR.

Non-stormwater management and material management controls reduce non-sediment-related pollutants from potentially leaving the construction site to the extent practicable. The Construction General Permit prohibits the discharge of materials other than stormwater and authorized non-stormwater discharges (such as irrigation and pipe flushing and testing). Non-stormwater BMPs tend to be management practices with the purpose of preventing stormwater from coming into contact with potential pollutants. Examples of non-stormwater BMPs include preventing illicit discharges, and implementing good practices for vehicle and equipment maintenance, cleaning, and fueling operations, such as using drip pans under vehicles. Waste and materials management BMPs include implementing practices and procedures to prevent pollution from materials used on construction sites. Examples of materials management BMPs include the following:

- Good housekeeping activities such as storing of materials covered and elevated off the ground, in a central location;
- Securely locating portable toilets away from the storm drainage system and performing routine maintenance;
- Providing a central location for concrete washout and performing routine maintenance;
- Providing several dumpsters and trash cans throughout the construction site for litter/floatable management; and
- Covering and/or containing stockpiled materials and overall good housekeeping on the site.

While the final materials management BMPs to be used during construction of the proposed project are currently unknown, the project would likely include a combination of the BMP examples listed above. Final BMPs for the proposed project construction would be chosen in consultation with the applicable California Stormwater Quality Association Stormwater BMP Handbooks and implemented by the project contractor.

In accordance with the Construction General Permit, the project site would also be inspected during construction before and after storm events and every 24 hours during extended storm events in order to identify maintenance requirements for the implemented BMPs and to determine the effectiveness of the implemented BMPs. As a “living document”, the site-specific SWPPP that would be prepared for the proposed project would be modified as construction activities progress. A Qualified SWPPP Practitioner (QSP) would ensure compliance with the SWPPP through regular monitoring and visual inspections during construction activities. The QSP for the project would amend the SWPPP and revise project BMPs, as determined necessary through field inspections, to protect against substantial erosion or siltation on- or off-site.

Compliance with the State NPDES Construction General Permit and Article 8.28 and 15.48 of the Placer County Code, as described above and required by Mitigation Measures 8-2(a) through 8-2(d) within this EIR, would minimize the potential degradation of stormwater quality and downstream surface water associated with construction of the proposed project. In addition, BMPs would be required to be designed in accordance with

the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction and for New Development/Redevelopment (or other similar source as approved by the Engineering and Surveying Division). Therefore, with implementation of the following mitigation measures, the proposed project would avoid a ***significant*** impact related to short-term construction-related water quality.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

10-1 Implement Mitigation Measures 8-2(a) through 8-2(d).

10-2 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Development of the proposed project would result in the conversion of a rural area to single-family residential uses and associated amenities, such as parks and landscaping. Such new land uses could result in new stormwater pollutants being introduced to the project area. Pollutants associated with the operational phase of the proposed project could include nutrients, oil and grease, metals, organics, pesticides, bacteria, sediment, trash, and other debris. Nutrients that could be present in post-construction stormwater include nitrogen and phosphorous resulting from fertilizers applied to landscaping. Excess nutrients could affect water quality by promoting excessive and/or a rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides, which are toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish, can potentially enter stormwater after application to landscaped areas within the project site. Oil and grease could enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals could enter stormwater as surfaces corrode, decay, or leach. Clippings associated with landscape maintenance and street litter could be carried into storm drainage systems. Pathogens (from pets, wildlife, and human activities) have the potential to affect downstream water quality.

Development of the proposed project could also increase polluted non-stormwater runoff (e.g., car wash water, other wash water, and landscape irrigation runoff). Such non-stormwater runoff could flow down sidewalks, parking areas, and streets, and pick up additional pollutants deposited on impervious surfaces prior to discharge into the storm drain system and surface waters. Discharge of polluted stormwater or non-stormwater runoff could violate waste discharge requirements.

Phase II MS4 Permit Requirements

As discussed previously, the proposed project is located within the permit area covered by Placer County's MS4 Permit (NPDES General Permit No. CAS000004, Order No. 2013-0001-DWQ), pursuant to the NPDES Phase II program. Project-related stormwater discharges are subject to all applicable requirements of said permit. Specifically, as noted above, regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately-sized SDMs and Baseline Hydromodification Measures

to each DMA. Source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and must be shown on the Improvement Plans. Additional details related to hydromodification management requirements associated with the Phase II MS4 permit are discussed under Impact 10-4 below.

Proposed Storm Drain System

Per the Preliminary Drainage Study & Stormwater Quality Plan prepared for the proposed project, the proposed project would include an on-site storm drain system composed of the following Low Impact Development (LID) components: downspout disconnection and bio-retention planters. Consistent with MS4 permit requirements and the *West Placer Storm Water Quality Design Manual*, the proposed project site would be divided into 20 DMAs. The 20 DMAs include the on-site portion of the Dry Creek Vineyard Road tributary and all areas of the site east of the Dry Creek Vineyard Road tributary. However, because the portion of the project site to the west of the Dry Creek Vineyard Road tributary would not be disturbed as part of the project, the area to the west of the Dry Creek Vineyard Road tributary was not divided into any additional DMAs.

Impervious surfaces proposed as part of the project include building roofs, driveways, and roadways. RFE assumed that each residential lot would be graded to allow drainage to flow to the front of the lot without the use of subdrains. Due to the anticipated grading of each lot, downspouts from the proposed residences can be disconnected from the underground drainage system, which would allow stormwater falling on proposed structures to flow overland through the lots before reaching bio-retention planters, street curbs, or gutters. Overland flow of stormwater across the lots would allow infiltration of stormwater into the ground within the lots, and the remaining stormwater will be directed into bio-retention planters located adjacent to the proposed internal roadways, as shown in Figure 10-3.

SWQPs prepared for proposed projects should specify source control measures to be implemented for each potential pollutant-generating activity or source present on the proposed project site. The source control measures may include, but are not limited to, measures related to proper storage of all project materials, use of environmentally-friendly materials for indoor and structural pest control, and compliance with manufacturer recommendations and regulations related to pesticide use. The source control measures should be designed consistent with the recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment, or from another equivalent manual. The source control measures included in the proposed project are discussed below.

RFE calculated that approximately 65 percent of each lot would consist of impervious surfaces with the remaining 35 percent consisting of pervious surfaces, such as landscaping and turf. The *West Placer Storm Water Quality Design Manual* allows for the provision of impervious to pervious surfaces on a project site at a ratio of 2:1 as a site design measure. Thus, the disconnection of downspouts within residential lots and the provision of 35 percent of each lot in pervious surfaces meets the impervious to pervious ratio and is considered a site design measure.

Additionally, stormwater falling on proposed roadways would be directed to bio-retention planters. Bio-retention planters on-site would be composed of a mulch layer above approximately 18 inches of sandy loam material with a minimum infiltration rate of five inches per hour, with six inches of permeable material underlying the sandy loam material. A perforated underdrain, clean out, and planter overflow structure would be built into each bio-retention planter. The underdrain and planter overflow would connect to proposed underground stormwater drainage infrastructure, which would be composed of 12, 15, and 24-inch storm drain pipes within proposed internal roadways. The proposed storm drain pipes would outfall into the Dry Creek Vineyard Road tributary. As shown in Figure 10-3, most of the bio-retention planters would be located at intersections of the proposed internal street network. Stormwater that overflows the bio-retention planters or flows through the bio-retention planters would enter the proposed on-site underground storm drainage system.

The proposed bio-retention planters would be sized to treat the first flush, which includes a majority of the larger pollutants (sand, soil, silt, grease and trash) as well as smaller pollutants (sediment, nutrient, metals, pesticides and organics). Thus, project runoff entering the Dry Creek Vineyard Road tributary would be properly treated, and would not pollute downstream waterways.

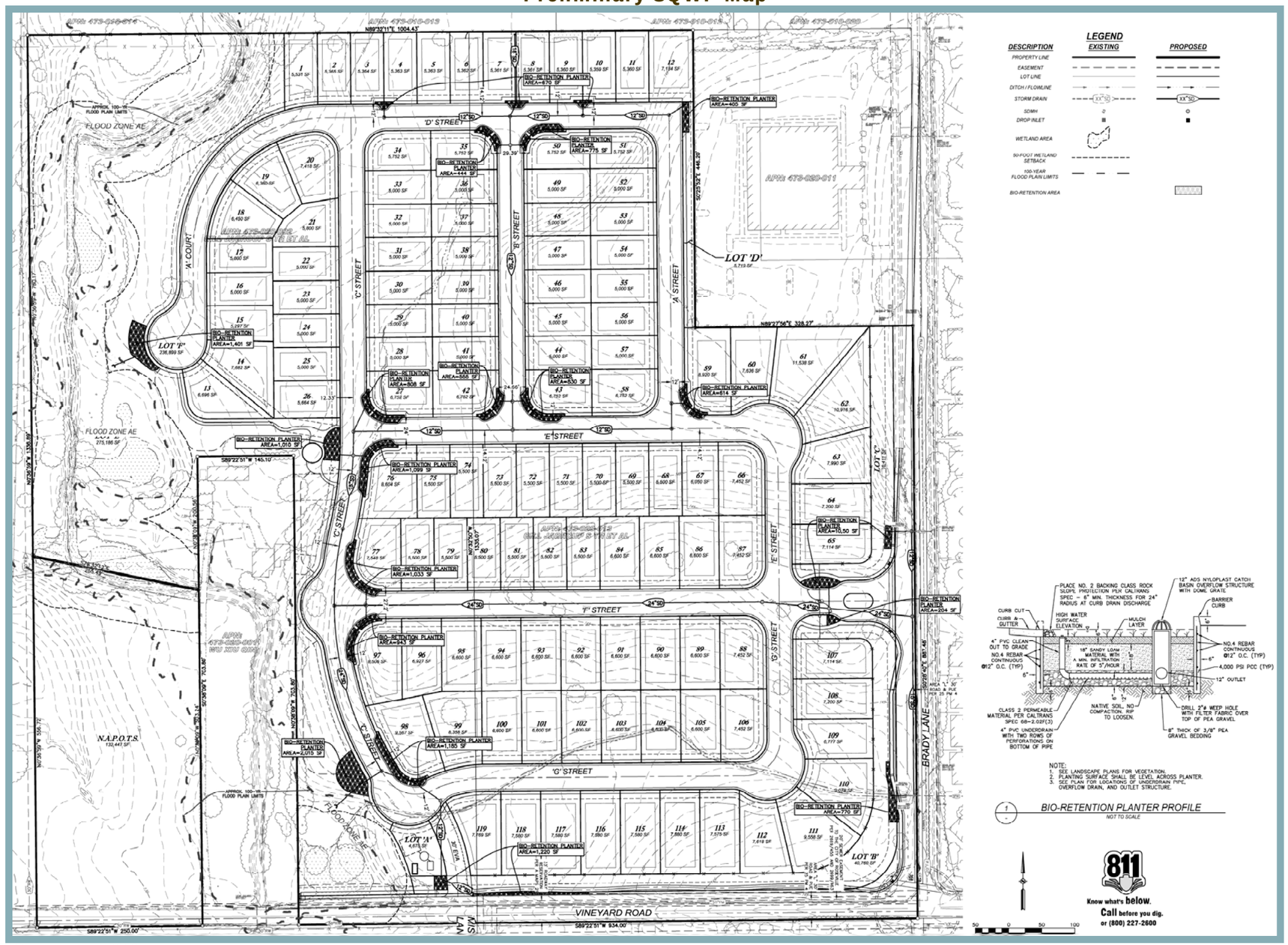
Maintenance and Inspection

In order to ensure continued operation of the proposed bio-retention planters, the SWQP must include detailed, site-specific inspection and maintenance procedures to be implemented by the project applicant. For example, plants and vegetation within the bio-retention planters should be inspected monthly, and the basins should be inspected for the presence of standing water 72 hours after rain events. Required maintenance activity should include, but not necessarily be limited to, removal of debris from bio-retention planters and removal of debris from outlets of bio-retention planters. Without implementation of such measures, the bio-retention planters could fail to ensure that polluted runoff would not enter downstream water bodies during the continued operation of the project.

Conclusion

Based on the above, the proposed project includes site design measures to ensure that stormwater runoff is properly treated prior to discharge to the Dry Creek Vineyard Road tributary. Thus, urban pollutants entering and potentially degrading local water quality would not be expected to occur as a result of the project. However, because a final SWQP has not been prepared, ongoing maintenance of the proposed bio-retention planters and the incorporation of proper source control measures cannot be ensured. Should the project applicant fail to prepare and implement such documentation, the proposed project could result in a ***significant*** impact related to a violation of water quality standards or waste discharge requirements or otherwise substantial degradation of surface or ground water quality during operations.

Figure 10-3
Preliminary SQWP Map



Source: RFE, 2019.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

10-2(a) *Implement Mitigation Measure 8-2(a), 8-2(c), and 8-2(d).*

10-2(b) *The Improvement Plans shall include the message details, placement, and locations showing that all storm drain inlets and bio-retention planters within the project area shall be permanently marked/embossed with prohibitive language such as "No Dumping! Flows to Creek." or other language and/or graphical icons to discourage illegal dumping as approved by the Engineering and Surveying Division (ESD). ESD-approved signs and prohibitive language and/or graphical icons, which prohibit illegal dumping, shall be posted at public access points along channels and creeks within the project area. The Property Owners' association is responsible for maintaining the legibility of stamped messages and signs.*

10-2(c) *This project is located within the permit area covered by Placer County's Small Municipal Separate Storm Sewer System (MS4) Permit (State Water Resources Control Board National Pollutant Discharge Elimination System (NPDES)). Project-related storm water discharges are subject to all applicable requirements of said permit.*

The project shall implement permanent and operational source control measures as applicable. Source control measures shall be designed for pollutant generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and shall be shown on the Improvement Plans.

The project is also required to implement Low Impact Development (LID) standards designed to reduce runoff, treat storm water, and provide baseline hydromodification management as outlined in the West Placer Storm Water Quality Design Manual.

10-2(d) *Per the State of California NPDES Phase II MS4 Permit, this project is a Regulated Project that creates and/or replaces 5,000 square feet or more of impervious surface. A final Stormwater Quality Plan (SWQP) shall be submitted, either within the final Drainage Report or as a separate document that identifies how this project will meet the Phase II MS4 permit obligations. Site design measures, source control measures, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the Improvement Plans. In addition, per the Phase II MS4 permit, projects creating and/or replacing one acre or more of impervious surface are also required to demonstrate hydromodification management of stormwater such that post-project runoff is maintained to equal or below pre-project flow rates for the 2 year, 24-hour storm event, generally by way of infiltration, rooftop and impervious area disconnection,*

bio-retention, and other LID measures that result in post-project flows that mimic pre-project conditions.

10-3 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Based on the analysis below, the impact is *less than significant*.

The proposed project would result in an increase in on-site impervious surfaces, which would reduce the infiltration of groundwater as compared to existing conditions. Groundwater relies on annual rainfall and percolation through pervious soils to recharge the system. As discussed in the Geology and Soils Chapter of this EIR, the predominant soils within the project site are of the Ramona and Cometa series. The Ramona series is characterized as a Group C hydrologic soil, with slow infiltration rates and soil layers that may impede the downward movement of water. The Cometa series is characterized as Group D, which exhibits very slow infiltration rates. Because the majority of the site is characterized by soils in Group C or D, the project site would not be considered an important groundwater recharge area protected by Policy 6.A.10b of the Placer County General Plan. Furthermore, the proposed project would not include any development within the channel of the Dry Creek Vineyard Road tributary; thus, infiltration of water moving through the tributary would continue to occur and contribute to groundwater recharge.

Given the limited recharge potential of the portion of the project site that would be developed with impervious surfaces, the proposed project would not interfere substantially with groundwater recharge. Furthermore, the groundwater subbasin within which the project site is located is not currently in a state of overdraft. As further discussed in Chapter 15, Utilities and Service Systems, of this EIR, the water supply for the proposed project would not be derived from groundwater sources. Considering that the project site is not considered an important groundwater recharge area, stormwater from the project site would continue to replenish groundwater through percolation into soils within the Dry Creek Vineyard Road tributary, and that the project would not involve increased demand on groundwater supplies within an area in a state of overdraft, the proposed project would not create a conflict with, or impede the implementation of, a sustainable groundwater plan. Thus, impacts related to groundwater would be ***less than significant***.

Mitigation Measure(s)

None required.

10-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff either during construction or in the post-construction condition. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The only impervious surfaces that currently exist within the project site are those related to Brady Lane and Vineyard Road. Implementation of the proposed project would result in an increased amount of impervious surfaces related to roofs, driveways, and roadways, including improvements to Brady Lane and Vineyard Road. As such, the project has the potential to substantially alter the existing drainage pattern of the site and increase runoff water.

It should be noted that the potential for the proposed project to result in substantial additional sources of polluted runoff, including erosion, is addressed under Impacts 10-1 and 10-2 above. Further discussion regarding erosion is provided in Chapter 8, Geology and Soils, of this EIR.

Peak Flows and Volumes

Increases to peak runoff flows or volumes resulting from alterations to the existing drainage pattern of the site have the potential to result in exceedance of existing or planned stormwater drainage systems or flooding on- or off-site.

The design of the project divides the site into 20 DMAs where development would occur. Within the DMAs that encompass areas of the site proposed for residential development, site grading would direct stormwater runoff overland to the curb and gutter linings proposed for all on-site streets. The proposed curbs and gutters would convey runoff to the bio-retention planters shown in Figure 10-3.

Runoff from Vineyard Road would be collected along a proposed dike and conveyed and directed to a bio-retention planter near Lot A. Currently, a portion of the runoff from Brady Lane is collected by an existing curb and gutter system and flows into an underground pipe system that discharges onto the project site. The proposed project would include extension of the curb and gutter system along Brady Lane to the intersection of Brady Lane and Vineyard Road. Runoff from the east side of Brady Lane would continue to be captured in the existing underground drain system, which would be routed to connect to the proposed underground storm drain system within the project site. Runoff from the westside of Brady Lane would be collected in proposed bio-retention planters near the project entrances on Brady Lane.

Runoff from the entire project site and portions of Vineyard Road and Brady Lane that percolates through the bio-retention planters, or that enters the proposed overflows during

larger storm events, would be directed into the underground storm drain system and conveyed to the discharge point at the southwest corner of the proposed subdivision. The inclusion of overflows in the bio-retention planters would ensure that the proposed changes in site drainage patterns would not result in on-site flooding. The discharge point would direct all stormwater into the Dry Creek Vineyard Road tributary.

To assess the changes in runoff volumes from the project site that could occur due to the proposed project, RFE calculated the pre- and post-construction peak flow volumes for on-site drainage sheds. Pre- and post-construction peak flows are presented in Table 10-3 below.

Table 10-3
Peak Flow Characteristics: Pre- and Post-Construction Peak Flows (cubic feet per second)

Drainage Shed	10-Year Peak Flow	25-Year Peak Flow	50-Year Peak Flow	100-Year Peak Flow	500-Year Peak Flow
Pre-Construction					
DC25F-onsite	2.1	2.8	3.5	4.0	5.9
DC25L-onsite	7.2	10.3	12.9	14.8	22.5
DC25N-onsite	0.8	1.1	1.4	1.8	2.6
Post-Construction					
DC25F-onsite	4.6	6.2	7.6	9.0	12.6
DC25L-onsite	28.6	37.8	44.8	51.8	72.4
DC25N-onsite	3.1	4.2	5.1	5.9	8.4

Source: RFE, 2019.

As shown in Table 10-3, implementation of the proposed project would result in increased peak flows from all on-site drainage sheds under the 10-, 25-, 50-, 100-, and 500-year frequency storm events.

Per the County's Phase II MS4 permit, hydromodification management projects, such as the proposed project, are typically required to demonstrate hydromodification management of stormwater such that post-project runoff is maintained equal to or below pre-project flow rates for the 2-year, 24-hour storm event, generally by way of infiltration, rooftop and impervious area disconnection, bio-retention, or other LID measures that result in post-project flows that mimic pre-project conditions. However, the Dry Creek Watershed Flood Control Plan notes that the use of local detention basins to limit peak runoff has the potential to result in higher overall peak flows within Dry Creek, which could result in off-site flooding.[18] Specifically, detaining flows in the lower portion of the Dry Creek Watershed, within which the project site is located, could delay the time when the peak flow in lower portions of the Dry Creek Watershed occurs such that the peak flow would coincide with the arrival of peak flows from the upper portion of the watershed. Based on calculations completed by RFE, in the absence of detention basins, peak flow from the proposed on-site development would not coincide with peak flows from the upstream Dry Creek Vineyard Road tributary as a whole. Therefore, while inclusion of on-site detention could reduce increased peak flows from the project site, on-site detention

[18] Placer County Flood Control and Water Conservation District. *Update to the Dry Creek Watershed Flood Control Plan* [pg. 66]. November 2011.

would have the potential to increase flooding hazards and conflict with the Dry Creek Watershed Flood Control Plan.

Considering the above, and the recommendations of the Dry Creek Watershed Flood Control Plan, the proposed project does not include on-site detention basins that could otherwise lower the post-project rate of runoff equal to or below pre-project flow rates.

Nonetheless, the proposed project would be required to comply with Placer County's Dry Creek Watershed Drainage Improvement Ordinance, which requires new development that increases impervious surface areas within the Dry Creek Watershed to pay fees to fund regional flood control and future drainage improvement projects within the watershed. District flood control projects include the Miners Ravine Off-Chanel Detention Basin and Antelope Creek Flood Control Project. These regional flood control projects were constructed to mitigate for increased runoff associated with development within the Dry Creek watershed. The fees include a one-time fee that is paid prior to start of construction and an annual fee that is included in the parcel's property tax.

Downstream Conveyance Capacity

RFE analyzed the potential for the proposed project to result in impacts related to increased flow and altered WSE within the Dry Creek Vineyard Road tributary upstream and downstream from the project site. Table 10-4 presents the analysis for increased flow, measured in cubic feet per second (cfs), and altered WSE, measured in feet (ft), under the two boundary condition modeling scenarios discussed in the Method of Analysis section above. Each tributary station in Table 10-4 represents a stream cross section.

Under both downstream boundary conditions, RFE determined that the proposed project would result in an approximately seven cfs increase in overall peak flow in the Dry Creek Vineyard Road tributary just downstream of the Vineyard Road culvert (tributary station 7446.46) during the 100-year storm event. The incremental increase in peak flow grows from seven cfs at station 7446.46 to approximately 14 cfs downstream of tributary station 5553.77 is due to converging peak flows from sheds DC25H and DC25I, which are shown in Figure 10-2. Tributary station 5553.77 is located immediately downstream of another small drainage that converges with the Dry Creek Vineyard Road tributary.

Considering the timing of peak flows through the Dry Creek Vineyard Road tributary, relative to the increase in on-site peak flow in the post-construction condition of over 45 cfs the resulting downstream increase of between seven and 14 cfs to the Dry Creek Vineyard Road tributary is considered a relatively small increase in peak flow.[19] The relatively small increase of between seven and 14 cfs demonstrates that the on-site peak flow of 45 cfs leaves the site before the much larger upstream peak flow arrives at the project site. Therefore, peak flows from the project site, although increasing, would not be anticipated to coincide with larger upstream peak flows, and would not be anticipated to cause flooding off-site.

[19] RFE Engineering, Inc. *Preliminary Drainage Study & Stormwater Quality Plan for Brady-Vineyard Subdivision*. April 2, 2019.

Table 10-4
Selected Flows and WSE from HEC-RAS

Tributary Station	100-Year Pre-Construction Peak Flows (csf)	100-Year Post-Construction Peak Flows (csf)	100-Year Pre-Construction WSE (ft)	100-Year Post-Construction WSE (ft)
Normal Depth Boundary Condition				
9764.85	428.81	428.78	132.89	132.89
9161.5	436.34	436.12	131.77	131.77
8292.18	439.46	439.94	127.68	127.68
7877.8	464.91	465.93	126.89	126.89
7588.69	464.20	465.02	125.27	125.31
7492.13[1]	490.22	496.96	124.96	125.00
7446.46[2]	490.19	496.90	124.04	124.06
7346.34	490.17	496.88	123.92	123.94
6748.04	495.31	502.04	121.18	121.20
5618.96	502.49	508.38	117.65	117.71
5553.77	577.76	591.65	117.52	117.57
4081.21[3]	585.69	598.89	113.23	113.28
2833.94[4]	592.64	605.40	109.79	109.83
1316.1	684.5	702.83	106.49	106.54
Dry Creek BFE Boundary Condition				
9764.85	428.75	428.77	132.89	132.89
9161.5	436.25	436.15	131.77	131.77
8292.18	439.37	439.96	127.68	127.68
7877.8	464.81	465.93	126.89	126.89
7588.69	464.09	465.03	125.27	125.31
7492.13[1]	490.10	496.99	124.95	125.00
7446.46[2]	490.07	496.92	124.04	124.06
7346.34	490.05	496.91	123.92	123.94
6748.04	495.19	502.07	121.18	121.20
5618.96	502.29	509.41	117.66	117.72
5553.77	577.56	591.71	117.53	117.58
4081.21[3]	587.63	601.68	114.44	114.46
2833.94[4]	585.67	594.15	114.06	114.06
1316.1	655.98	697.52	114.01	114.01

1 Tributary station just upstream of Vineyard Road culvert.
2 Tributary station just downstream of Vineyard Road culvert.
3 Tributary station at the north end of the Roseville Dry Creek Wastewater Treatment Plant.
4 Tributary station at the south end of the Roseville Dry Creek Wastewater Treatment Plant.

Source: RFE, 2019.

Under both boundary conditions, as shown in Table 10-4, the peak flow increase due to the proposed project during the 100-year storm would raise the peak WSE by only 0.06 feet immediately downstream of the project site. Based on the topographic data downstream of the site, the 0.06-foot increase in WSE would not subject any downstream structures to flooding, as all downstream structures are more than one foot above the post-construction WSE. Furthermore, the Vineyard Road culvert has capacity to pass even the flows from the 500-year storm without the WSE reaching the top of the culvert. Accordingly, implementation of the proposed project would not result in any off-site flooding impacts that necessitate the installation of on-site detention. Specifically, the HEC-RAS calculations completed by RFE show that 100-year drainage flows would not overtop the existing or proposed Vineyard Road pavement for the pre-project or post-project conditions. Therefore, the project would not affect the requirement that the traveled way of Vineyard Road (a collector road) shall remain clear in a 25-year storm and the center 12 feet shall remain clear in a 100-year storm as set forth in the Placer County Storm Water Management Manual. This conclusion is unaffected by the proposed minor fill within the floodplain, discussed below.[20]

Proposed Fill Within Floodplain

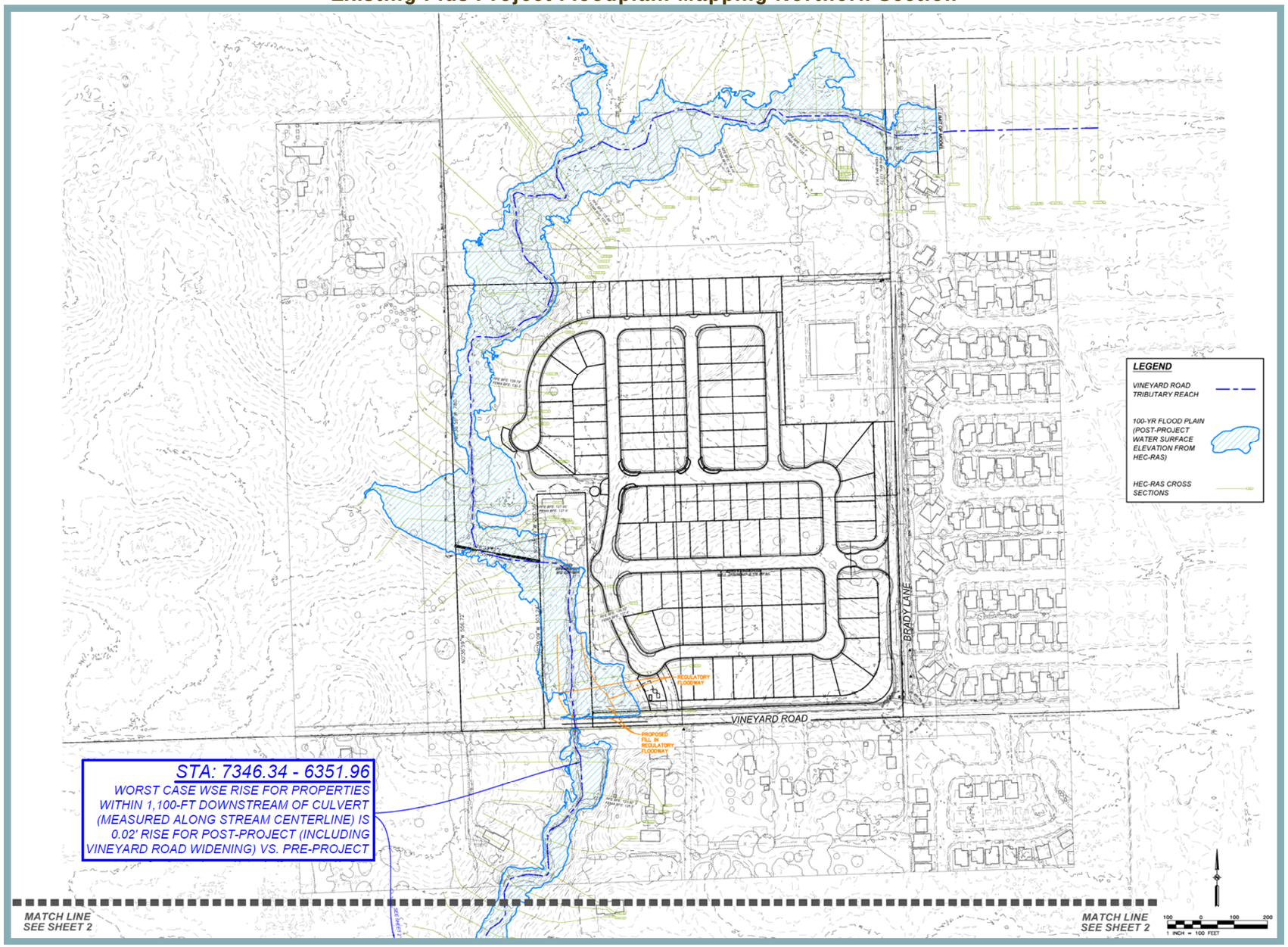
The proposed project would include widening of Vineyard Road along the project site frontage. The widening of Vineyard Road would include between 11 and 14 feet of new pavement on the north side of Vineyard Road, which requires the placement of fill within the floodplain and regulatory floodway of the Dry Creek Vineyard Road tributary. As noted in the Method of Analysis section of this chapter, RFE modeled widening of Vineyard Road under two separate scenarios, with Scenario 1 representing an interim widening, and Scenario 2 representing the ultimate widening of Vineyard Road. Results of the HEC-RAS modeling for the two fill conditions were compared to modeling results representing 100-year flow conditions, post-construction without fill, under the Dry Creek BFE boundary condition.

Project improvements, including fill in the floodway/floodplain needed to widen Vineyard Road per Placer County requirements, would increase peak flows in the Dry Creek Vineyard Road tributary. However, the overall WSE increase in the tributary would be minimal. Figure 10-4 and Figure 10-5 provide an overview of the modeled 100-year floodplain resulting from existing flows and implementation of the proposed project, under Scenario 1 (i.e., interim fill), including the locations of the cross sections included in the HEC-RAS modeling.

Under Scenario 1 (interim widening of Vineyard Road), the maximum WSE increase for the first 1,100 feet downstream of the Vineyard Road culvert would be limited to 0.02-feet for the post-construction condition versus the pre-construction condition (see Figure 10-4). The maximum WSE increase under the existing vs. post-project 100-year flow condition would occur at Station 5618.96, where a of 0.07-foot increase would occur under the Dry Creek BFE Condition (see Figure 10-5). The increase in WSE under Scenario 2 (ultimate widening) would be limited to 0.08-foot. This maximum WSE increase would also occur at Station 5618.96. Per RFE, such increases (both less than one inch) would not constitute a significant risk to downstream properties.

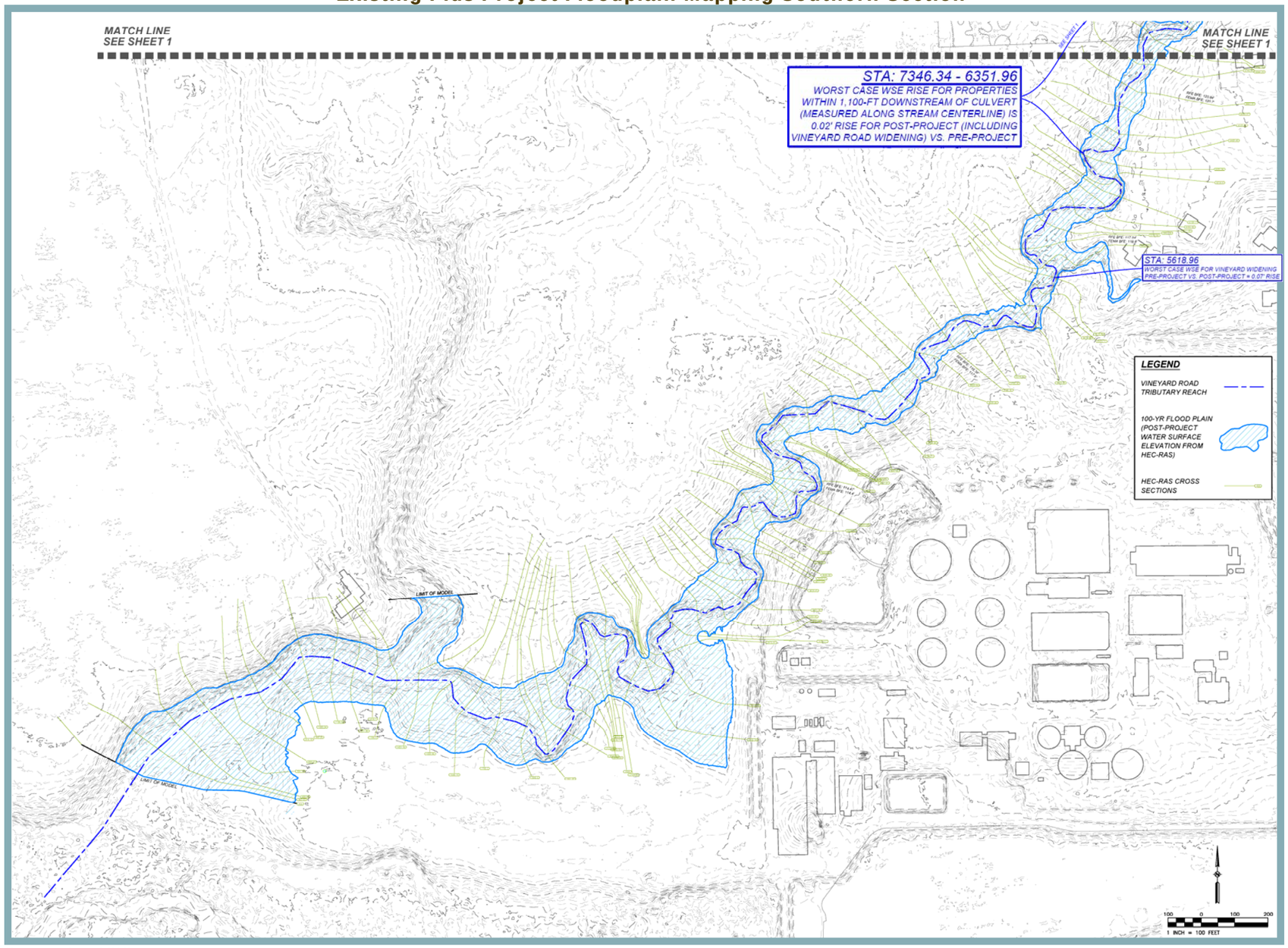
[20] Somers, Shawn, P.E., Engineering Manager, RFE Engineering, Inc. Personal communication [phone] with Nick Pappani, Vice President, Raney Planning & Management, Inc. October 25, 2019.

Figure 10-4
Existing Plus Project Floodplain Mapping Northern Section



Source: RFE, 2019.

Figure 10-5
Existing Plus Project Floodplain Mapping Southern Section



Source: RFE, 2019

Despite the increases in WSE between the pre-construction and post-construction conditions, due to the terrain in the channel of the Dry Creek Vineyard Road tributary, the increased WSE would result in an imperceptible change in the BFE floodplain boundaries.

Conclusion

Based on the above, the proposed project would result in a relatively minor increase in peak runoff relative to existing conditions. In addition, the project applicant would be required to pay fees in accordance with the Dry Creek Watershed Drainage Improvement Ordinance. Payment of such fees would help to fund regional flood control and future drainage facility improvement projects within the Dry Creek watershed. Nevertheless, the proposed project could result in a ***significant*** impact related to substantially altering the drainage pattern of the site or area, or increasing the rate or amount of surface runoff.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

10-4(a) *As part of the Improvement Plan submittal process, the preliminary Drainage Report provided during environmental review shall be submitted in final format. The final Drainage Report may require more detail than that provided in the preliminary report, and will be reviewed in concert with the Improvement Plans to confirm conformity between the two. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing conditions, the effects of the proposed improvements, all appropriate calculations, watershed maps, changes in flows and patterns, and proposed on- and off-site improvements to accommodate flows from this project. The report shall identify water quality protection features and methods to be used during construction, as well as long-term post-construction water quality measures. The final Drainage Report shall be prepared in conformance with the requirements of Section 5 of the Land Development Manual and the Placer County Storm Water Management Manual that are in effect at the time of Improvement Plan submittal.*

10-4(b) *This project is subject to the one-time payment of drainage improvement and flood control fees pursuant to the "Dry Creek Watershed Interim Drainage Improvement Ordinance" (Ref. Article 15.32, Placer County Code). The current estimated development fee is $26,656 ($224 per single family residential unit), payable to the Engineering and Surveying Division prior to Building Permit issuance. The fees to be paid shall be based on the fee program in effect at the time that the application is deemed complete.*

10-4(c) *This project is subject to payment of annual drainage improvement and flood control fees pursuant to the "Dry Creek Watershed Interim Drainage Improvement Ordinance" (Ref. Chapter 15, Article 15.32, Placer County Code). Prior to Building Permit issuance, the applicant shall cause the subject property to become a participant in the existing Dry Creek Watershed County Service Area for purposes of collecting such annual*

assessments. The current estimated annual fee is $4,165 ($35 per single family residential unit).

10-4(d) *On the Improvement Plans and Informational Sheet(s) filed with the Final Subdivision Map(s), show the limits of the future, unmitigated, fully developed, 100-year flood plain (after grading) for the Dry Creek Vineyard Road tributary (western drainageway) and the FEMA floodplain and designate same as a building setback line unless greater setbacks are required by other conditions contained herein.*

10-4(e) *On the Improvement Plans and Informational Sheet(s) filed with the Final Subdivision Map(s), show that finished house pad elevations for all Lot's along the floodplain shall be a minimum of two feet above the 100-year flood plain line (or finished floor -three feet above the 100-year floodplain line). The final pad elevation shall be certified by a California registered civil engineer or licensed land surveyor and submitted to the Engineering and Surveying Division. This certification shall be done prior to construction of the foundation or at the completion of final grading, whichever comes first. No building construction is allowed until the certification has been received by the Engineering and Surveying Division and approved by the floodplain manager. Benchmark elevation and location shall be shown on the Improvement Plans and Informational Sheet (s) to the satisfaction of Development Review Committee.*

10-5 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows or expose people or structures to risk of loss, injury or death involving flooding through the placement of housing in a flood hazard area. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As discussed throughout this chapter, the project site contains a portion of the Dry Creek Vineyard Road tributary. RFE used County provided LiDAR data to determine whether the proposed project would have the potential to impede or redirect flood flows. RFE prepared updated floodplain figures based on project-specific floodplain modeling. The updated floodplain figures are presented in Figure 10-4 and Figure 10-5 and provide an overview of the modeled 100-year floodplain resulting from existing flows and implementation of the proposed project, under Scenario 1, including the locations of the cross sections used in the HEC-RAS modeling.

Slight differences exist between the floodplain mapping prepared by RFE and FEMA. Such differences may be due to the greater extent of upstream tributary areas incorporated in the project-specific modeling prepared by RFE, or the higher spatial resolution used by RFE, as compared to FEMA. Despite the differences in floodplain mapping, none of the proposed structures would be located within the identified floodplains. Furthermore, the proposed project would not result in any substantial changes

in the floodplain of the Dry Creek Vineyard Road tributary that would expose off-site structures or people to risks of loss, injury or death due to flooding.

Although the proposed project would not include development of structures within the identified floodplains nor place housing within a flood hazard area, RFE concluded that placement of fill in the FEMA identified floodplains for the interim widening of Vineyard Road, which the project is responsible for, would have the potential to affect upstream WSE and flow velocity in the vicinity of the Vineyard Road culvert. With regard to changes to the WSE, RFE determined that the proposed fill would result in negligible effects to the WSE beyond the first 100-feet upstream of the culvert (station 7588.69). Downstream of the culvert, the change in WSE varied and some downstream portions of the tributary were unaffected. As noted under Impact 10-4 above, compared to the pre-construction 100-year flow condition without fill, the proposed fill would result in a maximum increase in WSE of 0.07-feet downstream of the culvert at Station 5618.96 (see Figure 10-5). In a supplemental letter, RFE affirmed that the maximum increase of 0.07-feet would not constitute a significant risk to downstream properties.[21] Accordingly, placement of fill in FEMA floodplains would not substantially impede or redirect flood flows nor would placement of fill expose people or structures to risk from flooding. Placer County has reviewed the methodology applied by RFE, and preliminarily concurs with the conclusions reached by RFE.

Because of the increase in BFE of the Dry Creek Vineyard Road tributary in the post-construction condition compared to the pre-construction condition, and because of fill required in the floodway/floodplain to widen Vineyard Road, a Conditional Letter of Map Revision (CLOMR) would be required to be submitted to FEMA prior to Improvement Plan approval to ensure the project's compliance with existing regulations related to alterations of floodplains.

Considering the above, the proposed project is not anticipated to result in the impediment or redirection of flood flows such that on- or off-site structures would be exposed to flood risk. However, as noted previously, a CLOMR would be required prior to Improvement Plan approval in order to ensure the project's compliance with existing regulations. Therefore, in the absence of a CLOMR submitted to FEMA, a ***significant*** impact could occur related to alteration of the existing drainage pattern of the site or area, including through alteration of a course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

10-5 *Prior to Improvement Plan approval, the applicant shall obtain from the Federal Emergency Management Agency (FEMA), a Conditional Letter of Map Revision (CLOMR) or Conditional Letter of Map Revision based on Fill (CLOMR-F) for fill within a Special Flood Hazard Area, if required. A copy of the letter shall be provided to the Engineering and Surveying Division. A Letter of Map Revision (LOMR), or a Letter of Map Revision*

[21] RFE Engineering, Inc. *Re: Brady Vineyard Project Drainage Impacts*. March 4, 2019.

based on Fill (LOMR-F) from FEMA shall be provided to the Engineering and Surveying Division prior to acceptance of project improvements as complete.

10-6 In a flood hazard zone, risk release of pollutants due to project inundation. Based on the analysis below, the impact is *less than significant*.

As noted previously, the project site contains a floodplain related to the Dry Creek Vineyard Road tributary. However, as show in Figure 10-4, the only project related improvement that would occur within the identified floodplain would be the placement of fill related to the widening of Vineyard Road. None of the proposed structures, infrastructure, or common areas would be placed within a flood hazard zone. As discussed in Impact 10-5, the project would not result in the impediment or redirection of flood flows in a flood hazard zone, nor would the project expose people or structures on- or off-site to risk of loss injury, or death involving flooding. Consequently, the project would not risk the release of pollutants due to inundation at any off-site locations.

It should be noted that the proposed project is residential in nature. Residential projects do not involve the storage of large amounts of pollutants, and all stormwater exiting the project site would be directed to on-site stormwater quality features to ensure that any pollutants entrained within stormwater from the project site are removed prior to discharge.

Considering that the proposed project would not include development within the identified floodplain, the proposed project would not have the potential to create a risk of release of pollutants due to inundation on- or off-site. Consequently, the proposed project would result in a ***less-than-significant*** impact related to the release of pollutants due to inundation.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

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

The cumulative setting for impacts related to hydrology and water quality encompasses the Dry Creek Vineyard Road tributary drainage sheds and the remaining portions of the Dry Creek watershed.

10-7 Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Impacts related to stormwater quality, groundwater, and drainage patterns are discussed separately below.

Stormwater Quality

Construction activities have the potential to affect water quality and contribute to localized violations of water quality standards if stormwater runoff from construction activities enters receiving waters. Runoff from additional construction sites within the project area could carry sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products, which could result in water quality degradation if runoff containing such sediment or contaminants should enter receiving waters in sufficient quantities. Thus, construction activities associated with the proposed project, in combination with construction activities associated with other reasonably foreseeable projects in the Dry Creek watershed, could result in cumulative impacts related to water quality. However, all construction projects resulting in disturbance of more than one acre of land are required to comply with the most current Construction General Permit requirements. Conformance with the Construction General Permit would require preparation of SWPPPs for all such projects, and subsequent implementation of BMPs to prevent the discharge of pollutants. Considering the existing permitting requirements for construction activity in the project area, cumulative construction within the Dry Creek watershed would be heavily regulated and impacts related to the degradation of water quality would be minimized to the extent feasible.

Similar to the proposed project, cumulative development within the DCWPCP would be subject to Phase II MS4 stormwater requirements, including source control and treatment control features. Specifically, regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately-sized SDMs and Baseline Hydromodification Measures to each DMA. Source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the CASQA Stormwater BMP Handbook for New Development and Redevelopment, or equivalent manual, and must be shown on Improvement Plans.

Based on the conceptual stormwater design, during operations, the stormwater runoff would be properly treated prior to discharge from the site. Thus, urban pollutants entering and potentially polluting the local drainage system would not be expected to occur as a result of the project. A final drainage report would be required with submittal of the Improvement Plans for County review and approval to substantiate the preliminary report's LID sizing calculations. In addition, per Phase II MS4 requirements, a Post Construction Stormwater Control Plan would be required for the proposed project. The project would be subject to NPDES Construction General Permit requirements, including implementation of BMPs and preparation of a site-specific SWPPP. Cumulative

development projects within the project area would also be subject to Phase II MS4 stormwater requirements, as well as all County requirements related to stormwater treatment and control. Compliance with the foregoing regulations would ensure that impacts related to the alteration of drainage patterns, the discharge of pollutants, and flooding are minimized to the extent feasible.

Groundwater

Cumulative development within the project region would result in increased amounts of impervious surfaces, which would reduce the infiltration of groundwater within the project region. Although cumulative development would increase the amount of impervious surfaces in the project region, stormwater would continue to be discharged to the Dry Creek Vineyard Road tributary, and other local waterways, where stormwater could infiltrate into the soil and recharge groundwater. Furthermore, the project site itself is not considered a site of substantial groundwater recharge; thus, development of the project would not result in a significant cumulative loss of groundwater recharge.

Groundwater in the project region is managed on a subbasin level. The North American Subbasin, within which the project is located, is not in a state of overdraft, and the WPGSA will continue to manage groundwater in the region.

Because groundwater is managed on a subbasin level, and the project would not result in a substantial site-specific loss of groundwater recharge, the proposed project, in combination with cumulative development within the region, would not result in a significant cumulative impact to groundwater recharge.

Drainage Patterns

Concurrent implementation of the proposed project and cumulative development within the Dry Creek Vineyard Road tributary drainage shed area would result in changes to the drainage pattern of the project area. Changes in drainage patterns would primarily be attributed to the development of currently undeveloped areas within the drainage shed, which would result in the conversion of pervious surfaces to impervious surfaces. RFE prepared an analysis of cumulative conditions to assess the potential impact of the proposed project's incremental effects on future peak flows and WSEs in the cumulative setting. The results of RFE cumulative analysis are summarized in Table 10-5 below.

The cumulative analysis demonstrated that the proposed project would moderately increase peak flows in the Dry Creek Vineyard Road tributary under the cumulative setting. Specifically, most peak flows downstream of the Vineyard Road culvert (tributary station 7492.13) would be increased by at least 10 cfs, with the maximum increase of 40.46 cfs occurring at tributary station 1386.3. Further downstream the peak flows are affected by the Dry Creek constant downstream BFE boundary condition, which creates a backwater condition that skews the peak flow results in the Dry Creek Vineyard Road tributary.

Table 10-5
HEC-RAS Flows and WSEs – Cumulative Conditions With and Without Proposed Project

Tributary Station	100-Year Cumulative Peak Flows Without Project (csf)	100-Year Cumulative Peak Flows With Project (csf)	100-Year Cumulative WSE Without Project (ft)	100-Year Cumulative WSE With Project (ft)
10016.43	126.93	126.87	133.44	133.44
9841.26	436.24	436.25	133.03	133.03
8488.69	447.19	448.67	128.23	128.24
7588.69	478.48	479.24	125.31	125.39
7492.13[1]	506.68	519.15	124.80	124.87
7446.46[2]	506.61	519.06	124.09	124.13
6748.04	510.97	523.59	121.22	121.25
5618.96	514.32	525.42	117.78	117.87
5008.64	613.16	635.01	116.24	116.31
4081.21[3]	621.84	644.53	114.49	114.52
2833.94[4]	618.15	643.81	114.07	114.08
2416.71	612.88	642.09	114.05	114.06
1760.2	596.26	636.01	114.03	114.03
1386.3	592.89	633.35	114.02	114.02

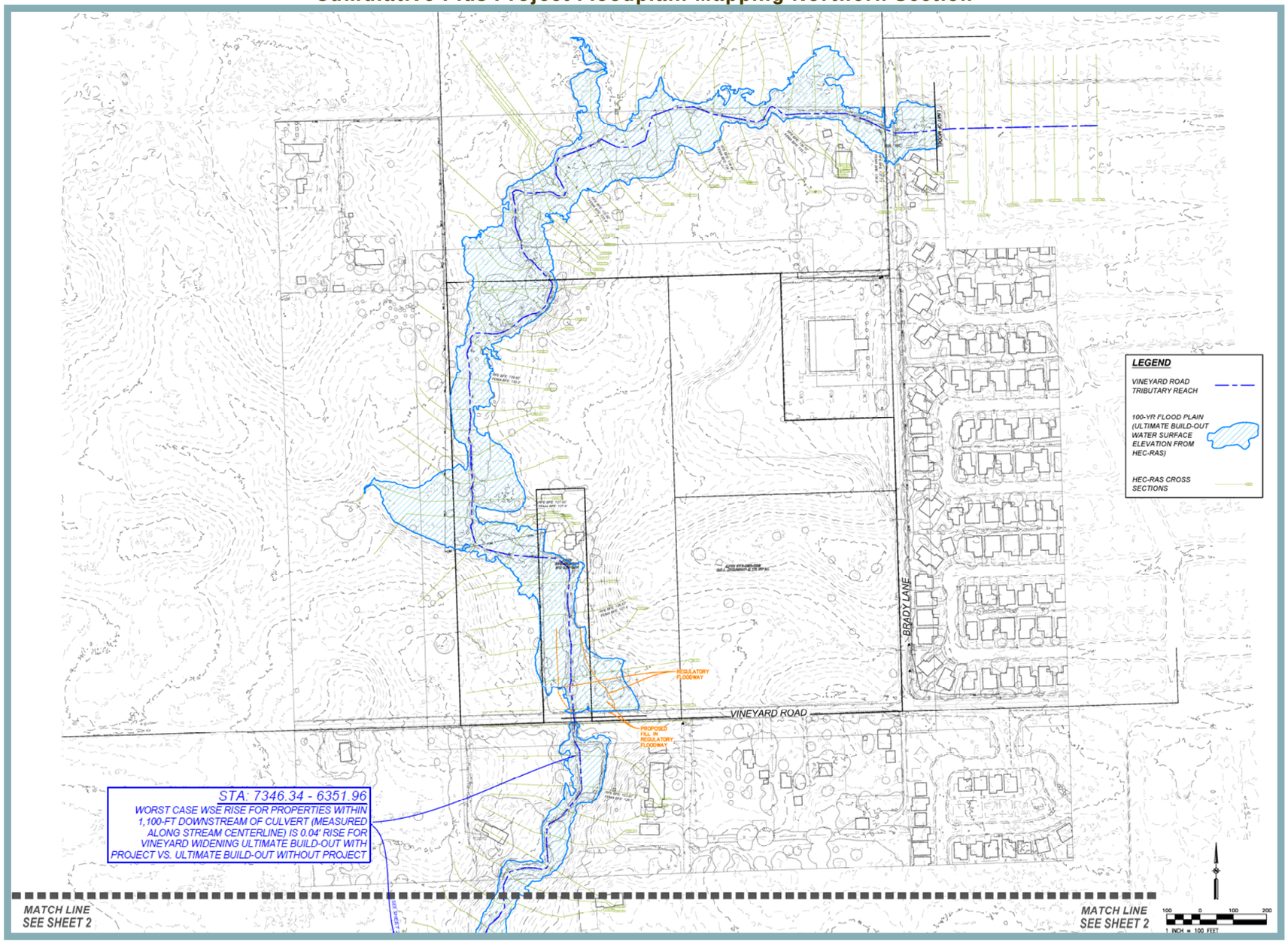
[1] Tributary station just upstream of Vineyard Road culvert.
[2] Tributary station just downstream of Vineyard Road culvert.
[3] Tributary station at the north end of the Roseville Dry Creek Wastewater Treatment Plant.
[4] Tributary station at the south end of the Roseville Dry Creek Wastewater Treatment Plant.

Source: RFE, 2019.

Implementation of the proposed project would not result in changes to the WSE at any tributary station upstream of the project site, with the exception of tributary station 7588.69, which is the first cross section upstream of the Vineyard Road culvert. The WSE at tributary station 7588.69 would be increased by 0.09-feet with implementation of the proposed project under the cumulative condition. Downstream of the Vineyard Road culvert, the maximum WSE increase would be an increase of 0.09-feet at station 5618.96, which is just downstream of inflows from another natural drainage channel that is unmapped by FEMA. For comparison, the project-level analysis presented in Impact 10-4 determined that in the existing setting, implementation of the project would increase WSE by only 0.07 feet downstream of the project site with the Dry Creek BFE boundary condition. A maximum cumulative increase of 0.09-feet is not significantly greater than the 0.07-foot increase anticipated to occur due to development of the project under existing conditions, and the baseline WSEs for the existing and cumulative scenarios are not significantly different. Figure 10-6 and Figure 10-7 provide an overview of the modeled floodplain resulting from the ultimate buildout flows.[22]

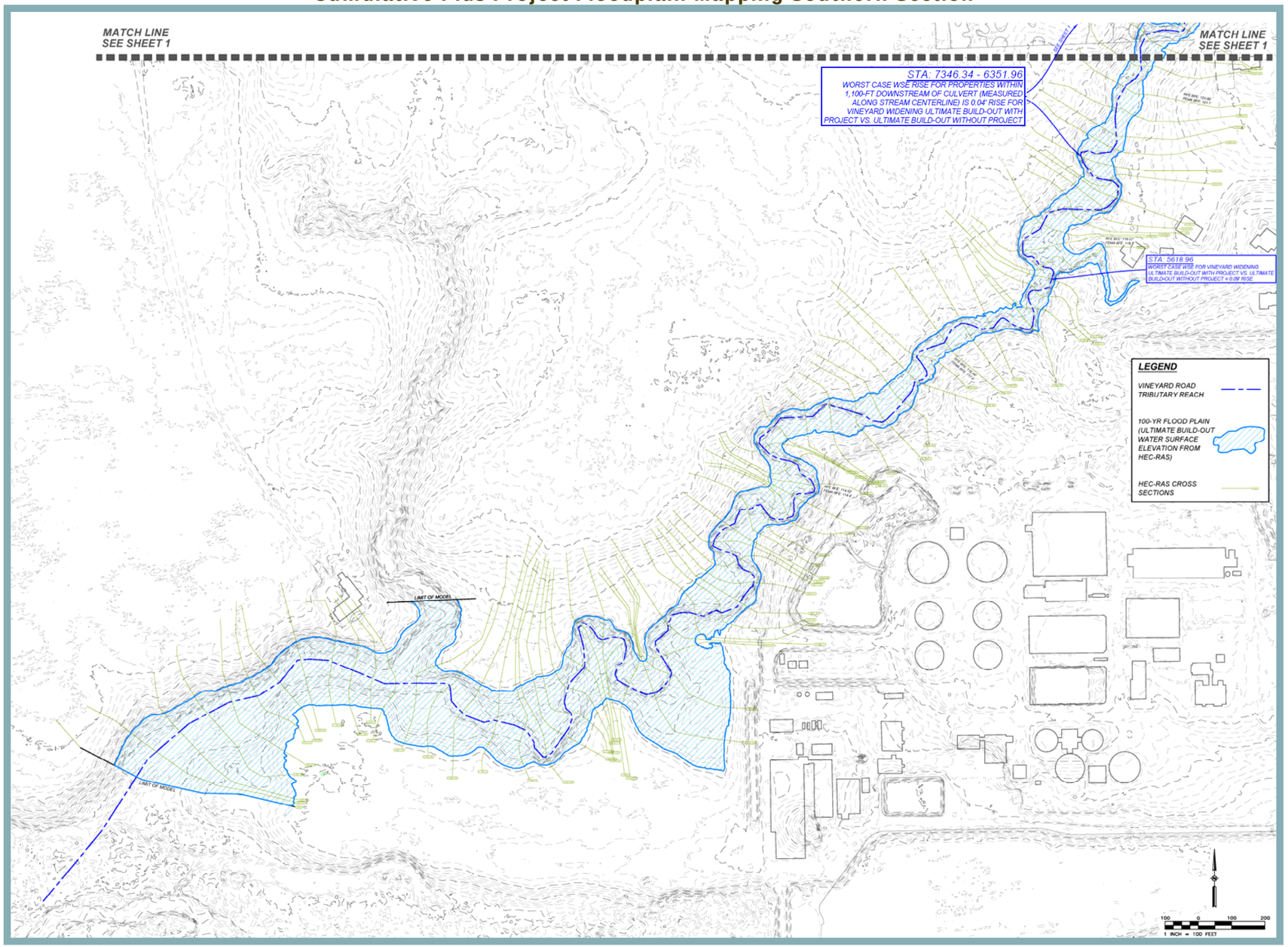
[22] It should be noted that these exhibits for the buildout condition assume full widening of Vineyard Road (i.e., Scenario 2 discussed in the Methods section).

Figure 10-6
Cumulative Plus Project Floodplain Mapping Northern Section



Source: RFE, 2019.

Figure 10-7
Cumulative Plus Project Floodplain Mapping Southern Section



Source: RFE, 2019

As shown in the figures, the ultimate buildout flows would not result in inundation of any on- or off-site structures or improvements. Thus, similar to the project-level conclusion, based on the topographic data downstream of the site, the 0.09-foot increase in WSE would not subject any downstream structures to flooding. Consequently, the proposed project would not result in a cumulatively significant impact to drainage patterns in the drainage shed.

Conclusion

As discussed throughout this chapter, implementation of the proposed project would include LIDs and BMPs to minimize the potential for the proposed project to result in impacts related to hydrology and water quality. Moreover, RFE estimated drainage conditions under cumulative conditions for the Dry Creek Vineyard Road tributary with and without the proposed project. Based on the findings of RFE implementation of the proposed project would not result in a significant incremental contribution to cumulative impacts related to peak flows or flooding due to changes in drainage patterns at the project site.

Given the analysis presented in this chapter, the conclusions reached by RFE, and the highly regulated nature of cumulative development in the project region, the project's incremental contribution to the significant cumulative impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

11. Land Use and Planning / Population and Housing / Agricultural Resources

11. LAND USE AND PLANNING / POPULATION AND HOUSING / AGRICULTURAL RESOURCES

11.1 INTRODUCTION

The purpose of the Land Use and Planning/Population and Housing/Agricultural Resources chapter of the EIR is to examine the proposed project's compatibility with existing and planned land uses in the area and identify any incompatibilities with applicable land use plans, policies and regulations adopted by the County for the purpose of avoiding environmental effects, including the Placer County General Plan[1] and the Dry Creek-West Placer Community Plan (DCWPCP)[2]. In addition, the chapter assesses the compatibility of the proposed project with the surrounding land uses, both existing and proposed. Furthermore, the chapter includes discussion of the potential for the project to induce substantial population growth in the project area, either directly or indirectly. The reader is referred to the various environmental resource evaluations presented in the other technical chapters of this EIR for a discussion of potential physical/environmental effects that may result from the proposed land use changes.

The Agricultural Resources section of the chapter describes the status of the existing agricultural resources within the boundaries of the project site, including, but not limited to, identification of any Important Farmland. Potential conflict with existing agricultural zoning is also addressed. Documents referenced to prepare this chapter include the Placer County General Plan, the Placer County General Plan EIR,[3] the DCWPCP, the *Placer Legacy Open Space and Agricultural Conservation Program, Implementation Report*,[4] the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey,[5] and the *Placer County Important Farmland Map 2014*.[6]

11.2 EXISTING ENVIRONMENTAL SETTING

This section describes the existing land uses on the project site and within the surrounding area at the time the NOP was published on January 30, 2019, as well as the existing plans and policies that guide the development of the project site. In addition, the Existing Environmental Setting section describes current population and housing trends in the project region, as well as current farmland and soil productivity classification systems and the extent and quality of any agricultural and forest resources present on the project site.

Project Site Characteristics and Surrounding Land Uses

The project site is located in the Dry Creek-West Placer area of unincorporated Placer County. Currently, the project site consists primarily of ruderal grasses, and is absent of structures or other indications of prior development. The site appears to have supported row crops and other

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1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
2 Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *Placer Legacy Open Space and Agricultural Conservation Program, Implementation Report.* June 2000.
5 United States Department of Agriculture, National Resources Conservation Service. *Web Soil Survey*. Available at: http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed March 2017.
6 California Department of Conservation. *Placer County Important Farmland 2014*. Published April 2016.

agricultural uses until the 1940's, as indicated in aerial photos dating back to 1947, but does not appear to have supported any active farming since that time. The western portion of the site contains an unnamed tributary that flows southward to Dry Creek. One seasonal swale and one drainage ditch within the site drain to the tributary. Approximately 3.26 acres of the site are located within the 100-year floodplain of the tributary. After accounting for this and the 1.57 acres of right-of-way dedication outside of the floodplain, the total net buildable acres equates to approximately 27.21 acres. Existing oak trees line both sides of the tributary, and scattered almond trees are located along the drainage ditch. The topography of the site is gently undulating, with elevations ranging from a low of approximately 122.5 feet at the western portion of the site adjacent to Vineyard Road to a high of approximately 151.4 feet at the eastern portion of the site adjacent to Brady Lane. A small knoll with an elevation of approximately 145.7 feet is located near the northwest portion of the site.

The community character is a mixture of suburban and rural residential uses. Land uses in the vicinity of the project site include both small and large-lot single-family residential development; detached and multi-family residential development and commercial uses within the City of Roseville, agricultural/grazing, and religious uses.

A two-acre rectangular-shaped parcel fronting Vineyard Road extends approximately 700 feet north (roughly halfway) into the project site, but is not included in the site. Currently, the parcel is developed with a house and associated outbuildings, located approximately 25 feet from the parcel's northern property line and 15 feet from its eastern property line. The existing on-site tributary flows through a culvert crossing under Vineyard Road near the south/center of the two-acre parcel.

To the west, the project site is bordered by a 30-acre vacant parcel. The nearest residence to the west of the site is approximately 1,000 feet from the site boundary. Immediately north of the project site is a church fronting Brady Lane, located on a three-acre parcel which, prior to a boundary line adjustment with the project site, was a 10-acre parcel. Three properties immediately to the north of the project site, ranging in size from 4.85 acres to 9.7 acres, are generally vacant, with the exception of one single-family residence located approximately 360 feet north of the site on a parcel north of the church.

The site is bordered on the south by Vineyard Road. Five properties, ranging in size from 0.82 to 2.7 acres, are located on the south side of Vineyard Road, east of the existing on-site tributary; the closest residence is situated approximately 80 feet from the southern boundary of the project site. Neighboring uses to the east of the site include Vineyard Estates, a single-family residential subdivision located across Brady Lane, within the City of Roseville limits. The subdivision includes 5,000-square-foot (sf) minimum lots with single-family residences that are typically located approximately 20 feet from the eastern edge of pavement along Brady Lane and are screened from the road with mature landscaping and a masonry wall.

To the southeast, the American Vineyard Villages (AKA The Vineyard) consists of 139 single-family lots on approximately 19.2 acres. The subdivision is zoned RS-B-3 (Residential Single-family, minimum Building Site of 3,000 square feet with lot sizes ranging from 3,298 sf to 10,953 sf. Typical lots are 45' x 75' or 3,375 sf, significantly smaller than the proposed project's lot sizes.

Land Use and Zoning Designations

The project site has current DCWPCP land use designations as follows: Low Density Residential (LDR 1-2 du/ac) on the eastern 24.1 acres; Greenbelt and Open Space (O) along the central-western 6.1 acres; and Rural Low Density Residential (RLDR 1-2.3 ac min) on the western 1.8 acres (see Figure 11-1). The current zoning designations for the site include: Residential Single-Family, combining Agriculture, minimum Building Site of 20,000 square feet (RS-AG-B-20) (eastern 24.1 acres); Open Space (O) (central-western 6.1 acres); and 1.8 acres of Farm-Development Reserve (F-DR) (western portion of site). The three-acre NAPOTS area in the southwestern portion of the site is currently designated RLDR 1-2.3 ac min per the DCWPCP, and zoned F-DR.

Table 11-1 below provides a summary of the current DCWPCP land use and zoning designations of the properties adjacent to the project site. The land uses to the east of the site are located within the City of Roseville, while the adjacent areas to the north, south, and west of the site are located within the DCWPCP area in unincorporated Placer County.

Table 11-1
Summary of Adjacent Community Plan Land Use and Zoning Designations

Relationship to Project Site	Present Land Use	Land Use Designation	Zoning Designation
North	Church, Predominantly Vacant	LDR 1-2 du/ac, O	RS-AG-B-20
			O
South	Single-Family Residential	LDR 1-2 du/ac, O	RS-AG-B-20
			F-DR 4.6 ac min
			O
East	Single-Family Residential	LDR (City of Roseville)	Small Lot Residential/Design Standards (RS/DS) (City of Roseville)
West	Vacant	RLDR 1-2.3 ac min	F-DR 4.6 ac min

Land Use Designation Definitions

The following sections provide definitions of the land use designations noted above, as summarized from the DCWPCP and the City of Roseville General Plan.

DCWPCP Designations

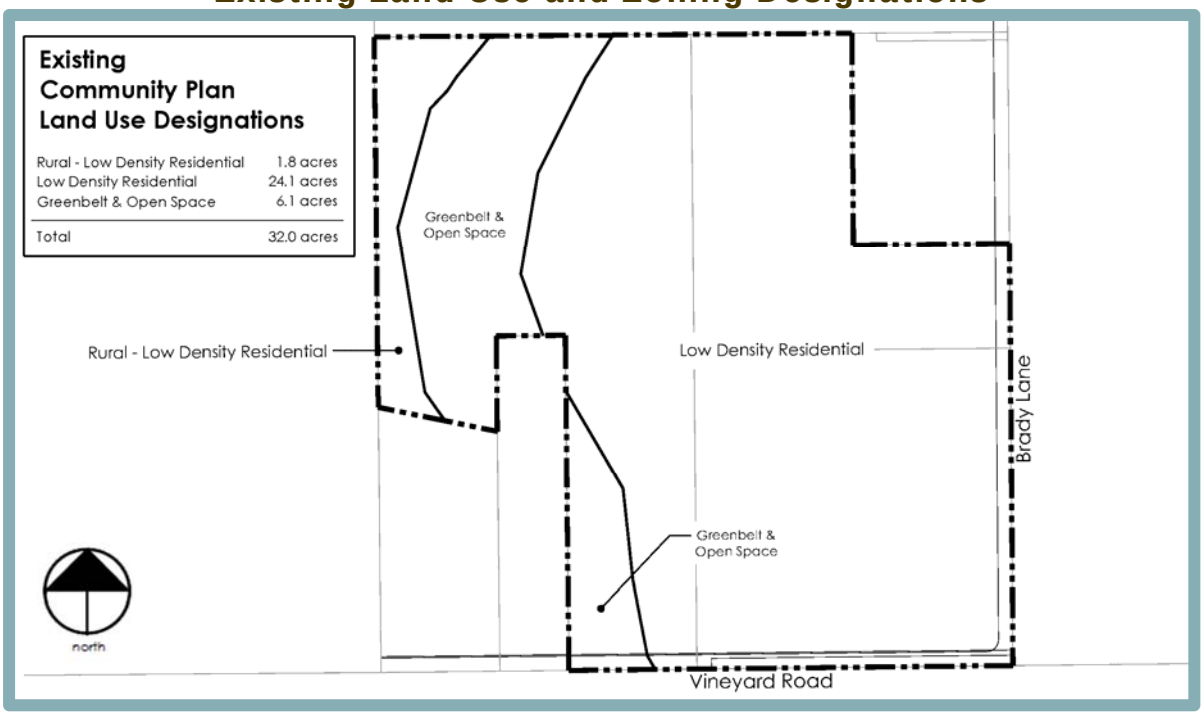
The DCWPCP defines the LDR, RLDR, and O land use designations as follows:

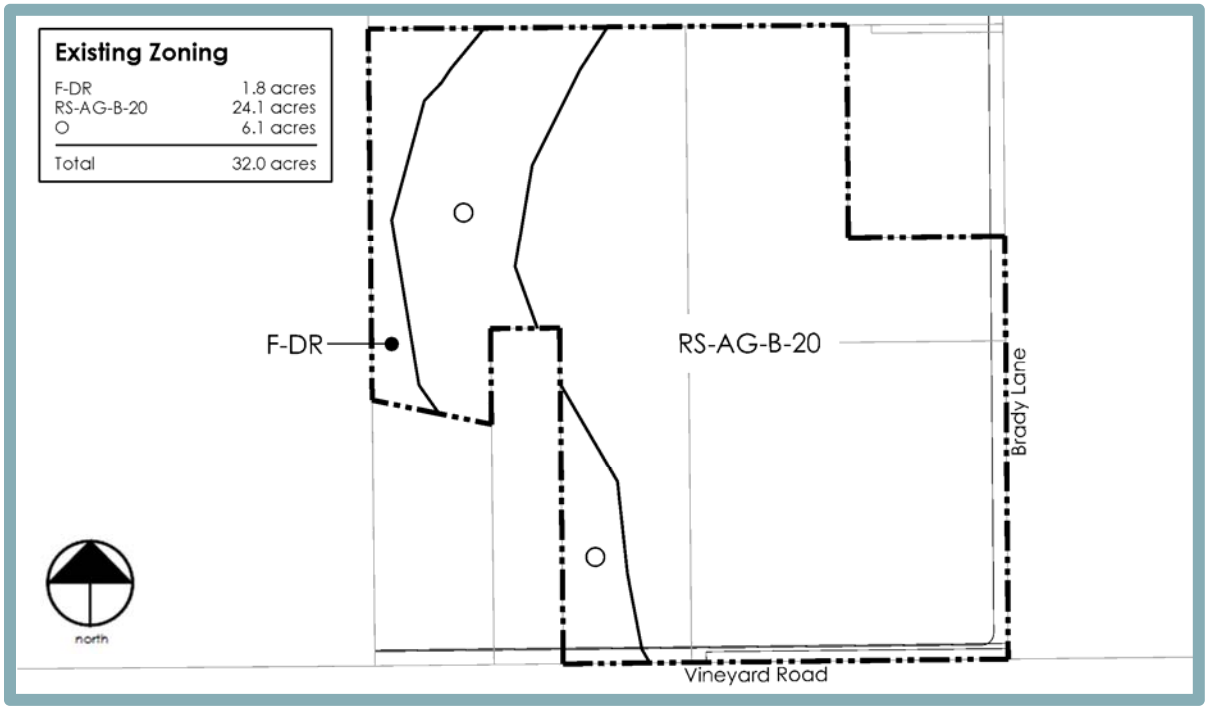
Low Density Residential (LDR)

The LDR land use designation is intended for low density housing, and allows for a range of densities from one to two dwelling units per acre, or approximately 0.5 to one-acre lot sizes.

Much of the land south of Dry Creek and north of the Sacramento County line is included in this land use district, as is an area between the Roseville City limits and East Drive in the northeastern portion of the DCWPCP area. In the area adjoining Roseville, this district will provide a lower density transition area between the higher densities in Roseville, lower densities to the west, and commercial uses along Baseline Road.

Figure 11-1
Existing Land Use and Zoning Designations





Medium Density Residential (MDR)

When the Dry Creek West Placer Community Plan was approved in 1990, high density residential land uses (four to ten dwelling units per acre) and low density residential land uses (one to two dwelling units per acre) were designated. However, a Medium Density Residential land use designation was not included with the DCWPCP, which created a gap between the two and four dwelling units per-acre range. As a part of the Morgan Knolls residential project entitlements, an Amendment to the Community Plan was approved in 2015 to a establish a Medium Density Residential land use designation consisting of two to four dwelling units per acre.

Rural Low Density Residential (RLDR)

The RLDR land use designation is intended to allow for development of low-density rural residential housing consistent with the rural character of the DCWPCP area. Development within the RLDR land use designation is permitted at a density of one to 2.3 acres per dwelling unit. Per the DCWPCP, the designation represents a transition zone between rural residences and higher-density suburban development.

Greenbelt and Open Space (O)

The O designation is generally identified as the approximate 100-year floodplain of Dry Creek and the creek's tributaries. The O-designated areas within the DCWPCP area are often heavily wooded, and are intended to improve the design of subdivisions adjoining such areas. The O land use designation is also compatible with certain public and private recreation facilities, in some areas.

City of Roseville General Plan Designations

The City of Roseville General Plan defines the LDR land use designation as follows:

Low Density Residential (LDR)

The LDR land use category applies to lands where the single-family dwelling units that comprise the majority of Roseville's housing supply are located. The City of Roseville assigns lower densities to lands with the flexibility to accommodate development constraints (e.g. slopes, trees, etc.). Primary uses include attached and detached single-family residences, public parks, resource preservation, and open space areas.

Zoning Designation Definitions

The following sections provide definitions of the zoning designations noted above, as summarized from the Placer County Zoning Code (Title 17 of the Placer County Code) and the City of Roseville Zoning Ordinance (Title 19 of the Roseville Municipal Code).

Placer County Zoning Code

The Placer County Zoning Code defines the RS, F, O, -AG, -B, and -DR zoning designations as follows:

Residential Single-Family (RS)

The RS district is intended to provide areas for residential development characterized by detached single-family homes in standard subdivision form. Minimum lot areas within the RS zone district are typically 10,000 square feet but may be smaller with a -B Combining District designation.

Farm (F)

The purpose of the F zone district is to provide areas for the conduct of commercial agricultural operations that can also accommodate necessary services to support agricultural uses, together with residential land uses at low population densities. Minimum lot sizes within the F zone district are typically 200,000 sf (4.6 acres) but may be smaller with a -B Combining District designation.

Open Space (O)

The purpose of the O district is to protect important open space lands within Placer County by limiting allowable land uses to low intensity agricultural and public recreational uses, with structural development being restricted to accessory structures necessary to support the primary allowed uses, and critical public facilities.

Combining Agriculture (-AG)

The purpose of the -AG combining district is to identify residential areas where parcel sizes and neighborhood conditions are suitable for the raising and keeping of a variety of farm and exotic animals, in addition to household pets, without compatibility problems with surrounding residential uses. Allowable uses within the –AG combining district include agricultural accessory structures, animal raising and keeping, crop production, and equestrian facilities.

Building Site (-B)

The purpose of the -B combining district is to provide for different parcel sizes in new subdivisions than would otherwise be required by an applicable zone district, based upon special characteristics of the site or area to which the combining district is applied, including but not limited to sensitive environmental characteristics, limited resource capacities, and community character.

Development Reserve (-DR)

A 1.8-acre portion along the northwestern edge of the project site and properties west and southwest of the project site have a –DR combining district designation. The purpose of the -DR combining district is to provide for the future development of limited residential, commercial, or industrial uses in areas that are identified by the General Plan (or any community plan adopted pursuant thereto) for such uses, but which:

- May not be prepared at the time the district is adopted to accommodate the planned levels of full development until additional infrastructure or resources have been provided; or additional population growth has occurred; or
- May require special treatment as provided for in specific or general plans.

The DCWPCP describes the "DR" area as properties to be planned as a distinct unit and therefore currently subject to approval by the County of a “Specific Plan” which would address a wide range of issues relative to development. However, it should be noted that the –DR portion of the project site would be rezoned to Open Space (O) and remain undeveloped. It would provide an edge that buffers adjacent properties from the proposed residences, partially serve as a passive recreational area, and act as a component of the County’s open space system.

City of Roseville Zoning Ordinance

The City of Roseville Zoning Ordinance defines the RS/DS zoning designation as follows:

Small Lot Residential/Design Standards (RS/DS)

The RS zone district is intended to allow either attached or detached single-family dwellings and similar and related compatible uses. The DS zone district is an overlay district which allows modification of the specified development standards in general zone districts.

Population and Housing

Population growth assumptions, average household sizes, and vacancy rates for Placer County and the DCWPCP area are discussed below.

Historical and Current Population

The DCWPCP included population projections for the DCWPCP area until the plan horizon year of 2010. Population projections for the DCWPCP were based on three different growth rates. The lowest growth rate was assumed to be three percent, which was the growth rate throughout Placer County at the time that the DCWPCP was prepared, in 1990. The mid-range growth rate was based on the growth rate experienced by the City of Roseville between 1980 and 1988, which was six percent. Finally, the highest growth rate used in the DCWPCP was assumed to be the 10 percent growth rate that was occurring in the City of Roseville at the time that the DCWPCP was prepared. The three growth rates resulted in a range of projected populations as shown in Table 11-2.

Table 11-2
DCWPCP Projected 2010 Population

Growth Rate (%)	Projected 2010 Population (residents)
3	3,400
6	5,550
10	9,836

Source: Placer County, Planning Services Division. Dry Creek West Placer Community Plan. May 14, 1990.

As shown in Table 11-3, the DCWPCP area's observed population more than tripled between 1980 and 2010, adding approximately 3,647 new residents and 1,071 households. Growth continued during the eight-year period including 2010 and 2018, when roughly 1,145 residents and 366 new homes were added to the DCWPCP area, which represents a 23 percent increase in population over that period.[7] Despite the growth discussed above, compared to Placer County as a whole, from 1980 to 2010 the population of the DCWPCP area grew much more slowly than the county in general, which experienced a 50 percent increase in population during the same period.[8]

The observed population change within the DCWPCP, presented in Table 11-3, falls within the range of growth anticipated by the DCWPCP. In fact, the actual 2010 population of 5,025 residents within the DCWPCP area was close, but slightly below, the mid-range six percent growth rate scenario projected in the DCWPCP. The DCWPCP area's population in 2018 was 6,170, which is slightly above the DCWPCP's mid-range projection for the area's population in 2010, but within the maximum growth scenario estimate of the DCWPCP for 2010. Therefore, while significant growth in the DCWPCP area has occurred since approval of the Plan, the area's actual 2018 population is in line with buildout assumptions for horizon year 2010.

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7 ESRI Business Analyst. *Housing Profile, DCWPCP Area*. February 2019.
8 Placer County. *Placer County General Plan Housing Element 2013-2021*. August 1, 2013.

Table 11-3
DCWPCP Area Population and Household Growth

Year	Population	Households	Persons Per Households
1980	1,378	700	1.97
2000	1,516	554	2.74
2010	5,025	1,655	3.03
2018	6,170	2005	3.08

Sources:
ESRI Business Analyst, 2010 Census Profile, February 2019.
ESRI Business Analyst, Housing Profile, DCWPCP Area, February 2019.
Placer County, Planning Services Division. Dry Creek West Placer Community Plan. May 14, 1990.

Projected Population

As seen in Table 11-2, the population of the DCWPCP area was anticipated to experience a maximum growth scenario of 9,836 residents by 2010. While Table 11-3 demonstrates that growth within the DCWPCP did not reach the maximum growth scenario by 2010, the population within the DCWPCP is anticipated to continue to grow with buildout of the DCWPCP area, in particular due to the growth within the approved Placer Vineyards Specific Plan, Riolo Vineyards Specific Plan, and various subdivisions completed, under construction, or approved yet unbuilt. The Sacramento Area Council of Governments (SACOG) has anticipated growth within the six-county Sacramento region through the 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).[9]

The MTP/SCS identifies the portion of the DCWPCP area, not including the Placer Vineyards Specific Plan and Riolo Vineyards Specific Plan, as one of the Established Communities within the MTP/SCS study area. As of 2016, Established Communities within Placer County included 16,143 housing units, and such communities are anticipated to grow to 16,772 units by 2020, 17,746 units by 2036, and 23,764 housing units at buildout.[10] Buildout of the DCWPCP, including the project site, was included in the foregoing MTP/SCS growth estimates.

Average Household Size

The average size of households is a function of the number of residents living in households within a given area divided by the number of occupied housing units within the given area. As shown in Table 11-4, average household sizes in California slightly increased between 2010 and 2018, with average household sizes increasing by approximately 0.11 persons/household. Concurrently, the average household size within Placer County increased by 0.03 persons/household. Within the DCWPCP area, the average household size increased by 0.05 persons/household.

[9] Sacramento Area Council of Governments. *2016 Metropolitan Transportation Plan/Sustainable Communities Strategy*. Adopted February 18, 2016.
[10] Sacramento Area Council of Governments. *2016 Metropolitan Transportation Plan/Sustainable Communities Strategy* [Appendix E-3, pg. 159]. Adopted February 18, 2016.

Table 11-4 Average Household Size (Persons Per Household)		
Area	**2010**	**2018**
California	2.87	2.98
Placer County	2.63	2.66
DCWPCP	3.03	3.08
Source: ESRI Business Analyst, Comparison Reports, DCWPCP Area, February 2019.		

Vacancy Rate

In 2010, Placer County experienced an overall vacancy rate of 15.1 percent, which is higher than the statewide average of 8.1 percent. While the county's overall vacancy rate of 15.1 percent is relatively high, the countywide vacancy rate includes units held vacant for seasonal or recreational uses, which are generally not open for long-term residential occupancy. Excluding the units held for seasonal or recreational uses, unincorporated portions of the county experienced a vacancy rate of 6.7 percent for units classified as for rent, for sale, or already rented or sold but not occupied. Placer County's General Plan Housing Element considers a six percent vacancy rate for rental units and a two percent vacancy rate for owner-occupied units generally sufficient to keep prices down and ensure availability of units for new or relocating residents.[11]

The California Department of Finance reports that the overall vacancy rate within the county has decreased since 2010, to approximately 12.6 percent.[12] Although data regarding the proportion of units kept vacant for seasonal or recreational uses in 2018 is not currently available, the proportion of such vacant units within the overall vacancy rate for the county is anticipated to be comparable to the proportion discussed above for the year 2010. Within the DCWPCP area, the 2010 Census indicated that approximately 116 units were vacant, representing a vacancy rate of 6.5 percent.[13]

Regional Housing Needs Plan

The Regional Housing Needs Allocation (RHNA) is a minimum projection of additional housing units needed to accommodate projected household growth of all income levels by the end of the housing element's statutory planning period. Based on SACOG's adopted RHNA, each city and county must update the housing element of their General Plan to demonstrate how the jurisdiction will meet the expected growth in housing need over the planning period.

According to the U.S. Department of Housing and Urban Development (HUD), housing is classified as "affordable" if households do not pay more than 30 percent of income for payment of rent (including utilities) or monthly homeownership costs (including mortgage payments, taxes, and insurance). SACOG adopted their Regional Housing Needs Plan (RHNP) on September 20, 2012, which officially assigns the allocations to cities and counties in the six-county Sacramento region. SACOG's RHNP covers the planning period from January 1, 2013 to October 31, 2021, and defines the lower income unit categories as follows:

- Very Low-Income Unit: is one that is affordable to a household whose combined gross household income is at or lower than 50 percent of the Placer County median income.

[11] Placer County. *Placer County General Plan Housing Element 2013-2021*. August 1, 2013.
[12] California Department of Finance. *Report E-5: Population and Housing Estimates for Cities Counties and the State, January 1, 2011-2018, with 2010 Benchmark*. Released May 1 2018.
[13] ESRI Business Analyst. *Comparison Reports, DCWPCP Area*. February 2019.

- Low-Income Unit: is one that is affordable to a household whose combined gross household income is at or between 50 and 80 percent of the Placer County median income.

In 2018, the median household income for Placer County was $85,299. Within the DCWPCP area, the median household income was $112,710.[14] According to SACOG's RHNP, Placer County's RHNA number for combined low- and very-low income levels is 2,169 dwelling units (see Table 11-5).[15]

Table 11-5
Placer County Regional Housing Needs Allocations

Jurisdiction	Total Units[1]	Very Low Income		Low Income		Moderate		Above Moderate		Combined Low and Very Low	
		#	%	#	%	#	%	#	%	#	%
Placer County Unincorporated Areas[2]	4,703	1,275	27.1	894	19.0	875	18.6	1,659	35.3	2,169	46.1
Placer County Total	21,625	5,749	26.6	4,030	18.6	4,023	18.6	7,823	36.2	9,779	45.2

Notes:
1. Total number of units (based on proportion of Metropolitan Transportation Plan/Sustainable Communities Strategy 2020 projection)
2 Unincorporated areas presented in this table do not include the unincorporated areas within the Tahoe Basin.

Source: Sacramento Area Council of Governments, Regional Housing Needs Plan, 2012.

Agricultural Resources

State farmland categories that apply to the project site, as well as Williamson Act contracts identified in the DCWPCP, are discussed below.

Definition of Farmland Classifications

The Farmland Mapping and Monitoring Program (FMMP), part of the Division of Land Resource Protection, California Department of Conservation (DOC), uses soil agricultural productivity information from the NRCS to create maps illustrating the types of farmland in a particular area.

The FMMP was established in 1982 to continue the Important Farmland mapping efforts begun in 1975 by the USDA. The intent of the USDA was to produce agriculture maps based on soil quality and land use across the nation. As part of the nationwide agricultural land use mapping effort, the USDA developed a series of definitions known as Land Inventory and Monitoring (LIM) criteria. The LIM criteria classified the land's suitability for agricultural production; suitability included both the physical and chemical characteristics of soils and the actual land use. Important Farmland maps are derived from the USDA soil survey maps using the LIM criteria.

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

[14] ESRI Business Analyst. *Comparison Reports, DCWPCP Area*. February 2019.
[15] Sacramento Area Council of Governments. *Regional Housing Needs Plan 2013-2021*. Adopted September 20, 2012.

detail by modifying the LIM criteria for use in California. The LIM criteria in California use the Land Capability Classification and Storie Index Rating systems, but also consider physical conditions such as dependable water supply for agricultural production, soil temperature range, depth of the groundwater table, flooding potential, rock fragment content, and rooting depth.

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

Each of the seven farmland types are summarized below, based on California DOC's *A Guide to the Farmland Mapping and Monitoring Program*.[16]

Prime Farmland

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

Farmland of Statewide Importance

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

Unique Farmland

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

Farmland of Local Importance

Farmland of Local Importance is land of importance to the local agricultural economy, as determined by each county's Board of Supervisors and a local advisory committee. Placer County farmland of local importance includes lands which do not qualify as Prime, Statewide, or Unique designation, but are currently irrigated crops or pasture or non-irrigated crops; lands that would meet the Prime or Statewide designation and have been improved for irrigation, but are now idle; and lands that currently support confined livestock, poultry operations and aquaculture.

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[16] California Department of Conservation, Division of Land Resource Protection, FMMP: *A Guide to the Farmland Mapping and Monitoring Program*. 2004.
Available at: https://www.conservation.ca.gov/dlrp/fmmp/Documents/fmmp_guide_2004.pdf. Accessed August 2019.

Grazing Land

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

Urban Land

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

Other Land

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

Project Site Farmland Classifications

According to the FMMP, the central and eastern portions of the project site are mapped as Grazing Land. The westernmost portion is mapped as Farmland of Local Importance (see Figure 11-2).[17]

Agricultural Productivity of Soils

The USDA NRCS uses two systems to determine a soil's agricultural productivity: the Land Capability Classification System and the Storie Index Rating System. The "prime" soil classification of both systems indicates the presence of few to no soil limitations, which, if present, would require the application of management techniques (e.g., drainage, leveling, special fertilizing practices) to enhance production.

The Land Capability Classification System takes into consideration soil limitations, the risk of damage when soils are used, and the way in which soils respond to treatment. Capability classes range from Class I soils, which have few limitations for agriculture, to Class VIII soils, which are unsuitable for agriculture. Generally, as the rating of the capability classification system increases, yields and profits are more difficult to obtain. A general description of soil classification, as defined by the NRCS, is provided in Table 11-6.

The Storie Index Rating system ranks soil characteristics according to suitability for agriculture from Grade 1 soils (80 to 100 rating), which have few or no limitations for agricultural production, to Grade 6 soils (less than 10 rating), which are not suitable for agriculture. Under the Storie Index Rating system, soils deemed less than prime can function as prime soils when limitations such as poor drainage, slopes, or soil nutrient deficiencies are partially or entirely removed. Unlike the Land Capability Classification outlined above, the Storie Index Rating System does not distinguish between irrigated and non-irrigated soils. The six grades, ranges in index rating, and definition of the grades, as defined by the NRCS, are provided below in Table 11-7.

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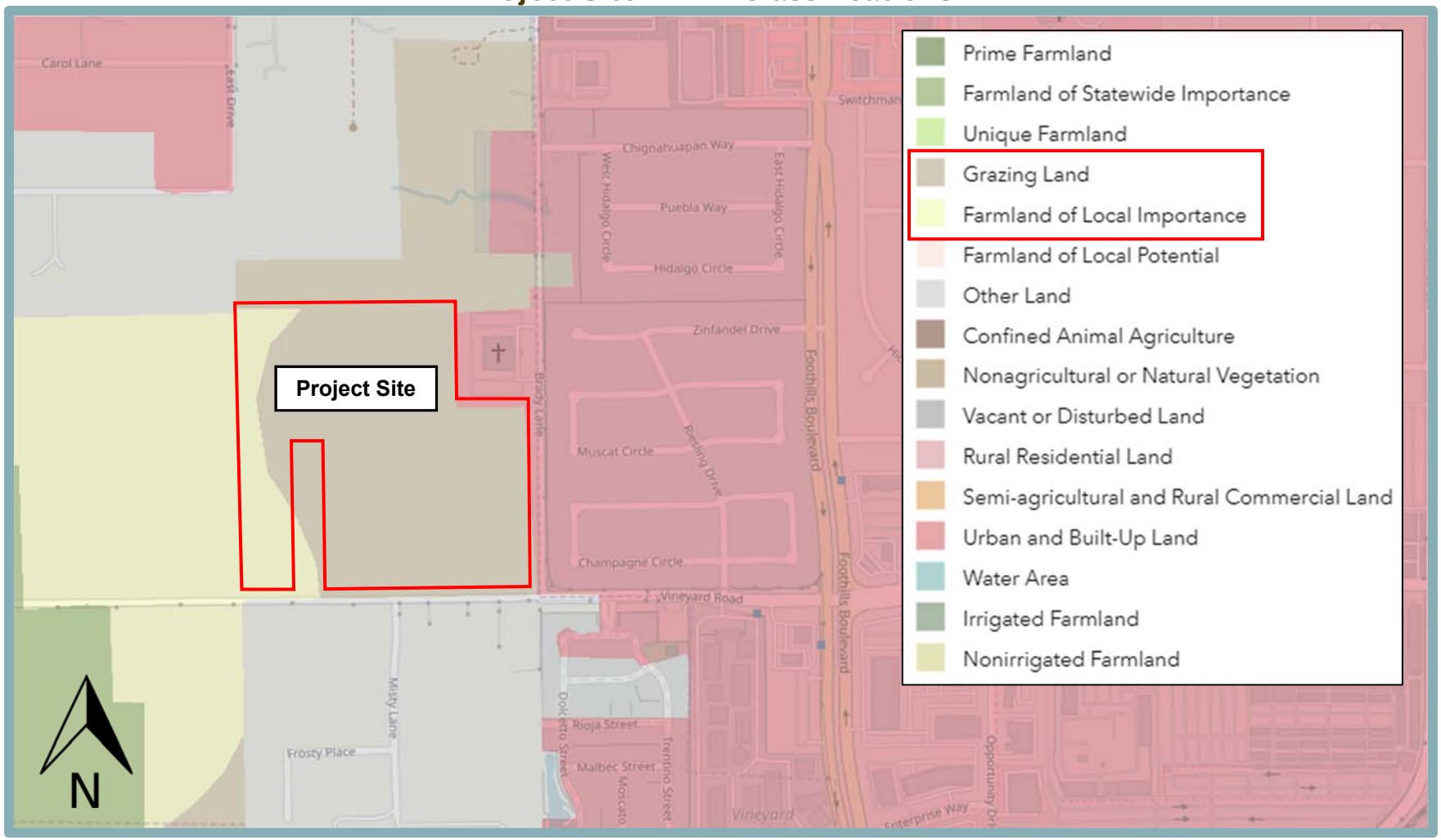
[17] California Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed May 2019.

Figure 11-2
Project Site FMMP Classifications



Note: Site boundaries are approximate.

Source: Department of Conservation, Farmland Mapping and Monitoring Program, 2019.

Table 11-6
Land Capability Classification

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

Source: USDA, Natural Resources Conservation Service. Available at: http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/tools/?cid=nrcs142p2_054226. Accessed February 2019.

Table 11-7
Storie Index Rating System

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

Source: USDA, Web Soil Survey, 2019.

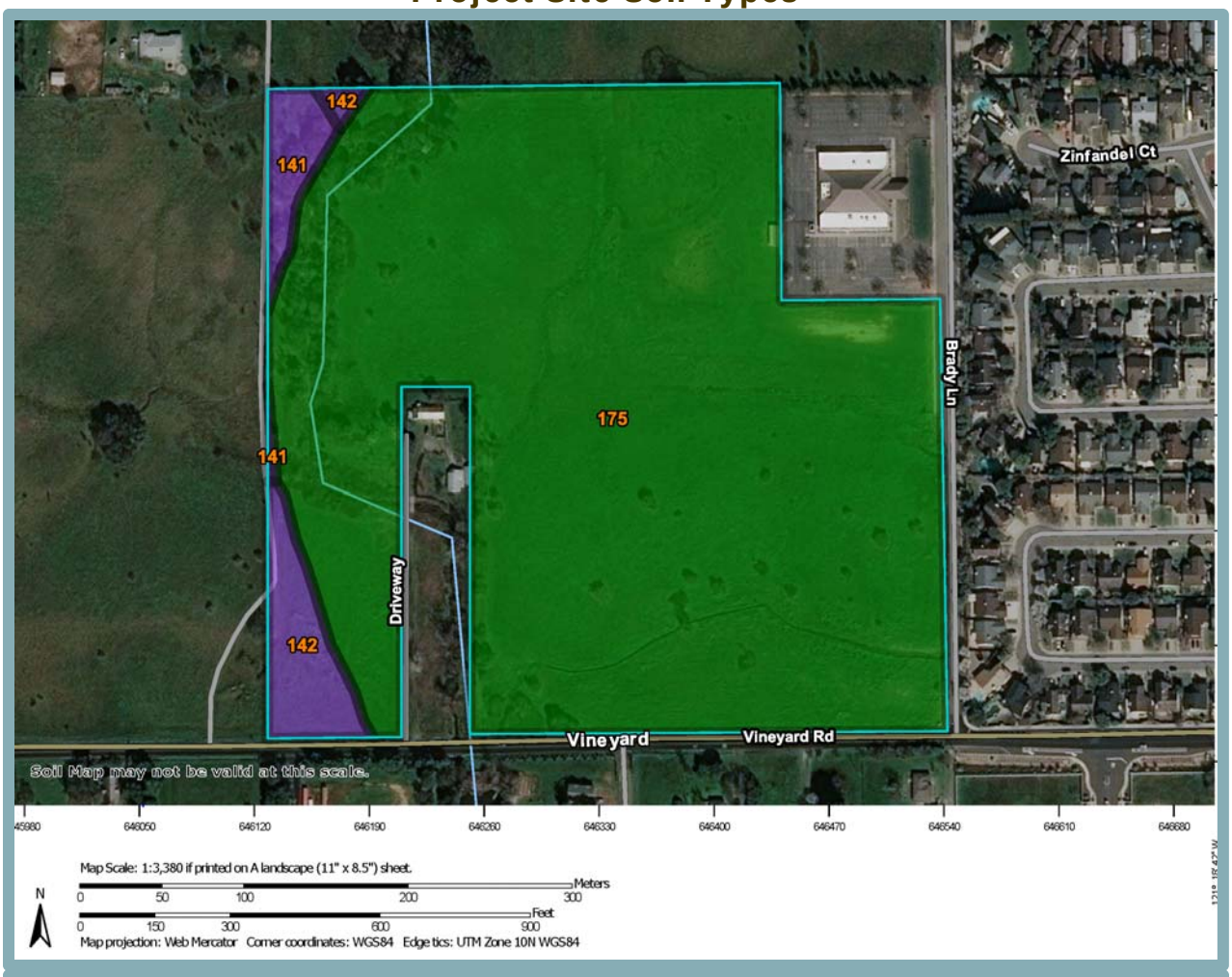
Table 11-8 below summarizes the existing on-site soil types along with the Land Capability Classification and Storie Index Rating for each soil type. The locations of the soil types are shown in Figure 11-3.

Table 11-8
Agricultural Ratings of On-Site Soils

Soil Type	Land Capability Classification	Storie Index Grade
Cometa-Fiddyment complex, one to five percent slopes.	IV	Grade 3 – Fair
Cometa-Ramona sandy loams, one to five percent slopes	III	Grade 3 – Fair
Ramona sandy loam, two to nine percent slopes	III	Grade 1 – Excellent

Source: USDA, Web Soil Survey, 2019.

Figure 11-3
Project Site Soil Types



Map unit symbol	Map unit name	Rating	Component name (percent)	Acres in AOI	Percent of AOI
141	Cometa-Fiddyment complex, 1 to 5 percent slopes	Grade 3 - Fair	Cometa (35%)	0.8	2.2%
142	Cometa-Ramona sandy loams, 1 to 5 percent slopes	Grade 3 - Fair	Cometa (50%)	1.4	4.0%
175	Ramona sandy loam, 2 to 9 percent slopes	Grade 1 - Excellent	Ramona (85%)	32.7	93.8%
Totals for Area of Interest				**34.8**	**100.0%**

Note: Site boundaries are approximate.

Source: USDA, Web Soil Survey, 2019.

As shown in Table 11-8, according to the USDA NRCS Web Soil Survey conducted for the project site, soils within the project site have Land Capability Classifications of Class III and Class IV. Class III soils are defined as having severe limitations that reduce the choice of plants or that require special conservation practices, or both. Class IV soils are defined as having very severe limitations that reduce the choice of plants or that require very careful management, or both.[18]

The Storie Index Ratings of the on-site soils range from Grade 1 – Excellent to Grade 3 – Fair. Grade 1 soils are considered to be excellent or well-suited to general intensive agriculture. Grade 3 soils are only fairly well-suited.[19] As noted above, the Storie Index Rating System does not distinguish between irrigated and non-irrigated soils, unlike the Land Capability Classification System. Thus, because the project site is not irrigated, the Storie Index Grade of the Ramona sandy loam located on the project site indicates that the soils have a higher agricultural productivity than is indicated by the Land Capability Classification.

Williamson Act Contracts

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of restricting specific parcels of land to agricultural or related open space use. According to the Placer County Williamson Act map published by the California DOC, the proposed project site is not under a Williamson Act contract.[20]

Forest Resources

The project site is not zoned for forest land or timberland uses. In addition, the site does not contain forest land (as defined in Public Resources Code section 12220[g]) or timberland (as defined by Public Resources Code section 4526).

11.3 REGULATORY CONTEXT

Federal laws or regulations pertaining to land use and planning, population and housing, or agricultural and forest resources are not applicable for this analysis. However, the existing State and local laws and regulations are listed below, as applicable.

State Regulations

The following are applicable State regulations related to land use and planning, population and housing, and agricultural and forest resources.

Title 14 California Code of Regulations Section 15131

Title 14, California Code of Regulations (CCR) Section 15131 provides that economic or social information may be included in an EIR, but those economic or social effects shall not be considered significant effects on the environment. In an EIR, the lead agency is responsible for researching economic or social changes resulting from a project, which may eventually lead to physical changes in the environment. Such economic or social changes can be used to determine the significance of physical changes on the environment.

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18 U.S. Department of Agriculture, Natural Resources Conservation Service. *Web Soil Survey.* Available at: http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm. Accessed February 2019.

19 U.S. Department of Agriculture, Soil Conservation Service. *Soil Survey of Placer County, California, Western Part* [pg. 76]. 1980.

20 California Department of Conservation. *Placer County Williamson Act FY 2015/2016, Sheet 1 of 2.* 2015.

Regional Housing Needs Plan

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The share is known as RHNA and is based on a RHNP developed by councils of government. The state-mandated RHNA process (Government Code Sections 65580 et seq.) requires SACOG to develop a methodology that determines how to divide and distribute an overall allocation that the region receives from the State.

Williamson Act

The California Land Conservation Act, better known as the Williamson Act, has been the State's premier agricultural land protection program since the act's enactment in 1965. The California legislature passed the Williamson Act in 1965 to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. The Williamson Act creates an arrangement whereby private landowners contract with counties and cities to voluntarily restrict land to agricultural and open space uses. The vehicle for these agreements is a rolling term 10-year contract (i.e., unless either party files a "notice of non-renewal," the contract is automatically renewed annually for an additional year). In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value. The proposed project site is not under a Williamson Act contract.

Local Regulations

The following are the local regulations and standards relevant to the CEQA review process with respect to land use and planning, population and housing, and agricultural and forest resources. Specific goals and policies from the County General Plan and DCWPCP are listed in Table 11-9 at the end of this chapter.

Sacramento Area Council of Governments

SACOG is responsible for the preparation of, and updates to, the Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for the region and the corresponding Metropolitan Transportation Improvement Program (MTIP). The MTIP identifies short-term projects (seven-year horizon) in more detail.

Metropolitan Transportation Plan/Sustainable Communities Strategy

The 2016 MTP/SCS was adopted by the SACOG board on February 18, 2016.[21] The MTP/SCS is a long-range plan for transportation improvements in the region and provides a 20-year transportation vision and corresponding list of projects. The plan is based on projections for growth in population, housing, and jobs. SACOG determines the regional growth projections by evaluating baseline data (existing housing units and employees, jobs/housing ratio, and percent of regional growth share for housing units and employees), historic reference data (based upon five- and ten-year residential building permit averages and historic county-level employment statistics), capacity data (General Plan data for each jurisdiction), and current MTIP data about assumptions used in the most recent MTP/SCS. SACOG staff then meets with each jurisdiction to discuss and incorporate more subjective considerations about planned growth for each area. Finally, SACOG makes a regional growth forecast for new homes and new jobs, based upon an economic analysis provided by a recognized expert in order to estimate regional growth potential based on market analysis and related economic data, which is incorporated into the MTP/SCS.

[21] Sacramento Area Council of Governments. *2016 Metropolitan Transportation Plan/Sustainable Communities Strategy*. Adopted February 18, 2016.

Placer Legacy Open Space and Conservation Program

The Placer Legacy Open Space and Agricultural Conservation Program (Placer Legacy Program) was adopted in June 1998 to protect and conserve open space and agricultural lands in Placer County.[22] The Placer Legacy Program implements the goals, policies, and programs of the 1994 Placer County General Plan and supplements existing open space and conservation programs. The Placer Legacy Program also provides important resource information to guide and direct decisions on the preparation of environmental documents for compliance with CEQA and for discretionary land use entitlements being examined by County staff. The objectives of the Placer Legacy Program include the following:

- Maintain a viable agricultural segment of the economy;
- Conserve natural features necessary for access to a variety of outdoor recreation opportunities;
- Retain important scenic and historic areas;
- Preserve the diversity of plant and animal communities;
- Protect endangered and other special status plant and animal species;
- Separate urban areas into distinct communities; and
- Ensure public safety.

For implementation purposes, the County was divided into 10 study areas based on common geographic and political boundaries. The development of the implementation measures was based on an assessment of each area's existing open space resources, development trends, stressors and conflicts, and opportunities for Placer Legacy Program involvement. The project site is located within the South Placer Urban Study Area. Placer Legacy Program implementation measures for the South Placer Urban Study Area that are pertinent to agricultural resources on and in the vicinity of the project site are listed below:

SP-1. Work with farmers and ranchers to protect agricultural lands outside of designated development areas through the use of conservation easements.

SP-2. Provide certainty to farmers and ranchers concerning the future extent of urban encroachment by coordinating with cities to create permanent greenbelts around urban areas.

SP-3. Support the County's Right-To-Farm Ordinance provisions.

SP-12. Create regional trail connections and develop new regional trails, consistent with adjacent agricultural uses.

SP-20. Establish permanent transition areas and buffers between urban/suburban areas and agricultural areas through conservation easements and/or fee title acquisition of lands containing multiple resource values.

SP-22. Preserve, through development agreements, a large open space buffer area around the lower end of Dry Creek.

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[22] Placer County. *Placer Legacy Open Space and Agricultural Conservation Program, Implementation Report.* June 2000.

Placer County Right-to-Farm Ordinance

Placer County has adopted a Right-to-Farm Ordinance (Section 5.24.040 of the Placer County Code) to minimize loss of the County's commercial agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance. The provisions of the Right-to-Farm Ordinance are as follows:

A. It is the declared policy of the county of Placer to preserve, protect and encourage the development and improvement of its agricultural land for the production of food and other agricultural products. When nonagricultural land uses extend into the agricultural areas, agricultural operations often become the subject of nuisance suits. As a result, agricultural operations are sometimes forced to cease or are substantially curtailed. Others may be discouraged from making investments in agricultural improvements. It is the purpose of this section to reduce the loss to the county of its commercial agricultural resources by limiting the circumstances under which agricultural operations may be deemed to constitute a nuisance.
B. No agricultural activity, operation, or facility, or appurtenances thereof, conducted or maintained for commercial purposes, and in a manner consistent with proper and accepted customs and standards, as established and followed by similar agricultural operations, shall be or become a nuisance, private or public, due to any changed condition in or about the locality, after the same has been in operation for more than one year if it was not a nuisance at the time it began.
C. For purpose of this section, the term "agricultural activity, operation, or facility, or appurtenances thereof" shall include, but not be limited to, the cultivation and tillage of soil, dairying, the production, cultivation, growing, and harvesting of any agricultural commodity including timber, Christmas trees, viticulture, apiculture, nursery stock, or horticulture, the raising of livestock, fur bearing animals, fish, or poultry, and game birds, and any practices performed by a farmer or on a farm as incident to or in conjunction with such farming operations, including preparation for market, delivery to storage, or to market, or to carriers for transportation to market.
D. For the purpose of this section, commercial "agriculture" means those agricultural lands in designated areas, or those lands that are within the California Land Conservation Act, or within a timber preserve zone or those lands that produce a gross annual income of four thousand five hundred dollars ($4,500.00) from the sale of agricultural products.
E. Each prospective buyer of property in unincorporated Placer County shall be informed by the seller or his/her authorized agent of the right-to-farm ordinance. The seller or his/her authorized agent will keep on file a disclosure statement signed by the buyer with the escrow process.
F. Whenever a building designated for residential occupancy is to be located on property in the unincorporated area of Placer County, the owners of the property, or their authorized agent, shall acknowledge receipt of the right-to-farm ordinance. (Ord. 4983-B, 1999: prior code § 5.715)

11.4 IMPACTS AND MITIGATION MEASURES

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

Standards of Significance

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

- Physically divide an established community;
- 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;
- Result in the development of incompatible uses and/or the creation of land use conflicts;
- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure);
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere (see Chapter 16, Effects Not Found to be Significant);
- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, a Williamson Act contract, or a Right-to-Farm Policy;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)) (see Chapter 16, Effects Not Found to be Significant);
- Result in the loss of forest land or conversion of forest land to non-forest use (see Chapter 16, Effects Not Found to be Significant);
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use;
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use (see Chapter 16, Effects Not Found to be Significant); or
- Conflict with General Plan or other policies regarding land use buffers for agricultural operations.

As noted above, issues related to whether the proposed project would result in any of the following impacts are discussed in Chapter 16, Effects Not Found To Be Significant, of this EIR:

- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)); or
- Result in the loss of forest land or conversion of forest land to non-forest use or involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.

Method of Analysis

The following section describes the method of analysis used to evaluate potential impacts of the proposed project related to land use and planning, population and housing, and agricultural resources.

It should be noted that in addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order

to meet the County's affordable housing requirements. However, the total number of residential lots would remain unchanged, as would the overall disturbance area associated with the project. In addition, the 12 additional Accessory Dwelling Units, if included, would include a smaller household size relative to standard market-rate single-family units. Therefore, the potential inclusion of an additional 12 units on-site would not result in new impacts or substantially more severe impacts beyond the analysis presented herein.

Land Use and Planning

This chapter analyzes the compatibility of the proposed project with surrounding land uses and compliance of the proposed project with adopted plans and policies. Environmental impacts resulting from the proposed project are discussed in the respective environmental categories. This discussion complies with Section 15125(d) of the CEQA Guidelines, which requires that EIRs discuss inconsistencies with adopted local plans as part of the environmental setting. The ultimate determination of consistency rests with the Placer County Board of Supervisors.

Compatibility with Existing Uses

The proposed project is evaluated for compatibility with the existing land uses adjacent to the project site. The evaluation considers the existing and planned type and intensity of uses in the project vicinity and those proposed for the project site. The analysis assumes the construction and implementation of the proposed project within the existing and planned environment to determine if the project is compatible with those existing and planned uses surrounding the project site.

Consistency with the Applicable Land Use Regulations

The proposed project is examined for consistency with the Placer County General Plan and the DCWPCP based on the relevant policies contained within both documents. The project's consistency with the Placer County Zoning Ordinance is also discussed.

Population and Housing

The level of significance of the impacts related to population and housing is determined by evaluating whether the proposed project, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure), would induce substantial unplanned population growth in the project area.

Agricultural Resources

Evaluation of potential impacts of the proposed project on agricultural resources is based on the following: the Placer County General Plan, the associated EIR, the DCWPCP, the *Placer Legacy Open Space and Agricultural Conservation Program, Implementation Report*, the NRCS Web Soil Survey, and the FMMP online mapping system. The standards of significance listed above are used to delineate the significance of any potential impacts.

Project-Specific Impacts and Mitigation Measures

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

11-1 Physically divide an established community. Based on the analysis below, the impact is *less than significant*.

The proposed project would involve the construction of a residential development on a site that contains grassland and a riparian corridor. Surrounding uses in the project site vicinity include an existing single-family residential subdivision to the east of the site in the City of Roseville and rural single-family homes to the north and south of the site, as well as the Father's House church to the north. The proposed project would not cut off any existing or proposed transportation route that provides connectivity in the DCWPCP area. Given that the proposed subdivision would essentially serve as an extension of the existing residential uses in the project area and would not require removal of any existing homes, the proposed project would not physically divide an established community. Thus, a ***less-than-significant*** impact would occur.

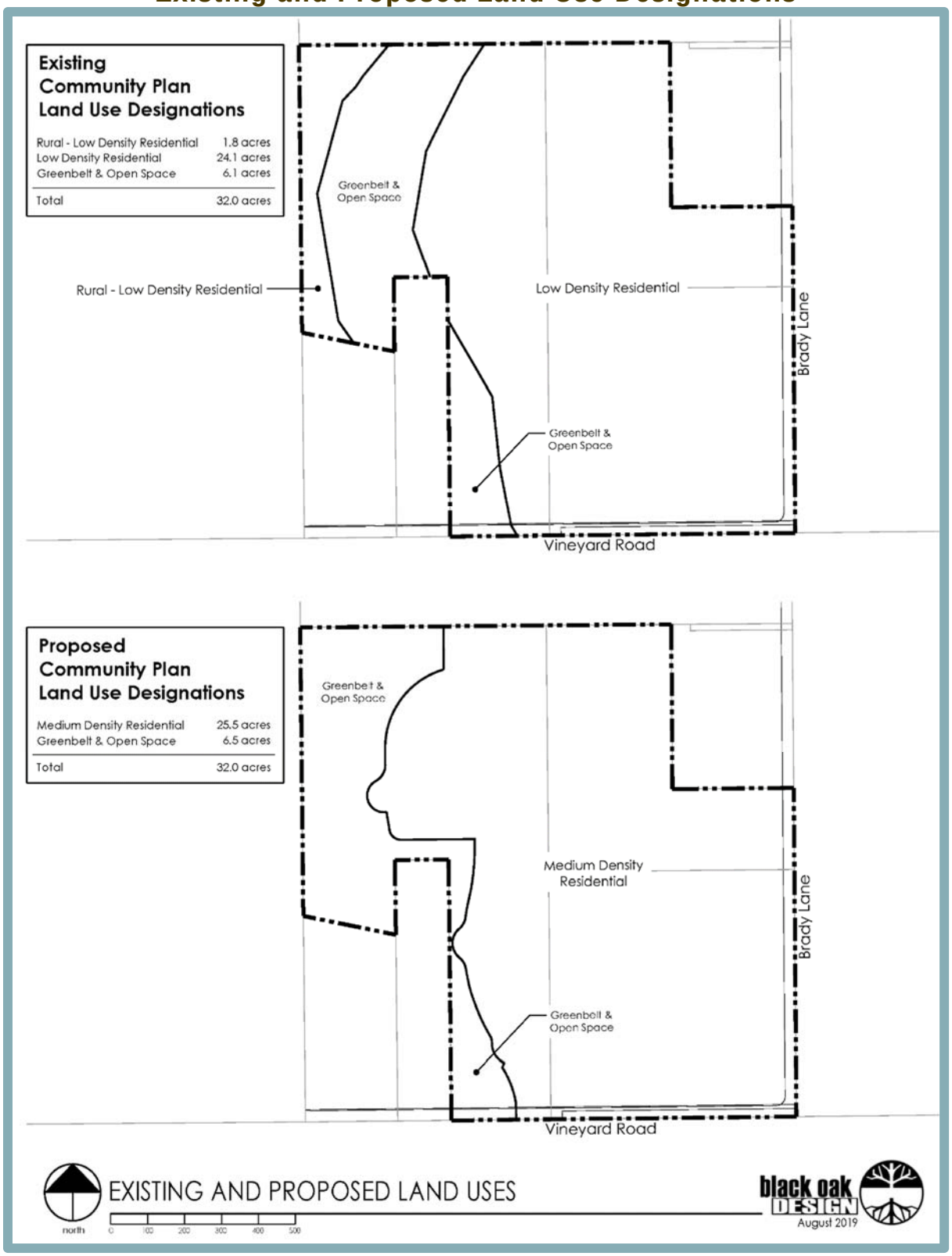
Mitigation Measure(s)
None required.

11-2 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, result in the development of incompatible uses and/or the creation of land use conflicts, or conflict with General Plan or other policies regarding land use buffers for agricultural operations. Based on the analysis below, the impact is *less than significant*.

The General Plan Guidelines published by the State Office of Planning and Research defines consistency as follows, "An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment." Therefore, the standard for analysis used in this EIR is in general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). The determination that the project is consistent or inconsistent with the Placer County General Plan policies or other County plans and policies is ultimately the decision of the Placer County Board of Supervisors. Furthermore, although CEQA analysis may identify some areas of general consistency with County policies, the County has the ability to impose additional requirements or conditions of approval on a project, at the time of its approval, to bring a project into more complete conformance with existing policies. A discussion of the project's general agreement with policy language and furtherance of policy intent is discussed in further detail below.

The DCWPCP and the Zoning Ordinance carries out the policies of the Placer County General Plan by classifying and regulating the uses of land and structures within the unincorporated County, consistent with the General plan. As noted previously, the project site is currently designated LDR 1-2 du/ac (24.1 acres), O (6.1 acres), and RLDR 1-2.3 ac min (1.8 acres). The project would include a General Plan/DCWPCP Amendment to change the site's land use designations to MDR (25.5 acres) and O (6.5 acres) (see Figure 11-4).

Figure 11-4
Existing and Proposed Land Use Designations



The proposed project would change the land use designation of the majority of the property from LDR to MDR. The MDR district provides moderate density housing, either as attached or detached units, at a density range of two to four units per acre. It may include a range and mix of dwelling types including single-family detached houses and multi-family residential development such as duplexes. The primary intent of the district is to provide for residential neighborhood development in an efficient urban pattern of well-connected streets and at greater dwelling unit density than the Low Density Residential district.

As shown in Table 11-9, Placer County General Plan and DCWPCP Policy Discussion, at the end of this chapter, the project would be generally consistent with the applicable policies outlined in the 2013 General Plan. Further, the project is generally consistent with and implements all other applicable plans and policies. However, the project is not consistent with existing RS-AG-B-20 zoning.

Specifically, the project would include a rezone to change the site's zoning designations from RS-AG-B-20 (24.1 acres), O (6.1 acres), and F-DR (1.8 acres) to (RS-B-4) (25.5 acres) and O (6.5 acres) (see Figure 11-5). The existing DCWPCP land use and zoning designations for the three-acre NAPOTS area within the southwestern portion of the site would not be altered. While an inconsistency may indicate a significant physical impact, the inconsistency is not itself an impact. The physical impacts of the project are analyzed in Chapters 4 through 15 of this Draft EIR.

The proposed project is consistent with the following standards set forth in the Zoning Ordinance applicable to the –B-4 combining district:

Minimum Lot Area:	4,000 square feet
Minimum Lot Width:	45 feet (Interior Lot) / 50 feet (Corner Lot)
Front Setback:	12 ½ feet for any portion of a structure and 20 feet to garage face
Side Setback:	5 feet (One Story) / 7 ½ feet (Two Story)
Rear Setback:	10 feet (One Story) / 20 feet (Two Story)
Height:	30 feet

Per Sections 17.50.010 and 17.52.040(C)(3) of the Placer County Code, projects within RS zoning districts are limited to site coverage restrictions of 40 percent maximum for one-story and two-story units. The proposed project would require a Variance to increase the allowable building coverage to 50 percent for one-story units, while two-story coverage would remain at the allowable 40 percent maximum. The proposed Variance is expected to result in a higher percentage of single-story homes being sold and built in the project site. Although the proposed project would introduce new homes on a currently undeveloped site, the lower percentage of two-story homes would lessen the "higher intensity" impression two-story homes can make by virtue of their massing, which would be beneficial to both the subdivision's home buyers and neighbors adjacent to the community. Having a reasonable ratio of single-story to two-story homes may break up the less-attractive mass a streetscape dominated by two-story homes could create. Thus, the variance would not create measurable negative environmental impacts.

Figure 11-5
Existing and Proposed Zoning Designations

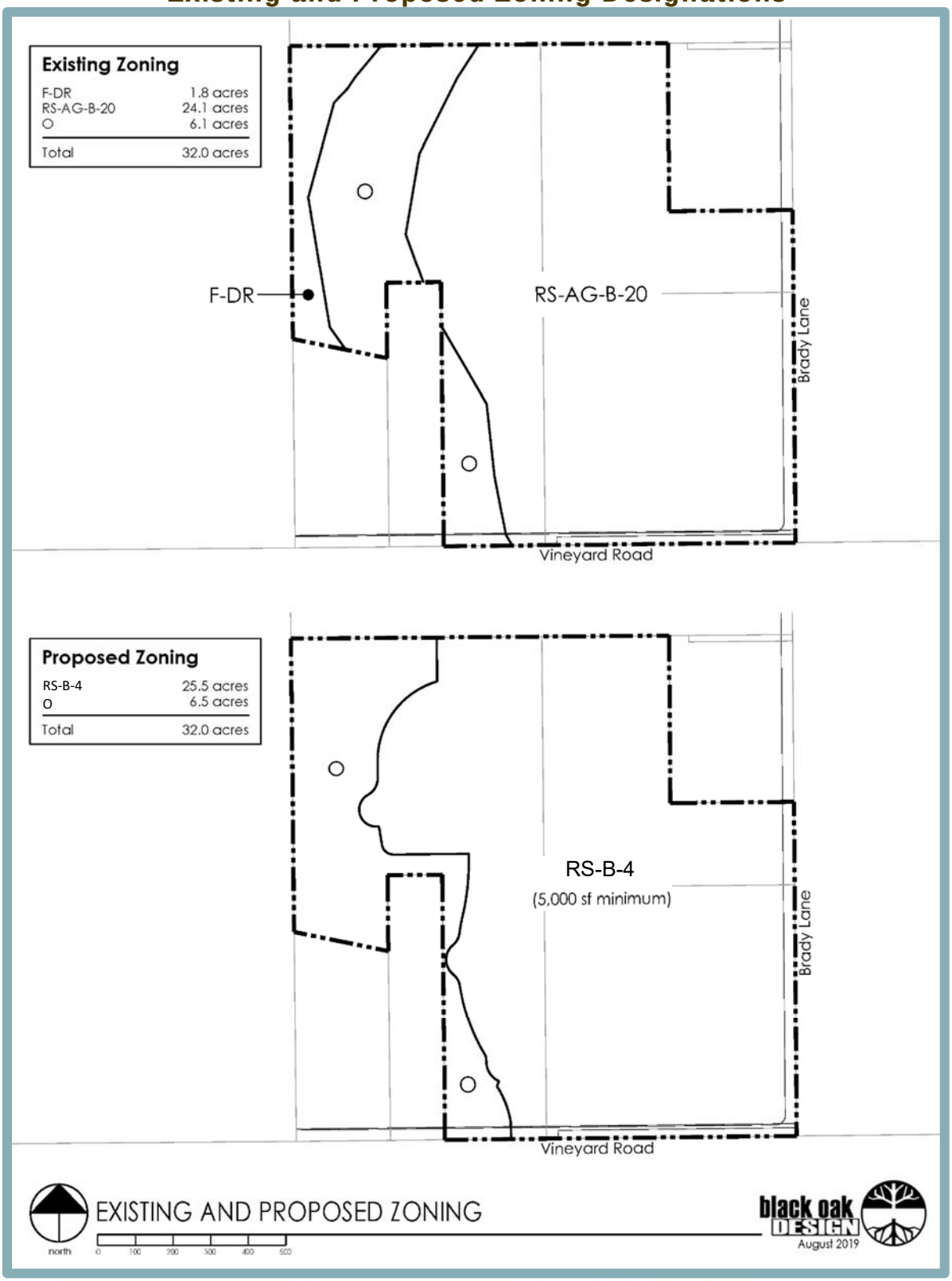


Figure 11-6 below demonstrates the proposed maximum coverage restriction changes for single-story units.

Lot coverage requirements are designed to ensure that lots are not overdeveloped; however, such requirements have been found by the County to impede single-story home construction on small lots. The following trends in the local and national housing markets also necessitate the County re-examine its development standards:

- An increase in smaller lots and compact development reflecting both increasing land cost and 'smart growth' planning trends;
- Increases in home sizes;
- Demand for increased interior entertainment space;
- Demand for smaller, drought-sensitive yards; and
- Demand for single-level living.

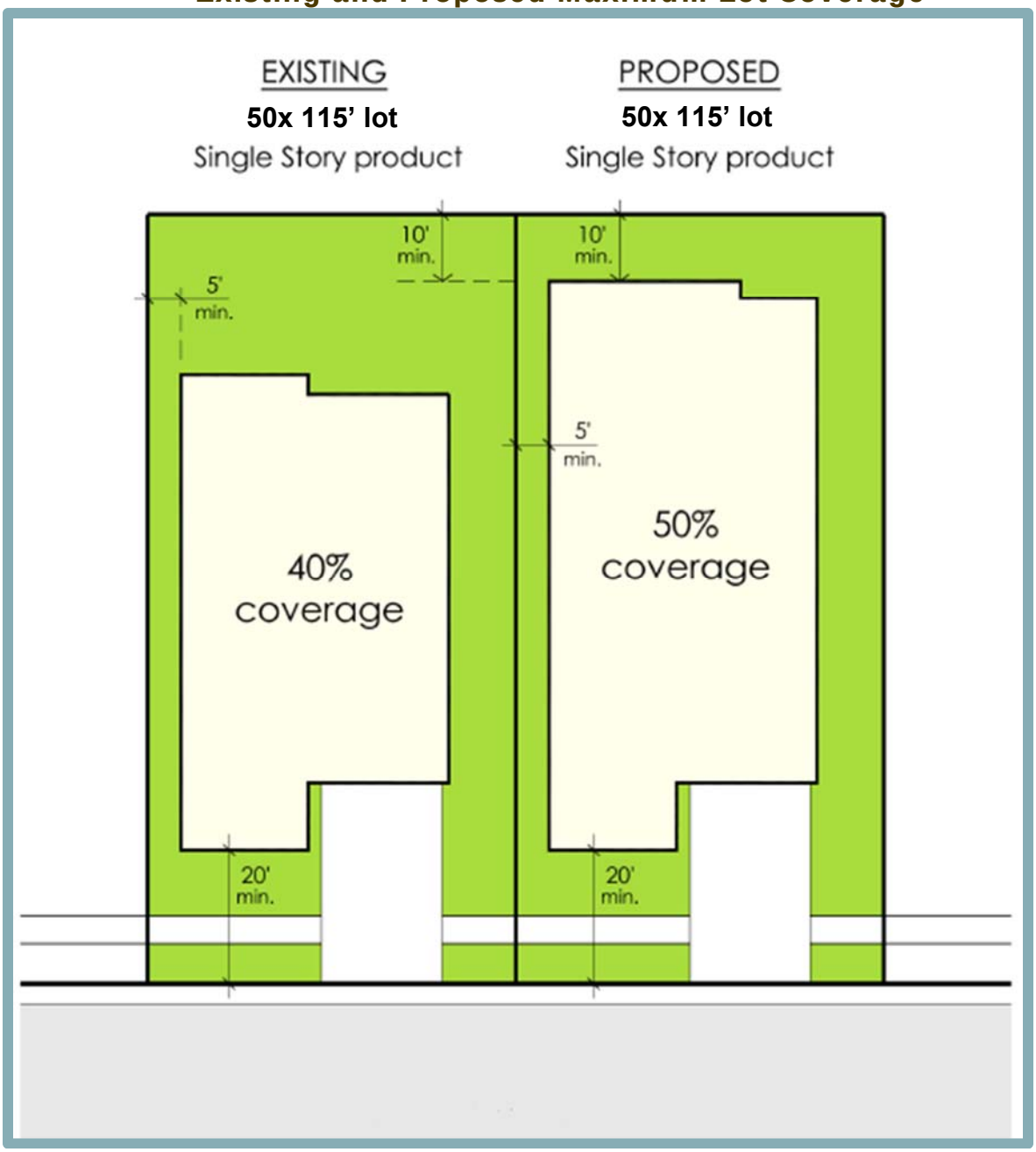
Per Section 17.14.010 of the Placer County Code, the project would also require a Conditional Use Permit (CUP) to construct the proposed on-site tot lot within the O zoning district. In addition, the proposed project would require approval of a Minor Boundary Line Adjustment to create a separate parcel for the three-acre NAPOTS area within the southwestern portion of the project site.

Approval of the General Plan/DCWPCP Amendment, Rezone, Variance, CUP, and Minor Boundary Line Adjustment are discretionary actions subject to approval by the Placer County Board of Supervisors. Should the Placer County Board of Supervisors approve the requested entitlements, the project would be rendered consistent with the County's DCWPCP and Zoning Ordinance. From a policy perspective, Table 11-9 at the end of this chapter demonstrates that the proposed project would be generally consistent with the policies in the Placer County General Plan and the DCWPCP adopted for the purpose of avoiding or mitigating an environmental effect, including policies related to agricultural buffers.

Land Use Compatibility

The proposed 119 single family lots would range in size from 5,000 square feet to 11,538 square feet. The 39 lots in the Southeast Village closest to existing residential development would have an average size of approximately 7,600 sf, ranging from 6,600 to 11,538 sf, while 80 smaller lots in the Northwest Village would have an average size of approximately 5,600 sf, and range in size from 5,000 to 8,604 sf. All lots exceed the 4,000 square foot minimum lot size requirement of the site's proposed RS-B-4 zoning classification. Furthermore, the proposed project would be generally compatible with the existing residential development within the project area. The proposed 5,000-sf minimum lot sizes would be consistent with the lot sizes within the existing single-family residential subdivision to the east of the site across Brady Lane, within the City of Roseville, and the minimum lot size of 3,000 sf within the American Vineyard Villages subdivision southeast of the project site. In addition, the proposed project would provide a transition between the lower-density rural residential lots located within the eastern portion of the DCWPCP area and the more densely developed urban landscape to the east in the City of Roseville.

Figure 11-6
Existing and Proposed Maximum Lot Coverage



While the project would introduce a more intensive use when compared to existing conditions, the project proposed is compatible with the uses and intensity of the surrounding development. In addition, the project would not introduce a substantial permanent increase in ambient noise levels in the project vicinity above levels of the existing conditions; and the project would provide connectivity between existing neighborhoods and increased pedestrian/bike pathways.

While the project would constitute an intensification of building mass and heights relative to existing conditions on the site, the project would be required to comply with design recommendations as a result of Planning Commission review. Landscaping, public space, and pedestrian access and connectivity would be compatible with adjacent walkways within the surrounding area. The project would be landscaped along the project frontages and would retain, and protect during construction activities, existing native trees within the riparian corridor where possible. Where new plantings are proposed, the project would use native plants that are indigenous and adapted to the region.

The project is consistent with the uses established for the RS zone. Adjacent residential land uses are comprised of single-family developments and are currently served by existing utilities and infrastructure. Therefore, the project would introduce a similar adjacent land use to these existing residential developments to the east and south. Thus, the project would not introduce an incompatible use to the project area or create land use conflicts, and would not result in any adverse environmental effects associated with such.

Conclusion

Based on the above, the proposed project would not cause a significant environmental impact due to conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (including the policies discussed in Table 11-9), and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

11-3 Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure). Based on the analysis below, the impact is *less than significant*.

Growth can be induced in a number of ways, including through the elimination of obstacles to growth or through the stimulation of economic activity within the region. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped. The following sections describe potential effects related to direct and indirect population growth associated with implementation of the proposed project.

Direct Population Growth

The proposed 119-unit single-family development would increase the available housing within the DCWPCP area, which would be expected to increase population in the area. Using the 3.08 persons/household average household size for the DCWPCP area (see Table 11-4), the project would house an estimated 367 residents. Under the current RS-AG-B-20 zoning for the 24.1-acre portion of the site east of the on-site tributary, up to 52 units could be built, resulting in a population of approximately 160 residents.[23] Thus, the proposed project would result in an increase of approximately 67 units, or 207 residents beyond what is currently anticipated for the site.

As noted previously, the project could include up to 12 ADUs on-site, with a maximum size of 1,200 sf each, in order to meet the County's affordable housing requirements. Because the ADUs are anticipated to be smaller than the proposed 119 single-family units, a lower person per household rate of 1.91 persons per household is applied to the ADUs. Thus, development of 12 ADUs would likely result in approximately 23 additional residents within the project site. The total population of the project site with 12 ADUs would be 390 residents, or 230 residents beyond what is currently estimated for the site based on current zoning.

Development of 119 residential units and the associated addition of between 367 and 390 residents would increase the total population of the DCWPCP area from 6,170 to between 6,537 and 6,560 residents, or a 5.9 to 6.3 percent increase. However, as discussed in the Existing Environmental Setting section of this chapter, the DCWPCP projected that the area's population could grow to as much as 9,836 residents by buildout. Therefore, although the proposed project would have the potential to increase the population of the area to approximately 6,537 residents, or 6,560 residents if the 12 ADUs are constructed on-site, such an increase in population would be within the range of growth projections assumed in the DCWPCP. Impacts associated with the growth anticipated in the DCWPCP area were analyzed in the EIR for the adopted DCWPCP.

It should be noted that while the anticipated population growth resulting from the proposed project would be within the maximum growth anticipated by the DCWPCP buildout, the 2010 growth estimates within the DCWPCP do not include more recent projects approved in the DCWPCP, namely the Riolo Vineyard Specific Plan and the Placer Vineyards Specific Plan. Growth related to buildout of the project in conjunction with the foregoing Specific Plans is considered in further depth within Impact 11-7 below.

SACOG also anticipates growth within Established Communities, including the DCWPCP area. As discussed within the Existing Environmental Setting section of this chapter, Established Communities throughout the unincorporated area of Placer County are anticipated to grow by 629 units between 2016 and 2020. The 119 units included in the proposed project, as well as the up to 12 ADUs that could be included in the project to meet the County's affordable housing requirements, would be within SACOG's growth estimates for Established Communities within Placer County by 2020. Additionally, growth in the DCWPCP area and other unincorporated areas of Placer County was anticipated by the Placer County Housing Element. As shown in Table 11-5, the County's Housing

[23] As noted in Chapter 18, Alternatives, of this EIR, 52 units is the theoretical capacity for development of the eastern portion of project site under the current zoning designations; however, development would likely occur at a lower intensity due to on-site requirements, including streets, landscape, EVA, lift station, etc.

Element includes allocation for market-rate and below market-rate units within unincorporated portions of the County. The proposed 119 single-family units would be within the Housing Elements' allocation of market-rate units for the County.

Therefore, while the proposed project would result in population growth in the DCWPCP area, such growth would be within the buildout projections for the DCWPCP area, as well as the growth projections for unincorporated areas within Placer County.

Indirect Population Growth

The proposed project would result in an increase of the permanent population on the project site by 367 to 390 residents. This new residential population would likely patronize local businesses and services in the area, fostering economic growth. While construction of the proposed project would result in increased employment opportunities in the construction field, which could potentially result in increased permanent population and demand for housing in the vicinity of the project site, employment patterns of construction workers is such that construction workers would not likely, to any significant degree, relocate their households as a result of the construction-related employment opportunities associated with the proposed project.

Although the project would provide short-term employment opportunities, which would likely be filled from the local employee base, with the possible exception of a few household and landscape maintenance jobs, no permanent jobs would be created by the proposed project. Therefore, the project would not result in long-term employment growth in the area.

The residential population generated by the proposed project would also result in an increased demand for public services. However, as discussed in Chapter 13, Public Services and Recreation, the project's demand for public services could be accommodated by existing services and would not create a need for new or altered governmental facilities

The DCWPCP included measures to ensure that adequate utilities and services were provided for development within the DCWPCP area. Consistent with the DCWPCP, the project would be annexed into Placer County Service Area 28, Zone 173, for sanitary sewer service. New public water mains would be installed on-site and along the Brady Lane and Vineyard Road frontages. In addition, the project would include installation of on-site gravity sewer and storm drain collection systems. The on-site sanitary sewer system would flow to a new lift station to be located on Lot A, on the north side of Vineyard Road, east of the on-site tributary and opposite Misty Lane.

With the exception of the proposed lift station, the proposed infrastructure improvements would be designed to serve the project only. The lift station, which would be financed by the project applicant, had been previously planned by the County per the Northeast Area Sewer Master Plan and would serve the entire northeast portion of the DCWPCP area. Given that the lift station has been previously planned per the Northeast Area Sewer Master Plan, the proposed infrastructure improvements would not allow for or encourage growth where such growth was not previously planned. Rather, the proposed project would include development as envisioned in the DCWPCP, which would meet the needs of future planned development within the area, and the induced growth need not be

reconsidered (cf. *Friends of the Eel River v. Sonoma County Water Agency* (2003) 108 CA4th 859).[24] This evaluation relies on the DCWPCP EIR analysis pursuant to CEQA Guidelines Section 15130, subdivision (b)(1)(B).

Conclusion

Considering the above, the proposed project would include development that would result in direct on-site population growth. However, population growth resulting from the proposed project would be within the DCWPCP, SACOG, and Placer County growth estimates for the project area. Furthermore, the infrastructure included in the proposed project would be sized to accommodate only the development that had been previously planned for the project area. As a result, the proposed project would not be considered to induce substantial unplanned population growth, and a ***less-than-significant*** impact would result. It should be noted that potential impacts related to growth inducement are discussed further within Chapter 17, Statutorily Required Sections, of this EIR, consistent with Section 15126.2(d) of the CEQA Guidelines.

Mitigation Measure(s)

None required.

11-4 Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use, or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Based on the analysis below, the impact is *less than significant*.

Public Resources Code 21060.1 defines "Agricultural land" as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. As noted previously, according to the most recent information from the FMMP, the central and eastern portions of the project site are mapped as Grazing Land. The westernmost portion is mapped as Farmland of Local Importance (see Figure 11-2).[25]

The area classified as Farmland of Local Importance consists of the three-acre NAPOTS area in the southwestern portion of the site and the northwestern portion of the site west of the on-site tributary. Neither area is proposed for development as part of the proposed project. Both areas would retain their current DCWPCP land use and zoning designations. Thus, the project would not convert Farmland of Local Importance to non-agricultural use. The portion of the site currently mapped as Grazing Land is proposed for development with single-family homes and associated improvements. However, given that Grazing Land does not constitute Farmland under CEQA, such development would not result in the conversion of Farmland to non-agricultural use.

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24 Placer County. *Countywide General Plan EIR* [pg. 3-18 and 3-19]. July 1994.
25 Department of Conservation. *California Important Farmland Finder.* Available at: https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed August 2019.

According to the DCWPCP, the project site is currently designated LDR 1-2 du/ac and O. As such, the County has previously anticipated development of the site with non-agricultural uses. The project site is not currently used for agricultural purposes, and the portion of the site designated as Grazing Land is not currently used for livestock grazing. The site does not include any land designated as Agricultural Land per the Environmental Resources Element of the DCWPCP.[26]

Based on the above, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the FMMP of the California Resources Agency, to non-agricultural use, or involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

11-5 Conflict with existing zoning for agricultural use, a Williamson Act contract, or a Right-to-Farm Policy. Based on the analysis below, the impact is *less than significant*.

As noted previously, according to the Placer County Williamson Act map published by the California DOC, the project site is not under a Williamson Act contract.[27] The nearest Williamson Act property is located 3,677 feet southwest of the project site on the north side of PFE Road. In addition, the site is not zoned exclusively for agricultural uses. The portion of the project site west of the existing on-site tributary is currently zoned F-DR, which is intended for agricultural uses. However, the proposed project would not include any development within the F-DR-zoned portion of the site, and the existing zoning designation would be retained.

The central and eastern portions of the site are currently zoned with an -AG combining district designation. The project would rezone the RS-AG-B-20 designated area to RS-B-4, thereby removing the -AG combining district designation. However, while the -AG combining district allows for some limited agricultural uses, the district is generally intended primarily for residential uses.

According to the DCWPCP, the proposed development area is currently designated LDR 1-2 du/ac and O. As such, the County has previously anticipated development of the site with non-agricultural uses. Furthermore, the project site is not currently used for agricultural purposes, and the portion of the site designated by the FMMP as Grazing Land is not currently used for livestock grazing. Upon approval of the proposed rezone, the project would be consistent with the site's updated zoning designation.

As shown in Table 11-9 of this chapter, the proposed project would be generally consistent with relevant policies in the Placer County General Plan and the DCWPCP. As discussed within the table, the proposed project would maintain the minimum separation distances

[26] Placer County. *Dry Creek West Placer Community Plan* [plate #2]. 1989.
[27] California Department of Conservation. *Placer County Williamson Act FY 2015/2016, Sheet 1 of 2.* 2015

between areas designated Agriculture and proposed for residential uses. Conflicts between the proposed project and adjacent agricultural uses would not be expected to occur. Therefore, development of the proposed project would not have the potential to conflict with the County's Right-to-Farm Ordinance provisions.

Based on the above, the proposed project would not conflict with existing zoning for agricultural use, a Williamson Act contract, or a Right-to-Farm Policy, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Additional detail regarding the cumulative setting is included in Chapter 17, Statutorily Required Sections, of this EIR.

11-6 Cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the cumulative impact is *less than significant*.

A cumulative analysis of land use is not included because land use plans or policies and zoning generally do not combine to result in cumulative impacts. The determination of significance for impacts related to such issues is whether the project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Such a conflict is site-specific, and, thus, is only addressed on a project-by-project basis. As shown in Table 11-9 of this chapter, the proposed project would be generally consistent with relevant policies in the Placer County General Plan and the DCWPCP.

Therefore, the proposed project would not cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and the cumulative impact would be ***less-than-significant***.

Mitigation Measure(s)
None required.

11-7 Cumulative unplanned population growth. Based on the analysis below, the cumulative impact is *less than significant*.

Buildout of the DCWPCP was anticipated to result in population growth within the plan area through the buildout of urban and rural developments throughout the DCWPCP, including the project site. Since approval of the DCWPCP, the Placer Vineyard Specific Plan and Riolo Vineyard Specific Plan have been approved, which have increased the amount of land designated for urban development within the DCWPCP area. In addition, several new residential subdivisions have been completed, are underway, or approved within the Plan area. The MTP/SCS, prepared by the SACOG, provides regional growth projections for the six-county Sacramento region, including the DCWPCP.

The MTP/SCS identifies the portions of the DCWPCP, excluding the Riolo Vineyard and Placer Vineyards Specific Plan areas, as Established Communities. As discussed within Impact 11-3 above, the population growth related to implementation of the proposed project has been anticipated for the region by the MTP/SCS. Concurrently, the MTP/SCS explicitly anticipates growth within the Developing Communities of Placer Vineyards and Riolo Vineyard within the total growth anticipated for Placer County.[28] Thus, the DCWPCP anticipated cumulative growth of the plan area, and increased urbanization within the DCWPCP area has been anticipated by regional planning such as the MTP/SCS. Because development of the project site and buildout of the DCWPCP area has been anticipated in regional development forecasts, buildout of the proposed project in combination with other approved developments within the project area would not result in a significant cumulative contribution to population growth within the project area or region.

It should be noted that population growth itself does not constitute a significant physical environmental effect. Rather, the determination of significance is based on whether population growth associated with a project has been previously planned for, and whether such growth could result in indirect impacts from associated development. As such, the cumulative analysis within each technical chapter of this EIR evaluates the physical environmental impacts of cumulative development.

Considering the above, implementation of the proposed project, in combination with future development occurring under buildout of the DCWPCP, would result in a ***less-than-significant*** cumulative impact related to unplanned population growth.

Mitigation Measure(s)

None required.

[28] Sacramento Area Council of Governments. *2016 Metropolitan Transportation Plan/Sustainable Communities Strategy* [Appendix E-3, pg. 159]. Adopted February 18, 2016.

11-8 Involve changes in the existing environment which, due to their location or nature, could cumulatively result in loss of Farmland to non-agricultural use. Based on the analysis below, the project's incremental contribution to the significant cumulative impact is *less than cumulatively considerable*.

The Placer County General Plan EIR concluded that the County's General Plan would bring about changes to the existing land uses in the unincorporated areas of the County. In addition, the buildout scenario presented in the DCWPCP presupposed that land uses would change as a result of growth and development occurring under buildout of the DCWPCP. Both the Placer County General Plan EIR and the DCWPCP anticipated that the conversion of existing Farmland in the region to urban use would result in the loss of agricultural production. While the Placer County General Plan EIR stated that the loss of Farmland and agricultural production was considered a significant adverse impact, the EIR did not provide mitigation measures sufficient to reduce the adverse impact to a less-than-significant level.

As discussed in Impact 11-4 above, the project site does not contain Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. In addition, the project site is not currently used for agricultural purposes, and the portion of the site designated as Grazing Land is not currently used for livestock grazing. The site does not include any land designated as Agricultural Land per the Environmental Resources Element of the DCWPCP.[29] Thus, development of the project site with single-family homes and associated improvements would not result in the direct conversion of Farmland to non-agricultural uses. In addition, the proposed project would not induce additional development in the project region such that future conversion of Farmland within the area would occur.

Based on the above, development of other proposed and pending projects within the DCWPCP area and unincorporated Placer County would result in a significant cumulative impact associated with the conversion of Farmland to non-agricultural use. However, the proposed project's incremental contribution to the significant cumulative impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

[29] Placer County. *Dry Creek West Placer Community Plan* [plate #2]. 1989.

Table 11-9
Placer County General Plan and DCWPCP Policy Discussion

Policy		Project Consistency
Placer County General Plan		
1.B.1	The County shall promote the concentration of new residential development in higher density residential areas located along major transportation corridors and transit routes.	The project site is located along Vineyard Road, which provides a major point of connection between the City of Roseville and the DCWPCP area. In addition, the proposed 5,000-sf minimum lot sizes would be consistent with the lot sizes within the existing single-family residential subdivision to the east of the site, across Brady Lane within the City of Roseville and the minimum lot size of 3,000 sf within the American Vineyard Villages subdivision southeast of the project site. While the project site is not located within a high-density residential area, the proposed project would be generally consistent with residential development trends in the project vicinity.
1.B.3	The County shall encourage the planning and design of new residential subdivisions to emulate the best characteristics (e.g., form, scale, and general character) of existing, nearby neighborhoods.	The proposed project is designed to be compatible with the existing American Vineyard Villages subdivision southeast of the project site within the City of Roseville. Specifically, as noted under the Policy 1.B.1 discussion above, the proposed lot sizes would be consistent with the lot sizes in the American Vineyard Villages subdivision. In addition, approximately 50 percent of the homes backing onto Vineyard Road and Brady Lane would be limited to single-story homes, with all two-story homes being separated from each other by at least one single-story home. Furthermore, the proposed project would be consistent with the Placer County Design Guidelines, the specific design guidelines contained in the DCWPCP, and all applicable sections of Article 17.54, General Development Regulations, of the Placer County Code.
1.B.5	The County shall require residential project design to reflect and consider natural features, noise exposure of residents, visibility of structures, circulation, access, and the relationship of the project to surrounding uses. Residential densities and lot patterns will be determined by these and other factors. As a result, the maximum density specified by General Plan designations or zoning for a given parcel of land may not be realized.	The most notable natural feature within the project site is the natural riparian corridor along the tributary within the western portion of the site. The proposed project would preserve the riparian corridor as open space. In addition, the project would include raised earthen berms and landscaping elements at the project frontages along Vineyard Road and Brady Lane. Such berms may include a short masonry base wall, with portions including a five-foot-tall open iron fence on top. The combined height of the earthen berms and associated masonry base walls would meet the required height to help reduce noise exposure at the proposed residences to ensure consistency with the County's applicable exterior noise thresholds. In addition, the berms would reduce visibility of the proposed residences from

Table 11-9
Placer County General Plan and DCWPCP Policy Discussion

Policy		Project Consistency
		sensitive receptors in the surrounding area. A detailed analysis of aesthetics, noise, and transportation and circulation is provided in Chapters 4, 12, and 14, respectively.
1.B.9	The County shall discourage the development of isolated, remote and/or walled residential projects that do not contribute to the sense of community desired for the area.	The project would provide a new decomposed granite trail/sidewalk system that would extend from the northern property boundary, through three linear parks, and connect to Vineyard Road to allow for pedestrian connectivity with the surrounding area. In addition, landscaped berms would be constructed along the project frontages to enhance the pedestrian streetscape and eliminate the excessive use of walls along the project boundaries.
1.B.10	The County shall require that all residential development provide private and/or public open spaces in order to insure that each parcel contributes to the adequate provision of light, air, and open space.	As discussed in Chapter 13, Public Services and Recreation, of this EIR, a total of 6.34 acres of the project site would be retained as open space, including areas planned for on-site trails. A total of 1.25 acres are planned for three linear parks. In addition, 1.44 acres within the site would consist of landscaped lots. Based on the County's requirement of five acres of park land per 1,000 residents (Section 16.08.100 of the Placer County Code and General Plan Policy 5.A.1), the proposed project would ultimately be required to provide a minimum of approximately 1.5 acres of parks, and with inclusion of up to 12 ADUs, would require 1.65 acres of parks. The difference between the amount of parkland required and the amount of parkland provided would be resolved through payment of in-lieu park fees.
1.H.2	The County shall seek to ensure that new development and public works projects do not encourage expansion of urban uses into designated agricultural areas.	As discussed previously, the proposed project site does not contain land designated as agricultural per the DCWPCP Environmental Resources Element. According to the DCWPCP, the proposed development area is currently designated LDR 1-2 du/ac and O. As such, the County has previously anticipated buildout of the site with non-agricultural uses, and agricultural operations are not a component of the long-term planning efforts for the area.
1.H.4	The County shall allow the conversion of existing agricultural land to urban uses only within community plan areas and within city spheres of influence where designated for urban development on the General Plan Land Use Diagram.	The project site is located within a community plan area and is currently designated by the DCWPCP for urban uses, with the exception of the on-site tributary area, which is designated as open space. The open space area will be retained with the project.
1.H.5	The County shall require development within or adjacent to designated agricultural areas to incorporate design, construction,	As stated in Policy 1.H.2 discussion, the project site does not contain land designated as agricultural per the DCWPCP. The DCWPCP Environmental Resources Element designates the 30-acre vacant parcel to the west of the

Table 11-9
Placer County General Plan and DCWPCP Policy Discussion

Policy		Project Consistency
	and maintenance techniques that protect agriculture and minimize conflicts with adjacent agricultural uses.	project site as Agricultural Land. However, the parcel is not currently used for commercial agricultural production and is not classified as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland per the FMMP. In addition, the 30-acre parcel would be separated from the proposed development on the project site by the existing on-site tributary and associated vegetation. The nearest proposed home would be located approximately 135 feet from the western site boundary. Therefore, in the event that the 30-acre parcel is used for agricultural production in the future, the tributary would act as a buffer to limit potential nuisances. Table 1-4 in the Land Use/Circulation Diagrams and Standards section of the Placer County General Plan establishes minimum separation distances between areas designated Agriculture or Timberland and proposed residential uses. Specific buffer distances are provided for the following agricultural/timber uses: field crops, irrigated orchards, irrigated vegetables or rice, rangeland/pasture, timberland, and vineyard. For rangeland/pasture uses, which most closely represents the 30-acre parcel to the west of the site, the minimum residential exclusion area is 50 feet, with a buffer width range of 50 to 200 feet, depending on site-specific characteristics. Therefore, the 135-foot separation provided between the nearest proposed on-site residential lot and the western site boundary would be consistent with the applicable buffer standards. Furthermore, the central and eastern portions of the project site have been anticipated for development with residential uses per the DCWPCP and the Placer County General Plan. As such, the project would not conflict with long-term planning efforts related to agricultural uses. Based on the above, the proposed project would minimize conflicts with adjacent agricultural uses.
1.K.4	The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines: a. Limit cuts and fills; b. Limit grading to the smallest practical area of land;	Mitigation Measure 8-2(d) of this EIR requires that all proposed grading, drainage improvements, vegetation and tree removal and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and Stormwater Quality Ordinance (Ref. Article 8.28, Placer County Code) that are in effect at the time of submittal. No grading,

Table 11-9
Placer County General Plan and DCWPCP Policy Discussion

Policy		Project Consistency
	c. Limit land exposure to the shortest practical amount of time; d. Replant graded areas to ensure establishment of plant cover before the next rainy season; and e. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development.	clearing, or tree disturbance shall occur until the Improvement Plans are approved and all temporary construction fencing has been installed and inspected by a member of the Development Review Committee (DRC). All cut/fill slopes shall be at a maximum of 2:1 (horizontal: vertical) unless a soils report supports a steeper slope and the Engineering and Surveying Division (ESD) concurs with said recommendation. Per the mitigation requirements, the applicant must also revegetate all disturbed areas. Revegetation, undertaken from April 1 to October 1, shall include regular watering to ensure adequate growth. A winterization plan shall be provided with project Improvement Plans.
1.M.1	The County shall concentrate most new growth within existing communities emphasizing infill development, intensified use of existing development, and expanded services, so individual communities become more complete, diverse, and balanced.	Given that the project site is located adjacent to existing development within the City of Roseville, future project residents would have convenient access to goods and services within the City, including existing restaurants, grocery stores, and other commercial uses along Vineyard Road and Foothills Boulevard in the project vicinity. In addition, the proposed project would provide additional housing stock within an area that has been previously anticipated by the County for development with residential uses. The project would also contribute to expanded services by constructing a sewer lift station previously contemplated by the County per the Northeast Area Sewer Master Plan, which would be designed and constructed to serve this northeast portion of the DCWPCP area.
1.O.9	The County shall discourage the use of outdoor lighting that shines unnecessarily onto adjacent properties or into the night sky.	Mitigation Measure 4-2 requires the project applicant to submit a lighting plan for the project to the Placer County Design Review Committee for review and approval, demonstrating that proposed lighting is Dark-Sky compliant as specified by the International Dark-Sky Association.
4.A.2	The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the following conditions are met: a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and	As discussed in Chapter 13, Public Services and Recreation, and Chapter 15, Utilities and Service Systems, of this EIR, adequate public services and utilities would be available to serve the proposed development.

Table 11-9
Placer County General Plan and DCWPCP Policy Discussion

Policy		Project Consistency
	b. The facilities improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant.	
4.B.1	The County shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.	The proposed project would be subject to payment of applicable fees used to fund fire protection services, sheriff protection services, and other public services. In addition, the project would be subject to California American Water Company (CAL-AM) fees, sewer connection fees, and monthly sewer services fees used to fund ongoing maintenance of existing water and sewer infrastructure
4.B.3	The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues. This includes working with the cities to require new development within city limits to mitigate impacts on Countywide facilities and services.	See response to Policy 4.B.1 above.
4.C.1	The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.	As discussed in Chapter 15, Utilities and Service Systems, of this EIR, CAL-AM has provided a Conditional Will-Serve Letter for the proposed project that indicates CAL-AM is capable of providing service to the project, given compliance with all applicable rules and regulations, including payment of necessary fees.
4.C.2	The County shall approve new development based on the following guidelines for water supply: a. Urban and suburban development should rely on public water systems using surface supply. b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban and no public water system exists or can be	See response to Policy 1.K.4 above.

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Policy		Project Consistency
	extended to the property, individual wells may be permitted. c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.	
4.C.6	The County shall promote efficient water use and reduced water demand by: a. Requiring water-conserving design and equipment in new construction; b. Encouraging water-conserving landscaping and other conservation measures; c. Encouraging retrofitting existing development with water-conserving devices; and, d. Encouraging water-conserving agricultural irrigation practices.	As discussed in Chapter 15, Utilities and Service Systems, of this EIR, the proposed project would comply with the County's Water Efficient Landscape Ordinance (WELO), which would be ensured during the design review process through submission of a landscape package to the County for review and approval
4.E.1	The County shall encourage the use of natural stormwater drainage systems to preserve and enhance natural features.	See response to Policy 6.A.1 below regarding preservation of the on-site riparian corridor.
4.E.4	The County shall ensure that new storm drainage systems are designed in conformance with the Placer County Flood Control and Water Conservation District's Stormwater Management Manual and the County Land Development Manual.	This is required by Mitigation Measure 10-4(a) of the EIR.
4.E.9	The County shall encourage good soil conservation practices in agricultural and urban areas and carefully examine the impact of proposed urban developments with regard to drainage courses.	See response to Policy 1.K.4 above.
4.E.10	The County shall strive to improve the quality of runoff from urban and suburban development through use of appropriate and feasible mitigation measures including, but not limited to, artificial wetlands, grassy swales, infiltration/sedimentation basins, riparian setbacks, oil/grit separators, and other best management practices (BMPs).	This is required by Mitigation Measures 10-2(a) through 10-2(d).
4.E.11	The County shall require new development to adequately mitigate increases in stormwater peak flows and/or volume. Mitigation measures should take into consideration impacts on adjoining lands in the unincorporated area and on properties in jurisdictions within and immediately adjacent to Placer County.	As discussed in Impact 10-4 of the Hydrology and Water Quality chapter, per the County's Phase II MS4 permit, hydromodification management projects, such as the proposed project, are typically required to demonstrate hydromodification management of stormwater such that post-project runoff is maintained equal to or below pre-project flow rates for the

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Policy		Project Consistency
		2-year, 24-hour storm event, generally by way of infiltration, rooftop and impervious area disconnection, bio-retention, or other LID measures that result in post-project flows that mimic pre-project conditions. However, the Dry Creek Watershed Flood Control Plan notes that the use of local detention basins to limit peak runoff has the potential to result in higher overall peak flows within Dry Creek, which could result in off-site flooding. Specifically, detaining flows in the lower portion of the Dry Creek Watershed, within which the project site is located, could delay the time when the peak flow in lower portions of the Dry Creek Watershed occurs such that the peak flow would coincide with the arrival of peak flows from the upper portion of the watershed. Based on calculations completed by RFE Engineering, Inc., in the absence of detention basins, peak flow from the proposed on-site development would not coincide with peak flows from the upstream Dry Creek Vineyard Road tributary as a whole. Therefore, while inclusion of on-site detention could reduce increased peak flows from the project site, on-site detention would have the potential to increase flooding hazards and conflict with the Dry Creek Watershed Flood Control Plan. Considering the above, and the recommendations of the Dry Creek Watershed Flood Control Plan, the proposed project does not include on-site detention basins that could otherwise lower the post-project rate of runoff equal to or below pre-project flow rates. Nonetheless, the proposed project would be required to comply with Placer County's Dry Creek Watershed Drainage Improvement Ordinance, which requires new development that increases impervious surface areas within the Dry Creek Watershed to pay fees to fund future drainage improvement projects within the watershed.
4.E.12	The County shall encourage project designs that minimize drainage concentrations and impervious coverage and maintain, to the extent feasible, natural site drainage conditions.	The project design maintains, to the extent feasible, natural site drainage conditions, as evidenced by retaining the on-site tributary in its natural condition.
4.E.13	The County shall require that new development conforms with the applicable programs, policies, recommendations, and plans of the Placer County Flood Control and Water Conservation District.	This is required by Mitigation Measure 10-4(a) of the EIR.

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Policy		Project Consistency
4.F.4	The County shall require evaluation of potential flood hazards prior to approval of development projects. The County shall require proponents of new development to submit accurate topographic and flow characteristics information and depiction of the 100-year floodplain boundaries under fully-developed, unmitigated runoff conditions.	Potential flood hazards are evaluated in detail in Impact 10-5 of the Hydrology and Water Quality chapter. Mitigation Measure 10-3(d) requires the project applicant to submit an application for, and subsequently obtain, approval for a Letter of Map Change from FEMA for the placement of fill within the regulatory floodway of the Dry Creek Vineyard Road tributary and corresponding changes to Base Flood Elevations related to the widening of Vineyard Road. In addition, consistent with Policy 4.F.4, Mitigation Measure 10-4(d) requires that Improvement Plans show the limits of the future, unmitigated, fully developed, 100-year flood plain (after grading) for the Dry Creek Vineyard Road tributary and the FEMA floodplain. Mitigation Measure 10-4(e) further requires that the Improvement Plans show the finished house pad elevations for all lots along the floodplain to be a minimum of two feet above the 100-year flood plain line (or finished floor - three feet above the 100-year floodplain line).
4.F.5	The County shall attempt to maintain natural conditions within the 100-year floodplain of all rivers and streams except under the following circumstances: a. Where work is required to manage and maintain the stream's drainage characteristics and where such work is done in accordance with the Placer County Flood Damage Prevention Ordinance, California Department of Fish and Game regulations, and Clean Water Act provisions administered by the U.S. Army Corps of Engineers; or b. When facilities for the treatment of urban runoff can be located in the floodplain, provided that there is no destruction of riparian vegetation.	The project includes relatively minor placement of fill within the FEMA floodplain for the widening of Vineyard Road. This work would be done in accordance with the regulations identified in this policy.
4.I.9	The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances.	As discussed in Chapter 13, Public Services and Recreation, of this EIR, final improvement plans for the proposed project would be subject to review by Placer County Fire as part of the County's approval process in order to ensure compliance with fire and safety standards.
6.A.1	The County shall require the provision of sensitive habitat buffers which shall, at a minimum, be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected, including riparian zones, wetlands, old	Based upon an analysis by the project biologist, the proposed project would not include any development within the 50-foot buffer for riparian wetland habitat, or the 50-foot buffer for the on-site Dry Creek tributary (intermittent stream). The project's lotting would result in a minor encroachment (0.1-acre) upon the 50-foot buffer for the existing sensitive valley oak riparian

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Policy		Project Consistency
	growth woodlands, and the habitat of special status, threatened or endangered species (see discussion of sensitive habitat buffers in Part I of this Policy Document). Based on more detailed information supplied as a part of the review for a specific project or input from state or federal regulatory agency, the County may determine that such setbacks are not applicable in a particular instance or should be modified based on the new information provided. The County may, however, allow exceptions, such as in the following cases: 1. Reasonable use of the property would otherwise be denied; 2. The location is necessary to avoid or mitigate hazards to the public; 3. The location is necessary for the repair of roads, bridges, trails, or similar infrastructure; or, 4. The location is necessary for the construction of new roads, bridges, trails, or similar infrastructure where the County determines there is no feasible alternative and the project has minimized environmental impacts through project design and infrastructure placement.	habitat, at the project's northerly boundary. The majority of valley oak riparian woodland encroachment (0.9-acre) would be due to the construction of roads, parks, and similar infrastructure, for which the County may allow exceptions (see Policy 6.A.1(4)). In addition, as shown in Figure 11-7, the project would include an additional 0.9-acre of buffer area. Only a portion of the encroachments would include areas proposed for residential development: specifically, portions of two proposed residential lots located within the northwestern portion of the project site. Such lots would be separated from the open space area by a 30-foot-wide public utility easement, as well as open iron fencing along the property line of the westernmost residential lot. As such, residents of the lots nearest to the on-site valley oak riparian woodland habitat would be restricted from accessing such sensitive habitat areas, consistent with the intent of the County's buffer requirements, while still being afforded limited views of the area. It should be noted that the proposed site plan previously included three single-family lots within the northwestern portion of the site along the east side of the proposed "A" Court, within the valley oak riparian habitat setback. However, based on input received through the CEQA process, the site plan has been revised to shift the three lots away from the riparian corridor. This analysis concludes that the County may allow exceptions for the proposed encroachments and, thus, the encroachments could be generally consistent with Policy 6.A.1.
6.A.2	The County shall require all development in the 100-year floodplain to comply with the provisions of the Placer County Flood Damage Prevention Ordinance.	The proposed project would not include development of habitable structures within a flood hazard zone; as such, the proposed residential structures would not conflict with the Placer County Flood Damage Prevention Ordinance. See response to Policy 4.F.4 above regarding placement of fill within the 100-year floodplain.
6.A.3	The County shall require development projects proposing to encroach into a stream zone or stream setback to do one or more of the following, in descending order of desirability: a. Avoid the disturbance of riparian vegetation; b. Replace all functions of the existing riparian vegetation (on-site, in-kind); c. Restore another section of stream (in-kind); and/or	See response to Policy 6.A.1 above.

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Policy		Project Consistency
	d. Pay a mitigation fee for in-kind restoration elsewhere (e.g., mitigation banks).	
6.A.5	The County shall continue to require the use of feasible and practical best management practices (BMPs) to protect streams from the adverse effects of construction activities and urban runoff and to encourage the use of BMPs for agricultural activities.	BMPs to protect the on-site tributary during construction, and from urban pollutants, will be required through Mitigation Measures 8-2(a) through 8-2(d) and 10-2(b) through 10-2(d).
6.A.6	The County shall require development projects to comply with the municipal and construction stormwater permit requirements of the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) Phase I and II programs and the State General Municipal and Construction permits. Municipal requirements affecting project design and construction practices are enacted through the County's Stormwater Quality Ordinance. Separate construction permits may be required by and obtained through the State Water Resources Control Board.	See response to Policy 6.A.5 above.
6.A.7	All new development and redevelopment projects shall be designed so as to minimize the introduction of pollutants into stormwater runoff, to the maximum extent practicable, as well as minimize the amount of runoff through the incorporation of appropriate Best Management Practices.	See response to Policy 6.A.5 above.
6.B.1	The County shall support the "no net loss" policy for wetland areas regulated by the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the California Department of Fish and Wildlife. Coordination with these agencies at all levels of project review shall continue to ensure that appropriate mitigation measures and the concerns of these agencies are adequately addressed.	Mitigation Measures 6-8(a) through 6-8(c) require project compliance with the U.S. Army Corps of Engineers (USACE) “no-net-loss” policy for wetland areas and application for a Section 1600 Lake or Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW). If a Section 404 permit is obtained, the applicant must also obtain a water quality certification from the RWQCB under Section 401 of the Clean Water Act (CWA).
6.B.2.	The County shall require new development to mitigate wetland loss in both federal jurisdictional and non-jurisdictional wetlands to achieve "no net loss" through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource; or (3) compensation, including use of a mitigation and conservation banking program that provides the opportunity to mitigate impacts to special status, threatened, and endangered	See response to Policy 6.B.1 above.

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Policy		Project Consistency
	species and/or the habitat which supports these species in wetland and riparian areas. Non-jurisdictional wetlands may include riparian areas that are not federal "waters of the United States" as defined by the Clean Water Act.	
6.B.3.	The County shall discourage direct runoff of pollutants and siltation into wetland areas from outfalls serving nearby urban development. Development shall be designed in such a manner that pollutants and siltation will not significantly adversely affect the value or function of wetlands.	See response to Policy 6.A.5 above.
6.D.8.	The County shall require that new development preserve natural woodlands to the maximum extent possible.	Woodlands would not be impacted as a result of the proposed project. The project would have impacts to individual protected trees – approximately seven. Mitigation Measure 6-10(a) requires replacement plantings or in-lieu fees.
6.F.6.	The County shall require project-level environmental review to include identification of potential air quality impacts and designation of design and other appropriate mitigation measures or offset fees to reduce impacts. The County shall dedicate staff to work with project proponents and other agencies in identifying, ensuring the implementation of, and monitoring the success of mitigation measures.	Analysis of environmental air quality impacts is provided in Chapter 5, Air Quality and Greenhouse Gas Emissions, of this EIR. Mitigation Measure 5-3 prohibits the use of wood-burning fireplaces, woodstoves, or similar wood-burning devices throughout the project site. Mitigation Measure 5-4 would ensure that the proposed sewer lift station includes appropriate odor control facilities.
6.F.7	The County shall encourage development to be located and designed to minimize direct and indirect air pollutants.	See response to Policy 6.F.6 above.
6.F.9	In reviewing project applications, the County shall consider alternatives or amendments that reduce emissions of air pollutants.	Chapter 18, Alternatives, of this EIR includes an analysis of air quality and greenhouse gas (GHG) impacts associated with project alternatives.
7.B.1	The County shall identify and maintain clear boundaries between urban/suburban and agricultural areas and require land use buffers between such uses where feasible. These buffers shall occur on the parcel for which the development permit is sought and shall favor protection of the maximum amount of farmland.	See response to Policy 1.H.5 above.
7.B.3	The County shall consider fencing subdivided lands adjoining agricultural uses as a potential mitigation measure to reduce conflicts between residential and agricultural uses. Factors to be considered in implementing such a measure include: a. The type of agricultural operation (i.e., livestock, orchard,	As noted previously, the 30-acre vacant parcel to the west of the project site is designated as Agricultural Land. However, the parcel is not currently used for commercial agricultural production. The 30-acre parcel would be separated from the proposed development on the site by the existing on-site tributary and associated vegetation. In addition, the project would

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	timber, row crops); b. The size of the lots to be created; c. The presence or lack of fences in the area; d. Existing natural barriers that prevent trespass; and e. Passage of wildlife.	include a combination of open iron fencing and post and cable fencing along the property lines of the westernmost single-family lots, which would help to limit any potential trespass through the tributary and onto the agricultural parcel. All lots along the northern/northeastern border of the project site would include wood, good-neighbor fencing to provide privacy and reduce trespassing.
8.C.3	The County shall require that new development meets state, County, and local fire district standards for fire protection.	See response to Policy 4.I.9 above.
9.A.1.	New development of noise-sensitive uses shall not be permitted where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 9-1 as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 9-1.	There are no existing non-transportation noise sources that would adversely affect the proposed on-site sensitive residential uses.
9.A.2	Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 9-1 (see Table 12-5) as measured immediately within the property line of lands designated for noise-sensitive uses: provided, however, the noise created by occasional events occurring within a stadium on land zoned for university purposes may temporarily exceed these standards as provided in an approved Specific Plan.	There are no existing non-transportation noise sources that would adversely affect the proposed on-site sensitive residential uses.
9.A.6	The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 9-3 (see Table 12-5).	The noise analysis conducted for the project determined that existing and future projected traffic noise levels, including noise from project traffic, would not exceed the applicable noise increase standards at off-site residential receptors.
9.A.8	New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources, including airports, which exceed the levels specified in Table 9-3 (see Table 12-5), unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table 9-3 (see Table 12-5).	As shown in Table 12-11 of the Noise chapter, predicted exterior noise levels at the outdoor activity areas of the proposed residences would not comply with the Placer County 60 dB Ldn exterior noise level standard without additional noise control measures. However, such an effect would constitute the existing environment's effect on the project, which is not considered an impact under CEQA. In order to address this, the County would require the following conditions of project approval to ensure

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		consistency with the County's noise standards at the proposed outdoor activity areas: • Prior to building permit issuance for proposed residential lots adjacent to Brady Lane and/or Vineyard Road, the Improvement Plans shall show that the proposed berms along the project frontages at both roadways may incorporate masonry base walls along the length of the berms. The top of the short base walls shall be five feet minimum above the crown of adjacent roadway (Vineyard Road or Brady Lane). The locations of berms and walls shall be consistent with alignments shown in Figure 12-2 of this EIR.
DCWPCP		
Community Development: Land Use		
2	Maintain large agricultural areas and require development to provide adequate buffer zones between agricultural uses and other uses, as described in the Placer County General Plan.	See response to Policy 1.H.5 above.
5	Encourage the use of greenbelts or landscaped areas along roadways as a design feature of any development in order to mitigate noise impacts and provide valuable open space.	The proposed project would include landscaped setbacks with raised berms and fences along the project frontages at Vineyard Road and Brady Lane in order to ensure that noise levels are below County standards.
7	The design of future residential developments should emphasize character, quality, livability, and the provision of all necessary services and facilities, to ensure their permanent attractiveness.	The proposed residential development would include various design features, such as linear parks, to be used by future residents. In addition, the proposed development would be located directly east of a riparian corridor, which would serve as a natural amenity. The proposed subdivision would feature high-quality traditional home designs, lots landscaped with native and drought-tolerant plants, low-level exterior lighting, and ornamental and decorative hardscape features. As discussed in Chapter 13, Public Services and Recreation, and Chapter 15, Utilities and Service Systems, of this EIR, adequate public services and utilities would be available to serve the proposed project.
8	Residential areas should be located where a full range of services and facilities can be provided most efficiently and economically.	The project site is partially bordered by existing development, and as a result, existing water and sewer infrastructure exists in surrounding roadways. Furthermore, the site is currently anticipated for development per the DCWPCP. Thus, the project would not result in the inefficient extension of utility infrastructure or public services. Additional information related the provision of utilities and public services is provided in Chapter

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		13, Public Services and Recreation, and Chapter 15, Utilities and Service Systems, of this EIR.
15	Encourage logical expansion of the area by developing in-fill areas and those lands lying closest to existing developed areas before extending into outlying areas. On a Countywide basis, encourage in-fill of lands in cities and areas of the unincorporated portions of the County designated for urban uses before allowing the premature conversion of open space and agricultural lands.	The proposed project would include development of a vacant parcel of land that is currently anticipated for buildout with residential uses per the DCWPCP. The project site is located adjacent to existing rural residential development to the south and west, as well as an existing medium-density residential subdivision to the east within the City of Roseville. Thus, the project would serve as a natural, logical extension of existing development in the project area. In addition, the proposed General Plan/DCWPCP Amendment would increase the total amount of O-designated land within the project site from 6.1 acres to 6.5 acres, thereby preserving a greater portion of the site as open space relative to current designations. The project site does not include any land currently used for agricultural purposes. Thus, the project would not result in the conversion of open space or agricultural lands.
21	Discourage public services from expanding into areas with significant value as rural open space.	Given that the central and eastern portions of the site, east of the existing tributary, have been anticipated for development with residential uses per the DCWPCP, expansion of public services to the site has been previously considered by the County. In addition, the project would retain the on-site tributary as open space.
26	Encourage development activities in areas of least environmental-sensitivity, and similarly, restrict from development activities those lands which are environmentally sensitive.	As discussed above, the existing on-site tributary and associated riparian vegetation, both of which are environmentally sensitive, would be preserved as open space as part of the project, with very limited exception. Approximately 0.1-acre of valley oak riparian woodland would be impacted by the project, whereas 3.3 acres would be fully avoided.
30	Encourage application of measures to mitigate erosion and water pollution from earth disturbing activities such as grading and road construction.	As discussed in Chapter 10, Hydrology and Water Quality, of this EIR, the EIR includes mitigation measures to minimize erosion and water quality impacts during construction and operation of the proposed project.
43	To allow for continued increased commercial and residential development only where all public services can be provided in an adequate and timely manner.	See response to Policy 8 (Community Development: Land Use) above.
44	The rate of development and location of projects shall not exceed the capacity of the community, special districts and utility	See response to Policy 8 (Community Development: Land Use) above.

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	companies to provide all needed services and facilities in an orderly and economic manner.	
	Community Development: Community Design	
1	Wherever possible, natural features should be retained as buffers between different, potentially incompatible uses. Where natural features are not available, landscaped buffer yards shall be provided to minimize the adverse effects of higher intensity uses upon lower intensity uses.	See response to Policy 5 (Community Development: Land Use) above. It should be noted that the existing on-site tributary would be retained as part of the proposed project and, thus, would act as a natural buffer between the proposed residential uses and potential future incompatible uses (i.e., agricultural uses to the west of the site).
3	Preservation of natural features, noise exposure, road access, and relationship to the surrounding properties shall be considered in preparing subdivision designs. Subdivision density, or total number of lots, will ultimately be determined by these factors. The development of the maximum number of lots permitted by the zoning will not be possible in most cases due to these and other design considerations required by this Plan.	See GP Policy 1.B.5 discussion.
4	Lots in subdivisions shall be of adequate size and appropriate shape for the range of primary and accessory uses which are designated for the area without: a) creating a feeling of overcrowding; b) creating measurable negative environmental impacts; c) creating the need for variances to ordinance requirements such as setbacks, lot size, height, length-to-width ratios, etc.; d) violating the goals and policies of this Plan; e) violating the intent of the Plan to create a type of living environment different from that found in the surrounding Antelope and Roseville areas.	As noted above, the proposed project would require a variance to increase the allowable building coverage to 50 percent for one-story units, while two-story units would remain at the allowable 40 percent maximum. The proposed increase is expected to result in a higher percentage of single-story homes being sold and built in the proposed project. The resulting lower percentage of two-story homes would lessen the "higher intensity" impression two-story homes tend to make by virtue of their massing, which would be beneficial to both the subdivision's home buyers and neighbors adjacent to the community. Thus, the variance would not create measurable negative environmental impacts. While lot coverage requirements are designed to ensure that lots are not overdeveloped, as discussed previously, such requirements have been found by the County to impede single-story home construction on small lots. In addition, trends in local and national housing markets have necessitated the County re-examine its development standards. Thus, the requested variance would not result in overcrowding or violate the goals and policies of the DCWPCP. In addition, consistent with Policy 4, the proposed 5,000-sf minimum lot sizes would represent a slight reduction in density relative

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		to the 3000-sf minimum lot sizes within the American Vineyard Villages subdivision southeast of the project site.
5	Where a development permit/approval is sought adjacent to an agricultural operation/land use category, protection of agricultural operations shall be provided by the establishment of a man-made or retention of a natural buffer between the agricultural land use and the proposed use. This buffer shall occur on the parcel for which the development permit is sought and shall favor protection of the maximum amount of farmland.	See response to Policy 1.H.5 above.
11	Landscaping shall be used to reduce the visual impact of all structures, including solid fences. Natural vegetation should dominate where possible. Where existing vegetation is inadequate the use of native plant materials is encouraged. Landscaping materials provide an informal character and smooth transition between buildings, parking lots adjoining roadways and open areas.	As discussed in Impact 4-1 of Chapter 4, Aesthetics, of this EIR, the proposed project would include landscaping with native vegetation along the project frontages to soften the visual appearance and screen fences otherwise visible from public rights-of-way. All of the proposed frontage improvements would be consistent with the Placer County Design Guidelines and the Placer County Landscape Design Guidelines, the specific design guidelines contained in the DCWPCP, and all applicable sections of Article 17.54, General Development Regulations, of the Placer County Code.
15	In place of sound wall construction, require, wherever possible, the use of greater setbacks to provide a scenic corridor for all parcels fronting on all the major circulation routes (2, 4, or 6 lanes of traffic). Long expanses of sound walls are not consistent with the desired character of the Plan area and the use of open space setbacks and landscaping instead, will be a major difference between this area and surrounding areas to the north and south.	The Vineyard Road frontage would include a setback/buffer of nearly 35 feet (minimum 25-foot from back of right-of-way to southern property lines of new residential lots within the project site) and would be screened with a landscaped berm between the proposed decomposed six-foot-wide meandering granite path and residential back yards within the project. As discussed in Chapter 4.12, Noise, of this EIR, noise attenuation structures may include short masonry base walls along the berms, portions atop of which could include five-foot-tall open iron fences. The masonry walls and associated iron fences would be partially screened by landscaping along the berms.
Community Development: Public Services/Flood Control		
5	Designate the 100-year floodplain of Dry Creek, including the major tributaries as open space, and provide for some compatible use of these areas in order to encourage their preservation.	The 100-year floodplain associated with the on-site Dry Creek tributary would continue to be designated O with approval of the proposed project. The project would not include development of housing or habitable structures within the 100-year floodplain.

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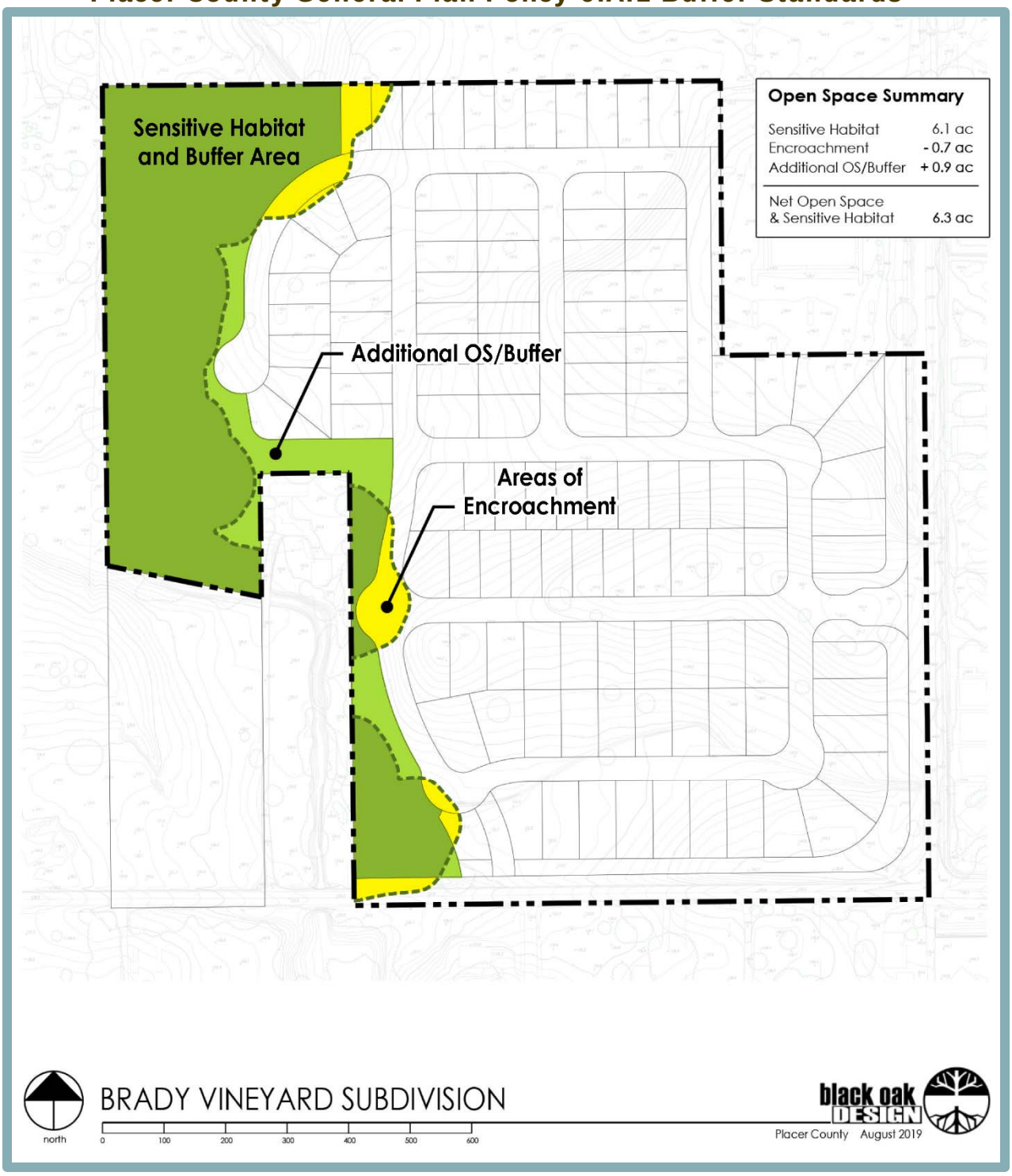
Environmental Resources Management: Natural Resources		
12	Conservation of the natural landscape, including minimizing disturbance to natural terrain and vegetation, shall be an overriding consideration in the design of any subdivision or land development project, paying particular attention to the protection and preservation of existing vegetation.	See the discussion for DCWPCP (Community Development: Land Use) Policy 26 above.
14	No construction activities shall occur within the Dry Creek floodplain and only limited alteration of its tributaries shall be permitted except as part of the development of the floodplain as a recreational area, or for stream enhancement, or where work is done in accordance with the Placer County Flood Damage Prevention Ordinance, Department of Fish and Game Regulations, and Clean Water Act Provisions administered by the U.S. Army Corps of Engineers.	The proposed project would not require grading or construction activities within the floodplain associated with the on-site tributary; rather, the entirety of the 100-year floodplain would be designated as O and preserved (see Chapter 10, Hydrology and Water Quality, of this EIR). Limited off-site work would be conducted within the floodplain related to relatively minor placement of fill for the widening of Vineyard Road. This work would be done in accordance with the regulations identified in this policy.
20	Preserve agricultural lands as an economically viable land use, and for the purposes of open space, groundwater recharge, wildlife habitat, buffering, flood control and soil conservation.	As discussed previously, the proposed project site does not contain Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or areas designated as Agricultural Land per the DCWPCP Environmental Resources Element.
Environmental Resources Management: Open Space		
2	Identify and, where possible, preserve all soils which are suitable for agricultural uses.	See response to Policy 20 (Environmental Resources Management: Natural Resources) above.
12	Development on private lands should be planned and designed to provide for preservation of open space.	See Policy 1.B.10 discussion above.

Figure 11-7
Placer County General Plan Policy 6.A.1 Buffer Standards



12. Noise

12. NOISE

12.1 INTRODUCTION

The Noise chapter of the EIR describes the existing noise environment in the project vicinity, and identifies potential impacts and mitigation measures related to noise and vibration associated with construction and operation of the proposed project. The method by which the potential impacts are analyzed is discussed, followed by the identification of potential impacts and the recommended mitigation measures designed to reduce significant noise and vibration impacts to less-than-significant levels, if required. The Noise chapter is primarily based on the Technical Noise Analysis prepared for the proposed project by RCH Group. (see Appendix J),[1] the Placer County General Plan,[2] the Placer County General Plan EIR,[3] and the City of Roseville General Plan.[4]

12.2 EXISTING ENVIRONMENTAL SETTING

The Existing Environmental Setting section provides background information on noise and vibration, a discussion of acoustical terminology and the effects of noise on people, existing sensitive receptors in the project vicinity, existing sources and noise levels in the project vicinity, and groundborne vibration.

Fundamentals of Acoustics

Decibels (dB) are logarithmic units that conveniently compare the wide range of sound intensities to which the human ear is sensitive. To describe noise environments and to assess impacts on noise–sensitive areas, a frequency weighting measure, which simulates human perception, is commonly used. A–weighting of sound levels has been found to best reflect the human ear's reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. Table 12-1 identifies decibel levels for common sounds heard in the environment.

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are the equivalent A-weighted sound level over a given time period (L_{eq}); average day-night 24-hour average sound level (L_{dn}) with a nighttime increase of 10 dB to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL), also a 24-hour average that includes both an evening and a nighttime sensitivity weighting.

1 RCH Group. *Technical Noise Analysis, Brady Vineyard Subdivision, Brady Lane and Vineyard Road, Placer County, California.* June 2019.
2 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 City of Roseville. *General Plan 2035.* Amended August 17, 2016.

Table 12-1
Typical Noise Levels

Noise Level (dB)	Outdoor Activity	Indoor Activity
90+	Gas lawn mower at three feet, jet flyover at 1,000 feet	Rock band
80 to 90	Diesel truck at 50 feet	Loud television at three feet
70 to 80	Gas lawn mower at 100 feet, noisy urban area	Garbage disposal at three feet, vacuum cleaner at 10 feet
60 to 70	Commercial area	Normal speech at three feet
40 to 60	Quiet urban daytime, traffic at 300 feet	Large business office, dishwasher next room
20 to 40	Quiet rural, suburban nighttime	Concert hall (background), library, bedroom at night
10 to 20		Broadcast/recording studio
0	Lowest threshold of human hearing	Lowest threshold of human hearing

Source: RCH Group, 2019.

Stationary sources of noise, including construction equipment, lessen at a rate of 6.0 to 7.5 dB per doubling of distance from the source depending on ground absorption. Soft sites attenuate at 7.5 dB per doubling, as such sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. Hard sites have reflective surfaces (e.g., parking lots or smooth bodies of water) and therefore have less attenuation (6.0 dB per doubling).

A street or roadway with moving vehicles (known as a “line” source), would typically attenuate at a lower rate, approximately 3.0 to 4.5 dB each time the distance doubles from the source, which also depends on ground absorption. Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, will increase the attenuation that occurs by distance alone.

Existing Sensitive Receptors

Certain land uses are more sensitive to ambient noise levels than others due to the amount of noise exposure (in terms of both exposure time and shielding from noise sources) and the type of activities typically involved. Noise sensitive land uses typically include residences, schools, child care centers, hospitals, long-term health care facilities, convalescent centers, retirement homes, and recreation areas.

Sensitive receptors in the project vicinity primarily consist of the Father’s House church located immediately north of the site, a single-family residential subdivision located east of the site across Brady Lane, and four single-family residences located south of the site across Vineyard Road. The subdivision includes a sound barrier and landscape screening along the Brady Lane frontage. In addition, a two-acre rectangular-shaped parcel fronting Vineyard Road extends approximately 700 feet north (roughly halfway) into the project site. Currently, the parcel is developed with a house and associated outbuilding, located approximately 25 feet from the parcel’s northern property line and 15 feet from its eastern property line.

Existing Noise Sources and Ambient Noise Levels

To quantify existing ambient noise levels in the immediate project vicinity, RCH Group conducted short-term (10-minute) noise measurements at six locations and two long-term (72-hour) measurements of existing noise levels at the project site. RCH Group also conducted one short-

term noise measurement east of the project site at the northwest corner of Vineyard Road and Riesling Drive, near the proposed off-site sewer improvements alignment. The locations of the noise measurement sites are shown in Figure 12-1. The results of the noise measurements are summarized in Table 12-2 below and included in the appendix to the Technical Noise Analysis (see Appendix J to this EIR).

The short-term noise measurements were conducted near Brady Lane and Vineyard Road to measure peak-hour morning traffic noise and at other locations on the project site to measure ambient noise levels farther from roadways. The long-term noise measurement locations were selected as close as possible to the locations of future building envelopes nearest to Brady Lane and Vineyard Road to capture the existing noise levels that would affect the proposed residences. As shown in the table, the dominant source of noise during the measurements was traffic from Brady Lane and Vineyard Road. Other noise sources included birds, as well as distant train movements and train horns from the Roseville Rail Yard.

The average noise level for the 5-minute periods measured near Brady Lane during peak-hour morning traffic was 60 dB L_{eq} approximately 50 feet from the centerline (Site 3). The average noise level for the 5-minute periods measured near Vineyard Road during peak-hour morning traffic was 54 to 56 dB L_{eq} approximately 55 feet from the centerline (Site 5) and 54-55 dB L_{eq} approximately 60 feet from the centerline (Site 6). The 24-hour noise level was 57-60 dB L_{dn}/CNEL at Site 1 and 59-60 dB L_{dn}/CNEL at Site 2.

Existing Traffic Noise Levels

To predict existing noise levels due to traffic, RCH conducted traffic noise modeling using the Federal Highway Administration (FHWA) Highway Traffic Noise Prediction Model (FHWA RD-77-108). Traffic volumes for existing conditions were obtained from the traffic study prepared for the proposed project by KD Anderson & Associates. For the roadway segments located along the project frontage, noise levels are modeled at the future backyards of the proposed single-family residences located nearest to the roadway segments. In addition, noise levels are modeled at the outdoor activity areas of the existing residential uses located nearest to other roadway segments in the project area. The results of the modeling are shown in Table 12-3 below.

As shown in the table, modeled noise levels at the project site are between 59.2 and 62.0 dB L_{dn}/CNEL. Modeled noise levels at existing residences along local roadway segments range from 54.7 to 67.5 dB L_{dn}/CNEL.

Vibration

While vibration is similar to noise, both involving a source, a transmission path, and a receiver, vibration differs from noise because noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency.

A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration levels in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Figure 12-1
Noise Measurement Locations

Source: RCH Group, 2019.

Table 12-2
Existing Noise Measurements

Location	Time Period	Noise Level (dB)	Noise Sources
Site 1: Eastern edge of project site, 75 feet west of the centerline of Brady Lane.	Friday, March 29, 12:00 AM through Sunday, March 31, 11:59 PM, 2019 72-hour measurement	24-hour L_{dn}: 60, 58, 57 Hourly L_{eq} ranged from: 47-63	Unattended noise measurements do not specifically identify noise sources.
Site 2: Southern edge of project site, 120 feet north of the centerline of Vineyard Road.	Friday March 29, 2019 7:48 to 7:58 AM	24-hour L_{dn}: 60, 59, 60 Hourly L_{eq} ranged from: 46-61	Unattended noise measurements do not specifically identify noise sources.
Site 3: 50 feet west of the centerline of Brady Lane.	Friday March 29, 2019 7:48 to 7:58 AM	5-Min L_{eq}: 60, 60 5-Min L_{max}: 74, 69	Cars on Brady Lane 74, 67, 68, 68, 69, 64, & 68 dB. Train noise (no horn) ~60 dB. Train horn ~67 dB and ~53 dB.
Site 4: Northwest corner of Brady Lane and Vineyard Road. 70 feet west of Brady Lane centerline and 70 feet north of Vineyard Road centerline.	Friday March 29, 2019 8:04 to 8:14 AM	5-Min L_{eq}: 54, 55 5-Min L_{max}: 64, 66	Bird noise ~48 dB, lots of bird noise, constant bird noise. Cars generally 55-66 dB approaching stop sign. Sirens (below ambient noise level). Plane overhead ~56 dB.
Site 5: Southern edge of project site, 55 feet north of Vineyard Road.	Friday March 29, 2019 8:18 to 8:28 AM	5-Min L_{eq}: 54, 56 5-Min L_{max}: 64, 69	Cars generally 56-65 dB. Bird noise ~48 dB. Train horn noise 49-54 dB. Leaf blower noise ~50 dB. Plane flyover ~55 dB.
Site 6: Southern edge of project site, 60 feet north of Vineyard Road.	Friday March 29, 2019 8:30 to 8:40 AM	5-Min L_{eq}: 55, 54 5-Min L_{max}: 63, 64	Cars generally 55-64 dB. Rooster noise ~50-52 dB. Leaf blower noise ~49-53 dB. Garbage truck on Misty Lane 62 dB. Birds chirping ~52 dB. Background noise is affected by constant bird noise.
Site 7: South central portion of project site, 300 feet north of Vineyard Road centerline.	Friday March 29, 2019 8:44 to 8:54 AM	5-Min L_{eq}: 49, 47 5-Min L_{max}: 57, 63	Garbage truck noise on Vineyard 52-56 dB. Dog barking ~47 dB. Birds chirping, ambient down to 43-44 dB with no bird noise. Train horns < 50 dB. Cars on Vineyard generally 45-50 dB.
Site 8: Middle of project site, 700 feet north of Vineyard Road centerline and 550 feet west of Brady Lane centerline.	Friday March 29, 2019 8:58 to 9:08 AM	5-Min L_{max}: 48, 55	Cars generally 55-64 dB. Rooster noise ~50-52 dB. Leaf blower noise ~49-53 dB. Garbage truck on Misty Lane 62 dB. Birds chirping ~52 dB. Background noise is affected by constant bird noise.
Site 9: Northwest corner of Vineyard Road and Riesling Drive.	Friday March 29, 2019 9:34 to 9:44 AM	5-Min L_{eq}: 63, 66 5-Min L_{max}: 76, 76	Cars and trucks 67-76 dB. Backup beeper at AMPM. Garbage noise at Vineyard Gate Apartments ~60 dB.

Source: RCH Group, 2019.

Table 12-3
Existing Traffic Noise at Outdoor Activity Areas

Roadway Segment	Existing Noise Levels (dB L_{dn}/CNEL)
Existing On-Site[1]	
Brady Lane South (project access to Vineyard)	59.2
Brady Lane North (project access to Baseline)	59.2
Vineyard Road (at project site)	62.0
Existing Off-Site Residences[2]	
PFE Road (Walerga to Cook Riolo)	65.9
PFE Road (Cook Riolo to Antelope)	66.9
Cook-Riolo Road (Baseline to Vineyard)	61.8
Cook-Riolo Road (Vineyard to Creekview School)	60.0
Cook-Riolo Road (Creekview School to PFE)	62.6
Antelope Road (PFE to Great Valley)	67.5
Vineyard Road (Crowder to Cook-Riolo)	57.3
Vineyard Road (Cook-Riolo to Brady)	62.0
Vineyard Road (Brady to Foothills)	54.7
Brady Lane (Baseline to project site)	59.2
Brady Lane (project site to PFE)	59.2

[1] For the segments located along the project frontage, noise levels are modeled at the future backyards of the proposed single-family residences located nearest to the roadway segments.
[2] Noise levels are modeled at the outdoor activity areas of the existing residential uses located nearest to the roadway segments.

Source: RCH Group, 2019.

12.3 REGULATORY CONTEXT

In order to limit exposure to physically and/or psychologically damaging noise levels, the State of California, various county governments, and most municipalities in the State have established standards and ordinances to control noise. The following provides a general overview of the existing State and local regulations that are relevant to the proposed project.

State Regulations

The following are the State environmental laws and policies relevant to noise.

California State Building Codes

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations, establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings.

Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

Local Regulations

The following are the local environmental goals and policies relevant to noise.

Placer County General Plan

The relevant goals and policies from the Placer County General Plan related to noise are presented below.

Goal 9.A To protect County residents from the harmful and annoying effects of exposure to excessive noise.

Policy 9.A.1 The County shall not allow development of new noise-sensitive uses where the noise level due to non-transportation noise sources will exceed the noise level standards of Table 9-1 (see Table 12-4) as measured immediately within the property line of the new development, unless effective noise mitigation measures have been incorporated into the development design to achieve the standards specified in Table 9-1 (see Table 12-4).

Policy 9.A.2 Noise created by new proposed non-transportation noise sources shall be mitigated so as not to exceed the noise level standards of Table 9-1 (see Table 12-4) as measured immediately within the property line of lands designated for noise-sensitive uses: provided, however, the noise created by occasional events occurring within a stadium on land zoned for university purposes may temporarily exceed these standards as provided in an approved Specific Plan.

Policy 9.A.6 The feasibility of proposed projects with respect to existing and future transportation noise levels shall be evaluated by comparison to Table 9-3 (see Table 12-5).

Policy 9.A.8 New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected levels of noise from transportation noise sources, including airports, which exceed the levels specified in Table 9-3 (see Table 12-5), unless the project design includes effective mitigation measures to reduce noise in outdoor activity areas and interior spaces to the levels specified in Table 9-3 (see Table 12-5).

Policy 9.A.9 Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed the levels specified in Table 9-3 (see Table 12-5) or the performance standards in Table 9-3 (see Table 12-5) at outdoor activity areas or interior spaces of existing noise sensitive land uses.

Table 12-4
Allowable L_{dn} Noise Levels within Specified Zone Districts Applicable to New Projects Affected by or Including Non-Transportation Noise Sources[1]

Zone District of Receptor	Property Line of Receiving Use (L_{dn}, dB)	Interior Spaces[2]
Residential Adjacent to Industrial[3]	60	45
Other Residential[4]	50	45
Office/Professional	70	45
Transient Lodging	65	45
Neighborhood Commercial	70	45
General Commercial	70	45
Heavy Commercial	75	45
Limited Industrial	75	45
Highway Service	75	45
Shopping Center	70	45
Industrial	---	45
Industrial Park	75	45
Industrial Reserve	---	---
Airport	---	45
Unclassified	---	---
Farm	---[6]	---
Agriculture Exclusive	---[6]	---
Forestry	---	---
Timberland Preserve	---	---
Recreation & Forestry	70	---
Open Space	---	---
Mineral Reserve	---	---

Notes:

- Except where noted otherwise, noise exposures will be those which occur at the property line of the receiving use.
- Where existing transportation noise levels exceed the standards of this table, the allowable L_{dn} shall be raised to the same level as that of the ambient level.
- If the noise source generated by, or affecting, the uses shown above consists primarily of speech or music, of if the noise source is impulsive in nature, the noise standards shown above shall be decreased by 5 dB.
- Where a use permit has established noise level standards for an existing use, those standards shall supersede the levels specified in Table 9-1 and Table 9-3 (see Table 12-4 and see Table 12-5). Similarly, where an existing use which is not subject to a use permit causes noise in excess of the allowable levels in Tables 9-1 and 9-3 (see Table 12-4 and see Table 12-5), said excess noise shall be considered the allowable level. If a new development is proposed which will be affected by noise from such an existing use, it will ordinarily be assumed that the noise levels already existing or those levels allowed by the existing use permit, whichever are greater, are those levels actually produced by the existing use.
- Existing industry located in industrial zones will be given the benefit of the doubt in being allowed to emit increased noise consistent with the state of the art[5] at the time of expansion. In no case will expansion of an existing industrial operation because to decrease allowable noise emission limits. Increased emissions above those normally allowable should be limited to a one-time 5 dB increase at the discretion of the decision-making body.
- The noise level standards applicable to land uses containing incidental residential uses, such as caretaker dwellings at industrial facilities and homes on agriculturally zoned land, shall be the standards applicable to the zone district, not those applicable to residential uses.
- Where no noise level standards have been provided for a specific zone district, it is assumed that the interior and/or exterior spaces of these uses are effectively insensitive to noise.

[1] Overriding policy on interpretation of allowable noise levels: Industrial-zoned properties are confined to unique areas of the County, and are irreplaceable. Industries which provide primary wage-earner jobs in the County, if

(Continued on next page)

forced to relocate, will likely be forced to leave the County. For this reason, industries operating upon industrial zoned properties must be afforded reasonable opportunity to exercise the rights/privileges conferred upon them be their zoning. Whenever the allowable noise levels herein fall subject to interpretation relative to industrial activities, the benefit of the doubt shall be afforded to the industrial use.

Where an industrial use is subject to infrequent and unplanned upset or breakdown of operations resulting in increased noise emissions, where such upsets and breakdowns are reasonable considering the type of industry, and where the industrial use exercises due diligence in preventing as well as correcting such upsets and breakdowns, noise generated during such upsets and breakdowns shall not be included in calculations to determine conformance with allowable noise levels.

[2] Interior spaces are defined as any locations where some degree of noise-sensitivity exists. Examples include all habitable rooms of residences, and areas where communication and speech intelligibility are essential, such as classrooms and offices.

[3] Noise from industrial operations may be difficult to mitigate in a cost-effective manner. In recognition of this fact, the exterior noise standards for residential zone districts immediately adjacent to industrial, limited industrial, industrial park, and industrial reserve zone districts have been increased by 10 dB as compared to residential districts adjacent to other land uses.

For purposes of the Noise Element, residential zone districts are defined to include the following zoning classifications: AR, R-1, R-2, R-3, FR, RP, TR-1, TR-2, TR-3, and TR-4.

[4] Where a residential zone district is located within an -SP combining district, the exterior noise level standards are applied at the outer boundary of the -SP district. If an existing industrial operation within an -SP district is expanded or modified, the noise level standards at the outer boundary of the -SP district may be increased as described above in these standards.

Where a new residential use is proposed in an -SP zone, an Administrative Review Permit is required, which may require mitigation measures at the residence for noise levels existing and/or allowed by use permit as described under "NOTES," above, in these standards.

[5] State of the art should include the use of modern equipment with lower noise emissions, site design, and plant orientation to mitigate offsite noise impacts, and similar methodology.

[6] Normally, agricultural uses are noise insensitive and will be treated in this way. However, conflicts with agricultural noise emissions can occur where single-family residences exist within agricultural zone districts. Therefore, where effects of agricultural noise upon residences located in these agricultural zones is a concern, an L_{dn} of 70 dBA will be considered acceptable outdoor exposure at a residence.

Source: Placer County General Plan, 2013.

Table 12-5
Maximum Allowable Noise Exposure for Transportation Noise Sources

Noise Sensitive Land Uses	Outdoor Activity Area[1]	Interior Spaces	
	L_{dn}, dB	L_{dn} / CNEL, dB	L_{eq}, dB[2]
Residential	60[3]	45	--
Transient Lodging	60[3]	45	--
Hospitals, Nursing Homes	60[3]	45	--
Theaters, Auditoriums, Music Halls	--	--	35
Churches, Meeting Halls	60[3]	--	40
Office Buildings	--	--	45
Schools, Libraries, Museums	--	--	45
Playgrounds, Neighborhood Parks	70	--	--

1 Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.
2 As determined for a typical worst-case hour during periods of use.
3 Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

Source: Placer County General Plan, 2013.

Policy 9.A.11 The County shall require one or more of the following mitigation measures where existing noise levels significantly impact existing noise-sensitive land uses, or where the cumulative increase in noise levels resulting from new development significantly impacts noise-sensitive land uses:

a. Rerouting traffic onto streets that have available traffic capacity and that do not adjoin noise-sensitive land uses;
b. Lowering speed limits, if feasible and practical;
c. Programs to pay for noise mitigation such as low cost loans to owners of noise-impacted property or establishment of developer fees;
d. Acoustical treatment of buildings; or,
e. Construction of noise barriers.

Policy 9.A.12 Where noise mitigation measures are required to achieve the standards of Tables 9-1 and 9-3 (see Table 12-4 and Table 12-5), the emphasis of such measure shall be placed upon site planning and project design. The use of noise barriers shall be considered as a means of achieving the noise standards only after all other practical design-related noise mitigation measures have been integrated into the project.

DCWPCP

The relevant goals and policies from the DCWPCP related to noise are presented below.

Land Use

Goal 4 To locate noise sensitive land uses within areas of acceptable noise levels.

Community Design Element

Goal 2 It is a goal of the Plan to encourage and support projects which exemplify good design characteristics when judged against the goals and policies of this Plan as well as other applicable design and landscape guidelines.

Policy 15 In place of sound wall construction, require, wherever possible, the use of greater setbacks to provide a scenic corridor for all parcels fronting on all the major circulation routes (2, 4, or 6 lanes of traffic). Long expanses of sound walls are not consistent with the desired character of the Plan area and the use of open space setbacks and landscaping instead, will be a major difference between this area and surrounding areas to the north and south.

Noise Element

Goal 1 To protect the health, safety, and welfare of the Dry Creek-West Placer Area residents by providing a livable environment free from excessive noise.

Goal 2 Locate noise-sensitive land uses within areas of acceptable community noise equivalent levels (CNEL).

Goal 3 Correlate noise concerns with community design, land use, and circulation and open space.

Policy 1 Encourage the use of green belts or natural areas along roadways as a design feature of any development in order to mitigate noise impacts.

Policy 3 Avoid the interface of noise-producing and noise-sensitive land uses.

Policy 4 Require implementation of noise abatement techniques within new projects where warranted.

Policy 8 Where noise levels have a potential to be in excess of normally acceptable CNEL levels, landscaped setbacks should be considered versus sound walls for noise mitigation.

Policy 11 Protect existing residential areas from excessive noise levels generated by the development of the Plan Area.

Policy 13 The location and design of transportation facilities shall be developed in a manner which minimizes the effects of noise on adjacent land uses.

Placer County Noise Ordinance

Section 9.36.060 of the Placer County Code establishes non-transportation noise level standards for noise-sensitive receptors. The purpose of the Noise Ordinance is to implement the noise level standards identified in the *Placer County General Plan*. The specific language of Section 9.36.060 is provided below:

A. It is unlawful for any person at any location to create any sound, or to allow the creation of any sound, on property owned, leased, occupied or otherwise controlled by such person that:

1. Causes the exterior sound levels when measured at the property line of any affected sensitive receptor to exceed the ambient sound level by five (5) dBA or

2. Exceeds the sound level standards as set forth in Table 1 (see Table 12-6), whichever is the greater.

Table 12-6
Noise Level Standards for Non-Transportation Noise Sources

Sound Level Descriptor	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
Hourly L_{eq}, dB	55	45
L_{max}, dB	70	65

Source*: *Placer County Noise Ordinance.

B. Each of the sound level standards specified in Table 1 (see Table 12-6) shall be reduced by five (5) dB for simple tone noises, consisting of speech and music. However, in no case shall the sound level standard be lower than the ambient sound level plus five (5) dB.

C. If the intruding sound source is continuous and cannot reasonably be discontinued or stopped for a time period whereby the ambient sound level can be measured, the sound level measured while the source is in operation shall be compared directly to the sound level standards of Table 1 (see Table 12-6).

Per Section 9.36.030 of the Placer County Code (Exemptions), sound or noise emanating from construction activities between the hours of 6:00 AM and 8:00 PM Monday through Friday, and between the hours of 8:00 AM and 8:00 PM Saturday and Sunday, is exempt from Section 9.36.060 of the Placer County Code Noise Ordinance, provided that all construction equipment is fitted with factory installed muffling devices and that all construction equipment is maintained in good working order. However, the hours of construction were modified in the Planning Commission revisions to the Placer County Board of Supervisors Minute Order 90-08 and, thus, the following standards are applicable to the proposed project:

Construction noise emanating from any construction activities for which a Grading or Building Permit is required is prohibited on Sundays and Federal Holidays, and shall only

occur: a) Monday through Friday, 6:00 a.m. to 8:00 p.m. (during daylight savings) b) Monday through Friday, 7:00 a.m. to 8:00 p.m. (during standard time) c) Saturdays, 8:00 a.m. to 6:00 p.m.

In addition, temporary signs shall be located throughout the project, as determined by the Development Review Committee, at key intersections depicting the above construction hour limitations.

City of Roseville Noise Ordinance

Roseville Municipal Code Section 9.24.030 (G) states that construction, alteration or repair activities shall not be permitted at any time other than between the hours of 7:00 AM and 7:00 PM, Monday through Friday, and 8:00 AM and 8:00 PM on Saturdays, Sundays, and state and federal legal holidays. Construction equipment must be fitted with factory installed muffling devices and all construction equipment must be maintained in good working order.

12.4 IMPACTS AND MITIGATION MEASURES

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

Impacts of the environment on a project (as opposed to impacts of a project on the environment) are beyond the scope of required California Environmental Quality Act (CEQA) review. "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the significant effects of the environment on the project." (*Ballona Wetlands Land Trust v. City of Los Angeles,* (2011) 201 Cal.App.4th 455, 473 (*Ballona*).) The impacts discussed in this section of the EIR relate both to noise that may be caused by the proposed project (e.g. construction noise and operational traffic added to surrounding streets) as well as effects of existing environmental noise sources on future residents of the project (e.g. background traffic on surrounding streets). The California Supreme Court recently held that "CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project's future users or residents. What CEQA does mandate… is an analysis of how a project might exacerbate existing environmental hazards." (*California Building Industry Assn. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 392; see also *Mission Bay Alliance v. Office of Community Investment & Infrastructure* (2016) 6 Cal.App.5th 160, 197 ["identifying the effects on the project and its users of locating the project in a particular environmental setting is neither consistent with CEQA's legislative purpose nor required by the CEQA statutes"], quoting *Ballona*, *supra*, 201 Cal.App.4th at p. 474.) Therefore, for the purposes of the CEQA analysis, the relevant inquiry is not whether the proposed project's future residents will be exposed to preexisting environmental noise-related hazards, but instead whether project-generated noise will exacerbate the pre-existing conditions. Nonetheless, for informational purposes, this chapter considers both the proposed project's contribution to on- and off-site noise levels, as well as exposure of future residents of the proposed project to potential hazards associated with the preexisting noise environment, in order to demonstrate General Plan compliance.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the

purposes of this EIR, an impact is considered significant if the proposed project would result in any of the following:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive groundborne vibration or groundborne noise levels; or
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels (see Chapter 16, Effects Not Found to be Significant).

As noted above, impacts related to exposure of people to airport noise levels are discussed in Chapter 16, Effects Not Found to be Significant, of this EIR.

Summary of Applicable Noise Standards

Applicable noise level standards from the Placer County General Plan and the Placer County Code are summarized below.

Transportation Noise

The Placer County General Plan Noise Element applies 60 dB L_{dn}/CNEL exterior and 45 dB L_{dn}/CNEL interior noise level standards for residential uses affected by transportation noise sources. The County may conditionally allow exterior noise levels between 60 and 65 dB L_{dn} for residential uses, provided that practical noise reduction measures have been implemented and interior noise levels remain in compliance with the 45 dB L_{dn} interior standard.

It is noted that the Placer County standards for transportation noise sources are similar to those in the City of Roseville Noise Element. Each jurisdiction utilizes the 60 dB L_{dn} exterior noise level standard for residential uses (e.g., see Table IX-1 of the Roseville General Plan Noise Element). Both jurisdictions allow a conditionally acceptable standard (up to 65 dB L_{dn} for Placer County and up to 75 dB L_{dn} for City of Roseville), provided that exterior reduction measures are included in the subject project.

Substantial Increase Criteria

Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to measurably severe noise levels. In practice, a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in transportation noise associated with the proposed project is a factor in determining significance.

Placer County, like many jurisdictions, does not have an adopted policy regarding significant increases in ambient noise. A common practice in many jurisdictions is to use a 3.0 to 5.0 dB increase as a threshold of significance. However, a limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project noise conditions.

The following table was developed by the Federal Interagency Committee on Noise (FICON) as a means of developing thresholds for identifying project-related noise level increases. The rationale for the graduated scales is that test subject's reactions to increases in noise levels varied

depending on the starting level of noise. Specifically, with lower ambient noise environments, such as those below 60 dB L_{dn}, a larger increase in noise levels was required to achieve a negative reaction than was necessary in environments where noise levels were already elevated. Therefore, because the County does not have defined thresholds for what would be considered a substantial increase in traffic noise levels, information from Table 12-7 is used. The approach to assessing the significance of increases in off-site traffic noise is also consistent with other recent Placer County EIRs and the industry-standard approach in general.

Table 12-7
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, dB	Increase Required for Significant Impact
<60	+5.0 dB or more
60-65	+3.0 dB or more
>65	+1.5 dB or more

Vibration

Placer County does not have specific policies or standards pertaining to vibration levels. However, vibration levels associated with construction activities and project operations are addressed as potential vibration impacts associated with project implementation. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events.

Construction operations have the potential to result in varying degrees of temporary ground vibration depending on the specific construction equipment used and operations involved. Table 12-8 indicates that per California Department of Transportation (Caltrans) standards, the threshold for architectural damage to structures is 0.2 peak particle velocity in inches per second (in/sec PPV) and continuous vibrations of 0.1 in/sec PPV, or greater, would likely cause annoyance to sensitive receptors.

Per the Technical Noise Analysis, vibrational effects from typical construction activities are only a concern within 25 feet of existing structures.

Method of Analysis

Below are descriptions of the methodologies utilized to measure background and ambient noise and estimate future traffic noise, construction noise, and vibration associated with the project. Further modeling details and calculations are provided in Appendix J to this EIR. The results of the noise and vibration impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.

The FHWA model was used in conjunction with traffic volumes provided by KD Anderson & Associates to analyze the potential impact on proposed residences from existing plus project traffic and future cumulative traffic scenarios. The FHWA model is based upon the noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site. The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict L_{dn}/CNEL values, determination of the day/night distribution of traffic and adjustment of the traffic volume input data is necessary to yield an equivalent hourly traffic volume.

Table 12-8
Effects of Vibration on People and Buildings

PPV		Human Reaction	Effect on Buildings
mm/sec	in/sec		
0.15 - 0.30	0.006 - 0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10 - 15	0.4 - 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: California Department of Transportation, 2002.

The existing plus project traffic and future cumulative traffic predicted noise levels were based on a conservative estimate of 10 percent of all average daily traffic (ADT) in the peak hour. The peak hour was then used as an estimate of the 24-hour future L_{dn}/CNEL. Typically, L_{dn}/CNEL is approximately equal to the peak hour L_{eq}.[5] Per RCH Group, L_{dn} or CNEL is usually assumed to be within +/- 2 dB of the peak hour L_{eq} under normal conditions. For the two weekday long-term measurements conducted at Sites 1 and 2, the calculated L_{dn}/CNEL was equal to the peak hour L_{eq} at Site 1 and the L_{dn}/CNEL was +1 dB from the peak hour L_{eq} at Site 2. Therefore, this analysis assumes the modelled peak hour L_{eq} is equal to the estimated future cumulative L_{dn} or CNEL at the project site.

Construction noise and vibration was analyzed using data compiled for various pieces of construction equipment at a representative distance of 50 feet. Construction noise is discussed relative to the applicable Placer County noise policies and standards.

It should be noted that in addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order to meet the County's affordable housing requirements. However, the total number of lots would remain unchanged, as would the overall disturbance area associated with the project. Per RCH Group, inclusion of the 12 Accessory Dwelling Units would not result in any substantial noise effects related to traffic noise.[6] The increase in total project trips would result in less than a 0.1-dB increase to cumulative traffic noise on all roadway segments. Therefore, the potential inclusion

5 California Department of Transportation. *Technical Noise Supplement*. October 1998.

6 Dan Jones, RCH Group. Personal communication [email] with Angela DaRosa, Assistant Division Manager, Raney Planning & Management, Inc. August 21, 2019.

of an additional 12 units on-site would not result in new impacts or substantially more severe impacts beyond the analysis presented herein.

Project-Specific Impacts and Mitigation Measures

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

12-1 Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

Construction activities associated with the proposed project, including off-site improvements, would require the use of numerous pieces of noise-generating equipment, such as excavating machinery (e.g., backhoes, bulldozers, excavators, front loaders) and other construction equipment (e.g., compactors, scrapers, graders). Construction worker traffic and construction-related material haul trips would raise ambient noise levels along local haul routes, depending on the number of haul trips made and types of vehicles used.

The noise levels generated by construction equipment would vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment and the prevailing wind direction. As shown in Table 12-9 below, maximum noise levels generated by various types of construction equipment can range from 76 to 89 dB L_{max} at 50 feet. As shown in Table 12-10 below, the highest noise levels associated with construction activities typically occur during ground excavation and finishing.

Table 12-9
Typical Construction Equipment Noise

Type of Equipment	Noise Level at 50 feet (dB L_{max})
Dump Truck	76
Air Compressor	78
Concrete Mixer (Truck)	79
Jackhammers	89
Scraper	84
Dozer	82
Paver	77
Generator	81
Auger Drill Rig	84
Front End Loader	79
Grader	85
Backhoe	78

Source: RCH Group, 2019.

Table 12-10
Typical Construction Activity Noise Levels

Construction Phase	Noise Level at 50 feet (dB L_{eq})
Ground Clearing	83
Excavation	88
Foundations	81
Erection	81
Finishing	88

Source: RCH Group, 2019.

Given that construction equipment would operate at various portions of the project site at any one time and construction activity would occur farther than 50 feet from the nearest sensitive receptors, project construction noise at nearby sensitive receptors would typically be lower than the reference levels in Table 12-9 and Table 12-10. In addition, noise levels from project construction at sensitive receptors to the north, east and south of the site would be generally in the same range as measured existing ambient noise levels. While construction noise levels at the adjacent two-acre parcel could exceed ambient noise levels when construction activities are occurring on the western portion of the project site, such exceedances would be temporary and would occur only during daytime hours.

On-site construction activities would be temporary in nature and the Placer County Code would limit construction activity to the following time periods: a) Monday through Friday, 6:00 AM to 8:00 PM (during daylight savings); b) Monday through Friday, 7:00 AM to 8:00 PM (during standard time); and c) Saturdays, 8:00 AM to 6:00 PM. Per Section 9.36.030 of the Placer County Code, sound or noise emanating from construction activities occurring during such hours is exempt from the noise level standards included in the County's Noise Ordinance, provided that all construction equipment is fitted with factory installed muffling devices and that all construction equipment is maintained in good working order.

Construction activities associated with the proposed off-site sewer construction would be typical of other minor roadway linear construction projects. The existing sensitive receptors to the north (single-family residential subdivision) of the proposed off-site sewer improvements are shielded by a noise barrier, and the sensitive receptors to the south are located approximately 100 feet south of the centerline of Vineyard Road. Noise levels from off-site sewer construction along Vineyard Road would be generally in the same range as measured existing ambient noise levels, and would only occur during daytime hours. In addition, the City of Roseville Noise Ordinance would limit off-site construction activity within the city limits to the following time periods: 7:00 AM and 7:00 PM Monday through Friday and between 8:00 AM and 8:00 PM on weekends and State and federal holidays.

However, if such requirements are not met, construction of the proposed project could conflict with the Placer County Code and/or the City of Roseville Noise Ordinance, and the project could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

12-1 *The following criteria shall be included in the Improvement Plans. Exceptions to allow expanded construction activities shall be reviewed on a case-by-case basis as determined by the Community Development Resource Agency Director.*

- *Noise-generating construction activities (e.g. construction, alteration or repair activities), including truck traffic coming to and from the project site for any purpose, shall be limited to the hours outlined in Placer County Board of Supervisors Minute Order 90-08; specifically, a) Monday through Friday, 6:00 AM to 8:00 PM (during daylight savings); b) Monday through Friday, 7:00 AM to 8:00 PM (during standard time); and c) Saturdays, 8:00 AM to 6:00 PM.*
- *Off-site construction activities occurring within the City of Roseville shall be limited to the following time periods: a) Monday through Friday, 7:00 AM to 7:00 PM; and b) weekends/State and federal holidays, 8:00 AM to 8:00 PM.*
- *Project construction activities should be limited to daytime hours unless conditions warrant that certain construction activities occur during evening or early morning hours (i.e., extreme heat).*
- *All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with mufflers, air-inlet silencers where appropriate, and any other shrouds, shields, or other noise-reducing features in good operating condition that meet or exceed original factory specifications. Mobile or fixed "package" equipment (e.g., arc welders, air compressors) shall be equipped with shrouds and noise-control features that are readily available for that type of equipment.*
- *All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, State, or local agency shall comply with such regulations while in the course of project activity.*
- *Electrically powered equipment shall be used instead of pneumatic or internal combustion-powered equipment, where feasible.*
- *Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive receptors.*
- *Construction site and access road speed limits shall be established and enforced during the construction period.*
- *The use of noise-producing signals, including horns, whistles, alarms, and bells, shall be for safety warning purposes only.*
- *Project-related public address or music systems shall not be audible at any adjacent receptor.*
- *As a means of avoiding the potential for annoyance, haul trucks shall be restricted along the local roadways to the same hours as construction activities are allowed unless a request is made for the County to allow greater flexibility in order to minimize potential AM peak hour traffic conflicts.*

12-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below, the impact is *less than significant.*

The primary source of noise associated with the proposed residential development would be traffic noise associated with traffic on local roadways. It should be noted that CEQA does not require an analysis of the environment's impact on the project; however, impacts to future residents of the proposed project due to traffic noise along local roadways is evaluated for the purposes of considering the project's consistency with policies in the County's General Plan.

Traffic Noise at the Project Site

The closest proposed outdoor activity areas to roadways would be the backyards of the closest proposed homes to Vineyard Road and Brady Lane (approximately 60 feet from the centerline of Vineyard Road and 75 feet from the centerline of Brady Lane). See Table 12-2 above for existing 24-hour noise levels at the project site.

Traffic noise occurring under the Existing Plus Project condition was modeled with the FHWA model using the assumptions discussed under the Method of Analysis section above. The results of the modeling are shown in Table 12-11 below.

Table 12-11
Estimated Traffic Noise at Project Outdoor Activity Areas

Roadway Segment	Noise Levels (dB L_{dn}/CNEL)		
	Existing	Existing Plus Project	Change
Brady Lane South (project access to Vineyard)	59.2	61.5	+2.3
Brady Lane North (project access to Baseline)	59.2	60.6	+1.4
Vineyard Road (at project site)	62.0	62.1	+0.1

Note: Noise levels are modeled at the future backyards of the proposed single-family residences located nearest to the roadway segments.

Source: RCH Group, 2019.

As shown in Table 12-11, predicted exterior noise levels at the outdoor activity areas of the proposed residences would not comply with the Placer County 60 dB L_{dn} exterior noise level standard without additional noise control measures. However, such an effect would constitute the existing environment's effect on the project, which is not considered an impact under CEQA. In order to address this, the County would require the following conditions of project approval to ensure consistency with the County's noise standards at the proposed outdoor activity areas:

- Prior to building permit issuance for proposed residential lots adjacent to Brady Lane and/or Vineyard Road, the Improvement Plans shall show proposed berms along the project frontages at both roadways, which may incorporate masonry

base walls along some length of the berms. The top of the berms and/or base walls shall be five feet minimum above the crown of adjacent roadway (Vineyard Road or Brady Lane). The locations of berms and/or base walls shall be consistent with alignments shown in Figure 12-2 of this EIR.

It should be noted that cumulative noise levels represent the worst-case future noise environment at the proposed project site. Any design for sound walls would need to be based on the worse-case condition. Accordingly, in order to evaluate the impacts of traffic noise on the proposed residential development, the required sound walls would be designed based on the noise levels that would occur under the Cumulative Plus Project conditions discussed under Impact 12-4 below. With construction of the berms/masonry stem walls discussed above, future Cumulative Plus Project traffic noise levels would be reduced to between 62 and 63 dB L_{dn} at the outdoor activity areas of the proposed residences nearest Brady Lane and 62 dB L_{dn} at the outdoor activity areas of the proposed residences nearest to Vineyard Road.

With regard to interior noise levels, modern construction typically provides a 25 dB exterior-to-interior noise level reduction with windows closed. Accordingly, sensitive receptors exposed to exterior noise levels of 70 dB L_{dn}, or less, would typically comply with the County's 45 dB L_{dn} interior noise level standard. As shown in the table, exterior traffic noise levels at the outdoor activity areas of the proposed residences would be 62.1 dB L_{dn} or less; traffic noise levels both first and second floor building facades would be similar or slightly reduced. Therefore, interior noise control measures would not be required in order to reduce traffic noise exposure.

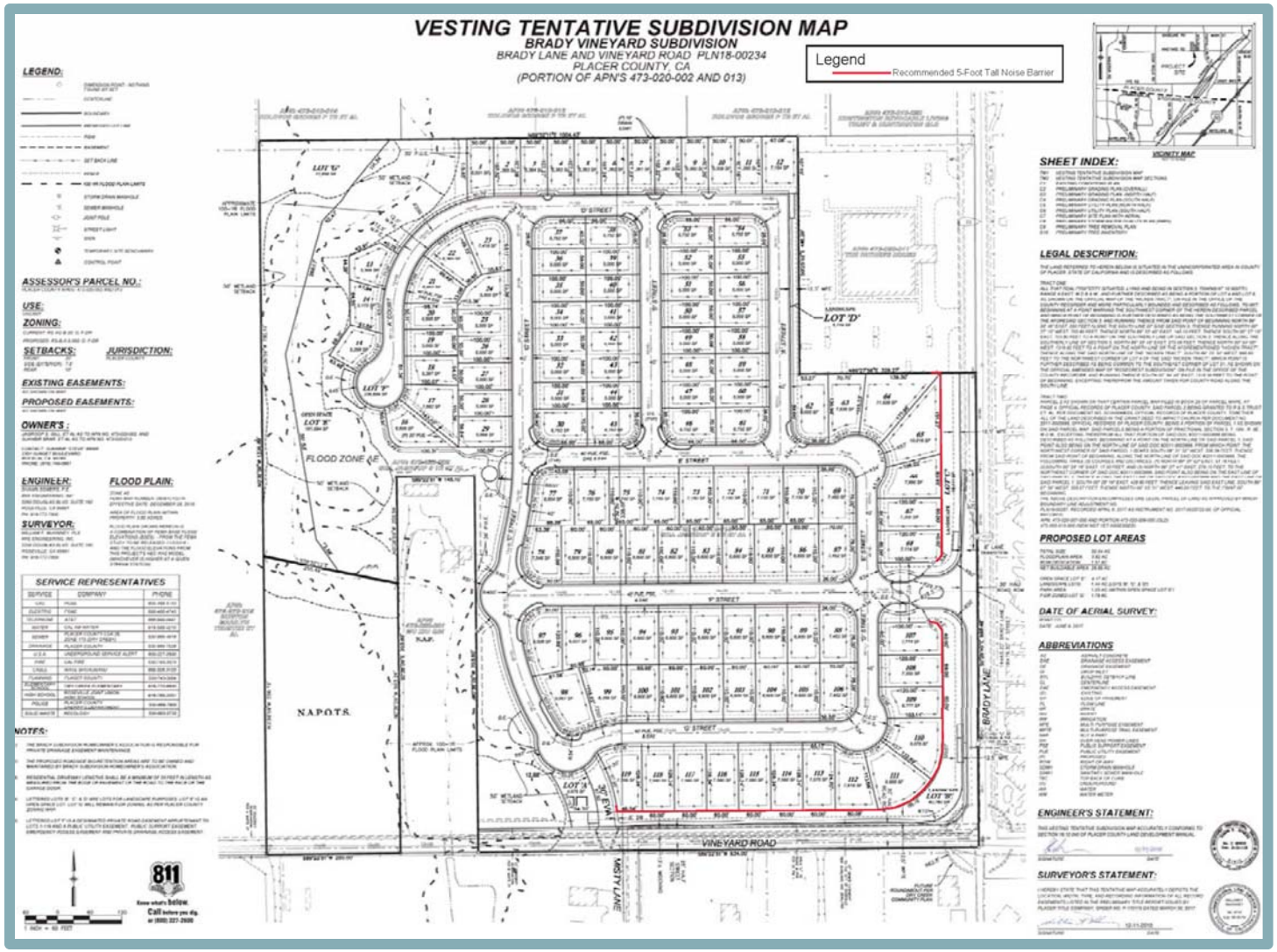
As noted previously, the County conditionally allows exterior noise levels between 60 and 65 dB L_{dn} for residential uses, provided that practical noise reduction measures have been implemented and interior noise levels remain in compliance with the 45 dB L_{dn} interior standard. Therefore, with the required condition of approval noted above, project traffic noise at the proposed single-family residences under Existing Plus Project conditions would not conflict with the County's applicable interior or exterior noise thresholds. Overall, project traffic noise at the proposed sensitive receptors under Existing Plus Project conditions would be less-than-significant.

Traffic Noise at Existing Sensitive Receptors

Table 12-12 displays the predicted noise level estimates at the outdoor activity areas of the closest existing residents for modelled project scenarios.

Noise levels at existing sensitive receptors would continue to exceed the County's 60 dB exterior noise level threshold along a majority of the study roadway segments. However, the existing residences would experience a 0.1 dB increase or less on all traffic segments modeled except for Vineyard Road (from Brady Lane to Foothills Boulevard) and along Brady Lane (from Vineyard Road to Project and from Project to PFE Road). For the Vineyard Road segment (Brady Lane to Foothills Boulevard), the project would increase traffic noise by approximately 0.4 dB above existing levels, and the closest residences (north of Vineyard Road) are shielded by an existing sound barrier. For the Brady Lane segments, residences fronting Brady Lane would experience a 1.4 to 2.3 dB increase from project traffic above existing levels and the closest residences (east of Brady Lane) are shielded by an existing sound barrier.

Figure 12-2
Noise Barrier Locations



Source: RCH Group, 2019.

Table 12-12
Estimated Traffic Noise at Existing Sensitive Receptors

Roadway Segment	Noise Levels (dB L_{dn}/CNEL)		
	Existing	Existing Plus Project	Change
PFE Road (Walerga to Cook Riolo)	65.9	65.9	0.0
PFE Road (Cook Riolo to Antelope)	66.9	66.9	0.0
Cook-Riolo Road (Baseline to Vineyard)	61.8	61.8	0.0
Cook-Riolo Road (Vineyard to Creekview School)	60.0	60.1	+0.1
Cook-Riolo Road (Creekview School to PFE)	62.6	62.7	+0.1
Antelope Road (PFE to Great Valley)	67.5	67.6	+0.1
Vineyard Road (Crowder to Cook-Riolo)	57.3	57.4	+0.1
Vineyard Road (Cook-Riolo to Brady)	62.0	62.1	+0.1
Vineyard Road (Brady to Foothills)	54.7	55.1	+0.4
Brady Lane (Baseline to project site)	59.2	60.6	+1.4
Brady Lane (project site to PFE)	59.2	61.5	+2.3

Note: Noise levels are modeled at the outdoor activity areas of the existing residential uses located nearest to the roadway segments.

Source: RCH Group, 2019.

All project-related traffic noise increases at existing sensitive receptors would be below the applicable FICON threshold for substantial noise level increase (see Table 12-7). The proposed project's contribution to traffic noise increases would be primarily less than 1 dB L_{dn}, which is the threshold at which noise level increases are perceptible to the human ear. Furthermore, residences located along the segments of Brady Lane and Vineyard Road that would experience the greatest traffic noise level increases already include noise barriers that would attenuate traffic noise.

As noted previously, sensitive receptors exposed to exterior noise levels of 70 dB L_{dn}, or less, will typically comply with the County's 45 dB L_{dn} interior noise level standard. As shown in the table, exterior traffic noise levels at the outdoor activity areas of the existing residences would be 66.9 dB L_{dn} or less; traffic noise levels both first and second floor building facades would likely be similar or slightly reduced. Therefore, the proposed project would not result in conflicts with the County's 45 dB L_{dn} at existing residences under Existing Plus Project conditions.

Based on the above, project traffic noise at existing sensitive receptors under the Existing Plus Project condition would be less than significant.

Operational Noise at Existing Residence on Adjacent Two-Acre Parcel

The existing single-family home (and associated outbuilding) within the adjacent two-acre parcel is located over 500 feet north of the centerline of Vineyard Road. As shown in Table 12-12, under Existing Plus Project conditions, traffic noise on the Vineyard Road segment adjacent to the adjacent two-acre parcel (Segment 8. Vineyard Rd. [Cook-Riolo to Brady]) would increase by approximately 0.1 dB. Thus, the traffic noise increase attributable to the project would not be perceptible at the existing residence, and traffic noise impacts on the existing single-family home within the adjacent two-acre parcel would be less than significant.

In general, residential land uses are considered to be relatively quiet, and non-transportation noise from the proposed residences would be considered compatible with the adjacent residence within the adjacent two-acre parcel. Operation of the proposed project would result in noise associated with use of the proposed the tot lot within the linear park area on the western portion of the development area, to the east of the two-acre parcel. However, small neighborhood parks such as the proposed tot-lot park are generally very quiet and are only used during daylight hours. Thus, the proposed tot-lot park would be considered compatible with the adjacent residence within the adjacent two-acre parcel. Any permanent increase in ambient noise levels from operation of the project would not be substantially greater than existing noise levels without the project. Therefore, operational non-transportation noise impacts associated with the proposed residences and parks would be less than significant at the adjacent two-acre parcel.

Conclusion

Based on the above, traffic noise at a number of the proposed single-family homes could exceed the County's 60 dB L_{dn} exterior noise level. However, such an effect would not be considered an impact under CEQA, and the project would include construction of noise-attenuating features, as required by a condition of approval, to reduce traffic noise at the outdoor activity areas of the affected residences. Neither existing nor proposed residences would experience interior noise levels in excess of the County's 45 dB L_{dn} noise level standard. The proposed project would not result in the generation of a substantial permanent increase in ambient noise levels at existing sensitive receptors located along local roadways.

Therefore, a ***less-than-significant*** impact would occur related to generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Mitigation Measure(s)

None required.

12-3 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Based on the analysis below, the impact is *less than significant*.

Construction activity associated with the proposed project would have the potential to result in varying degrees of temporary ground vibration depending on the specific construction equipment used and operations involved. Project construction would utilize typical construction equipment and would not require significant sources of vibration such as pile driving or blasting. Table 12-13 below shows the typical vibration levels produced by construction equipment.

As shown in Table 12-13, construction vibration levels anticipated for the proposed project are less than the 0.2 in/sec PPV threshold of damage to buildings and less than the 0.1 in/sec threshold of annoyance criteria at distances of 50 feet. On-site construction activities would occur at a distance of 75 feet or greater from the nearest existing structures. Therefore, construction vibrations are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors.

Table 12-13
Vibration Levels for Various Construction Equipment

Type of Equipment	PPV at 25 feet (in/sec)	PPV at 50 feet (in/sec)
Large Bulldozer	0.089	0.029
Loaded Trucks	0.076	0.025
Small Bulldozer	0.003	0.000
Auger/drill Rigs	0.089	0.029
Jackhammer	0.035	0.011
Vibratory Hammer	0.070	0.023
Vibratory Compactor/roller	0.210	0.070

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment Guidelines, May 2006.

Based on the construction equipment to be used and the distance from construction activities to the nearest structures, vibration from the project would not be a concern. Additionally, construction activities would be temporary in nature. Therefore, the proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

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

For further detail related to the cumulative setting of the proposed project, refer to Chapter 17, Statutorily Required Sections of this EIR.

12-4 Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the DCWPCP. Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Future development projects within the DCWPCP area, including the proposed project, would incrementally affect the future cumulative ambient noise environment. To assess noise impacts due to project-related traffic increases on the existing local roadway network, noise levels have been calculated for the Cumulative Plus Project Condition at the proposed residences and at existing sensitive receptors located along area roadways.

Cumulative Traffic Noise at the Project Site

Traffic noise occurring under the Cumulative Plus Project condition was modeled with the FHWA model using the assumptions discussed under the Method of Analysis section

above. The results of the modeling are shown in Table 12-14 below. As shown in Table 12-14, predicted exterior noise levels at the outdoor activity areas of the proposed residences closest to Brady Lane and Vineyard Road would exceed the Placer County 60 dB L_{dn} exterior noise level standard in the absence of additional noise control measures.

Table 12-14
Estimated Cumulative Traffic Noise at Project Outdoor Activity Areas

Roadway Segment	Noise Levels (dB L_{dn}/CNEL)		
	Cumulative No Project	Cumulative Plus Project	Change
Brady Lane South (project access to Vineyard)	67.8	68.2	+0.4
Brady Lane North (project access to Baseline)	66.8	67.1	+0.3
Vineyard Road (at project site)	66.4	66.5	+0.1

Note: Noise levels are modeled at the future backyards of the proposed single-family residences located nearest to the roadway segments.

Source: RCH Group, 2019.

However, as discussed under Impact 12-2 above, the County would require installation of noise-attenuating features as a condition of approval to reduce traffic noise levels at such residences. With construction of the proposed berms along the project frontages, which may incorporate masonry base walls along some length of the berms, future Cumulative Plus Project traffic noise levels would be reduced to below 65 dB L_{dn}, which is considered conditionally acceptable by the County considering that practical noise reduction measures would be implemented and, as noted in further detail below, interior noise levels would remain in compliance with the 45 dB L_{dn} interior standard.

Table 12-15 below summarizes the predicted noise levels at the outdoor activity areas of the proposed residences with construction of noise barriers of varying heights. As shown in the table, the required five-foot-tall noise barriers would be sufficient to reduce noise levels to below 65 dB L_{dn}.

As noted previously, sensitive receptors exposed to exterior noise levels of 70 dB L_{dn}, or less, would typically comply with the County's 45 dB L_{dn} interior noise level standard. As shown in the table, exterior traffic noise levels at the outdoor activity areas of the proposed residences would be 68.2 dB L_{dn} or less; traffic noise levels both first and second floor building facades would likely be similar or slightly reduced. Therefore, interior noise control measures would not be required in order to reduce traffic noise exposure.

With the required condition of approval noted above, project traffic noise at the proposed single-family residences under Cumulative Plus Project conditions would not conflict with the County's applicable interior or exterior noise thresholds. Overall, the project's incremental contribution to cumulative traffic noise at the proposed sensitive receptors would be less than significant under Cumulative Plus Project conditions.

Table 12-15
Estimated Cumulative Traffic Noise at Project Outdoor Activity Areas by Noise Barrier Height

Roadway Segment	Cumulative with Project (dB L_{dn}/CNEL)	Noise Levels (dB L_{dn}/CNEL)			
		5-Foot Barrier	6-Foot Barrier	7-Foot Barrier	8-Foot Barrier
Brady Lane South (project access to Vineyard)	68	63	62	61	60
Brady Lane North (project access to Baseline)	67	62	61	60	59
Vineyard Road (at project site)	67	62	60	59	58

Note: Noise levels are modeled at the future backyards of the proposed single-family residences located nearest to the roadway segments.

Source: RCH Group, 2019.

Traffic Noise at Existing Sensitive Receptors

Table 12-16 displays the predicted noise level estimates at the outdoor activity areas of the closest existing residents for Cumulative No Project and Cumulative Plus Project conditions.

Table 12-16
Estimated Cumulative Traffic Noise at Existing Sensitive Receptors

Roadway Segment	Noise Levels (dB L_{dn}/CNEL)		
	Cumulative No Project	Cumulative Plus Project	Change
PFE Road (Walerga to Cook Riolo)	67.6	67.6	0.0
PFE Road (Cook Riolo to Antelope)	71.3	71.3	0.0
Cook-Riolo Road (Baseline to Vineyard)	65.9	65.9	0.0
Cook-Riolo Road (Vineyard to Creekview School)	64.3	64.3	0.0
Cook-Riolo Road (Creekview School to PFE)	66.9	67.0	+0.1
Antelope Road (PFE to Great Valley)	73.8	73.8	0.0
Vineyard Road (Crowder to Cook-Riolo)	62.6	62.6	0.0
Vineyard Road (Cook-Riolo to Brady)	66.4	66.5	+0.1
Vineyard Road (Brady to Foothills)	59.8	59.9	+0.1
Brady Lane (Baseline to project site)	66.8	67.1	+0.3
Brady Lane (project site to PFE)	67.8	68.2	+0.4

Note: Noise levels are modeled at the outdoor activity areas of the existing residential uses located nearest to the roadway segments.

Source: RCH Group, 2019.

Noise levels at existing sensitive receptors would continue to exceed the County's 60 dB exterior noise level threshold along a majority of the study roadway segments. However, the existing residences would experience a 0.4 dB increase or less on all traffic segments. The cumulative noise increases at the existing residence on the two-acre parcel adjacent to the project site would be approximately 0.1 dB. Based on the FICON noise level

increase criteria shown in Table 12-7, none of the study roadway segments would experience a significant cumulative noise level increase as a result of project traffic. Furthermore, existing residences located along the segments of Brady Lane and Vineyard Road that would experience the greatest traffic noise level increases already include noise barriers that would attenuate traffic noise. Therefore, the project's incremental contribution to cumulative traffic noise at existing sensitive receptors would be less-than-significant under Cumulative Plus Project conditions.

Sensitive receptors exposed to exterior noise levels of 70 dB L_{dn}, or less, will typically comply with the County's 45 dB L_{dn} interior noise level standard. As shown in the table, exterior traffic noise levels at the outdoor activity areas of the existing residences would be 70 dB L_{dn} or less for the roadway segments analyzed, with the exception of two segments: PFE Road between Cook Riolo and Antelope, and Vineyard Road between PFE and Great Valley. As shown in the table, the proposed project would not increase traffic noise levels at the two impacted segments. Traffic noise levels both first and second floor building facades of existing segments would likely be similar or slightly reduced.

Therefore, the proposed project would not result in conflicts with the County's 45 dB L_{dn} at existing residences under Cumulative Plus Project conditions.

Conclusion

Based on the above, with inclusion of the proposed berms along the project frontage at Brady Lane and Vineyard Road, which may incorporate masonry base walls along some length of the berms, Cumulative Plus Project traffic noise levels at the proposed single-family homes would not conflict with the County's applicable exterior noise level standards. Both existing and proposed residences would not experience interior noise levels in excess of the County's 45 dB L_{dn} noise level standard. In addition, the proposed project would not result in the generation of a substantial permanent increase relative to Cumulative No Project noise levels at the existing sensitive receptors located along local roadways.

Therefore, under Cumulative Plus Project Conditions, the proposed project would not result in a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. The project's incremental contribution to cumulative traffic noise impacts would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

13. Public Services and Recreation

13. PUBLIC SERVICES AND RECREATION

13.1 INTRODUCTION

The Public Services and Recreation chapter of the EIR summarizes the setting information and identifies potential new demands resulting from the proposed project on fire and sheriff protection services, as well as demand associated with schools, parks, recreation facilities, and other public facilities such as libraries. Potential impacts are identified if the proposed project would require the development of new facilities or expansion of existing facilities, the construction of which could have adverse physical effects on the environment. Information for the Public Services and Recreation chapter was primarily drawn from the Placer County General Plan,[1] the Placer County General Plan EIR,[2] and the Dry Creek-West Placer Community Plan (DCWPCP).[3] In addition, information related to fire protection services was sourced from the Placer County Local Agency Formation Commission (LAFCo) Municipal Service Review for Fire and Emergency Services.[4]

13.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing fire, sheriff protection, and other public services within the project area, including schools, parks, and recreation facilities. The project site is located to the west of the City of Roseville limits and is within the DCWPCP area.

Fire Protection Services

The Placer County Fire Department (PCF) services are administered by the County Office of Emergency Services and is responsible for fire protection and rescue and emergency response services for approximately 475 square miles of unincorporated area in Placer County. The territory served by the PCF is consistent with the boundaries of County Service Area (CSA) 28, which is used as a means to fund the services offered by the PCF. Within CSA 28, the proposed project site is located within Zone 165 (see Figure 13-1). The various zones of benefit within CSA 28 represent areas previously served by independent fire districts that were dissolved at some point in the past with services transferred to the County, as well as areas originally served by the County. The zones of benefit are intended to fill the services funding gap between general County services and special services. Zone 165 covers approximately 19,800 acres and was established September of 2001, at which point Placer County assumed responsibility for providing fire protection and emergency medical services within the area.[5]

Fire prevention and protection in areas of Placer County not served by independent fire protection districts or municipal fire departments are provided by a combination of a contract with the California Department of Forestry and Fire Protection (CAL FIRE) and eight volunteer companies, all operated by CAL FIRE under the name PCF.

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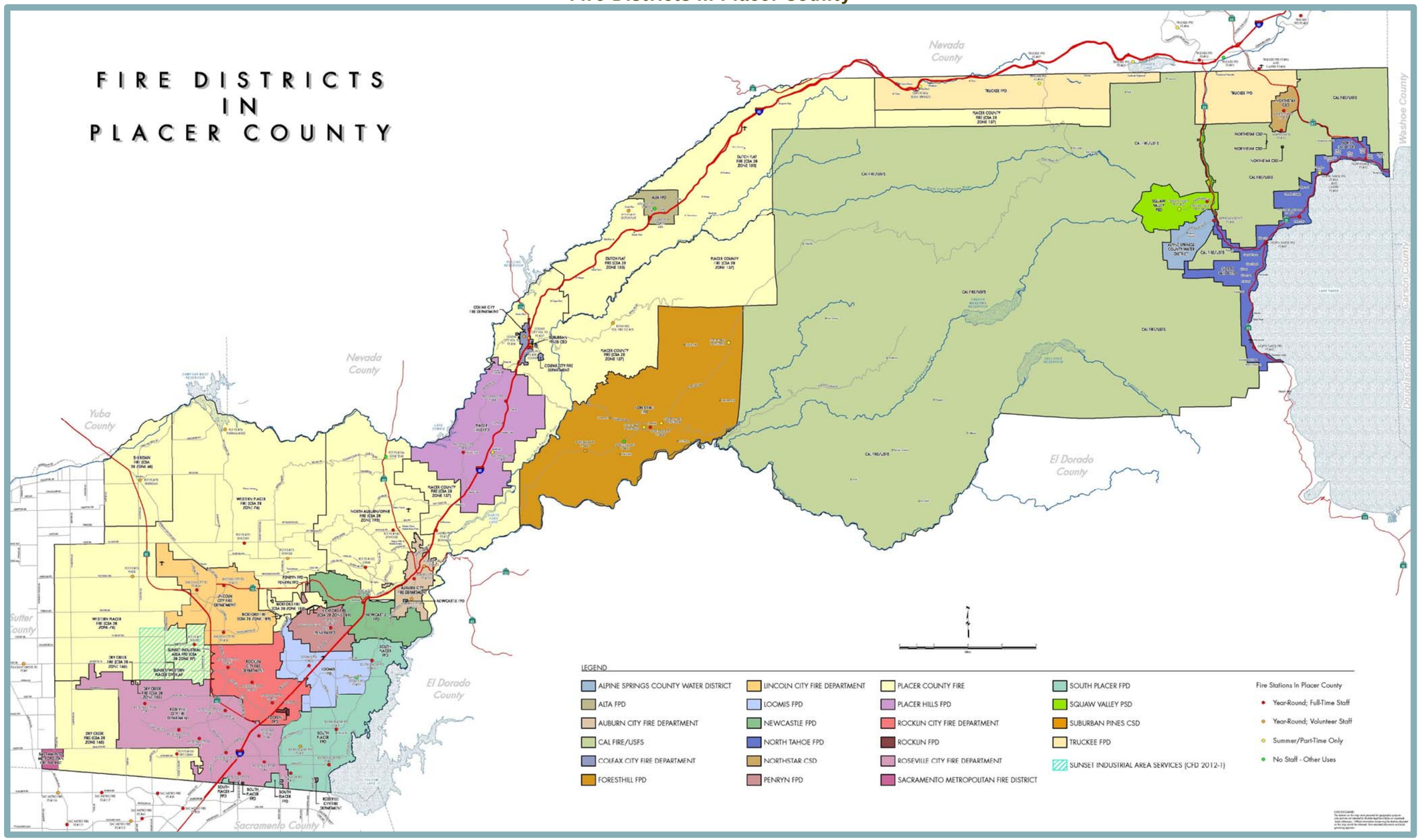
1 Placer County. *Countywide General Plan Policy Document.* August 1994 (updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.
4 Placer County Local Agency Formation Commission. *Municipal Service Review for Fire and Emergency Services West Placer County Area Draft Final.* May 25, 2017.
5 Placer County. *Approve a Resolution imposing a charge for fire protection and emergency medical services for parcels in the Morgan Creek Residential Parcel Map.* July 11, 2017.

Figure 13-1
Fire Districts in Placer County



Services provided include fire suppression, emergency medical, fire prevention, and rescue, among others. Additionally, PCF, by way of its contract with CAL FIRE, conducts fire inspections and assists with land development functions within the PCF service area. All fire agencies within Placer County operate under a mutual aid system, defined as a pre-arranged plan and contract between agencies for reciprocal assistance upon request by the first-response agency.

Currently, CAL FIRE employs 69 personnel that respond to PCF calls for service, including 42 permanent personnel assigned to serve PCF stations full-time. The nearest CAL FIRE station to the project site is the Dry Creek Fire Station (Station 100), located approximately 1.25 miles west of the project site at 8350 Cook Riolo Road. Station 100 is a full-time staffed station and would provide fire protection services to the proposed project.

PCF collects a development impact fee specific to fire services for each sub area within the PCF service area. The development impact fee is calculated based on a "fair share portion" of anticipated capital needs through 2060. Currently, the PCF's Fire Facilities Fee is $0.59 per square foot of residential development. The fee was last updated in 2013.

Sheriff Protection Services

The Placer County Sheriff's Office (PCSO) provides law enforcement services to the unincorporated areas of Placer County, including the areas in the vicinity of the proposed project site. In addition, The California Highway Patrol provides traffic enforcement and accident investigations along the Interstate 80 (I-80) corridor to the east of the project site.

The Auburn Justice Center (AJC), located at 2929 Richardson Drive, is the main office for the PCSO's operations and is located approximately 25 miles northeast of the project site.

The PCSO has continued to work with the West Roseville community to provide increased law enforcement presence in the DCWPCP/West Roseville area. In May 2016, the Dry Creek Joint Elementary School District (DCJESD) and PCSO identified an opportunity to locate a community service station within the former Dry Creek Elementary School site at the corner of PFE Road and Cook Riolo Road, southwest of the proposed project site. To allow this, the DCJESD provided the PCSO with a License Agreement (License) authorizing the use of approximately 2,030 square feet (sf) within the former school offices.The premises is used by PCSO deputies and volunteers and as a general service center functioning as an extended office to write reports, meet with citizens, take reports, and provide a more easily identifiable law enforcement presence within the DCWPCP/West Roseville community as a whole. The former school office site was recently sold by the DCJESD to a private party; however, subsequent to the sale, PCSO entered into a lease agreement with the private party, and the operations at the community service station remain unchanged.

According to the Placer County General Plan, the PCSO is organized into five divisions: patrol services, investigations/coroner, corrections, marshal, and a Tahoe sub-station. Patrol and investigation services operate in the Dewitt Center and various substations in Loomis, Foresthill, and near Lake Tahoe.

The proposed project site would be primarily served by the South Placer Substation located in Loomis at the intersection of Horseshoe Bar Road and I-80, approximately 15 miles to the northeast. Staffing of the substation includes 36 patrol positions, three detectives, four patrol sergeants, community services/school safety sergeant, five high school resource officers, two

elementary school resource officers, one field community services officer, three community services officers, and numerous volunteers and other professional staff.[6]

Policies 4.H.1 and 4.H.2 of the Placer County General Plan call for a staffing ratio of one officer per 1,000 residents in unincorporated areas and a response time for emergency calls of eight minutes in suburban areas. According to the *Placer County Sheriff's Office 2014 Annual Report*, the Dispatch Services Unit handled a total of 99,503 calls for service in 2015, which was an increase of 826 calls compared to 2014.[7]

Schools

The project would be served by two school districts: The DCJESD (kindergarten through grade eight) and the Roseville Joint Union High School District (RJUHSD) (grades nine through 12). Table 13-1 below provides enrollment and capacity information for both school districts.

Table 13-1
School Districts Serving the Project Site

District	Grades	Enrollment	Capacity
DCJESD	K-8	6,731	8,482
RJUHSD	9-12	10,123	9,896

Sources:
- *Dry Creek Joint Elementary School District, 2015.*
- *Roseville Joint Union High School District. FY 2019-20 Tentative Budget. June 27, 2019.*

Based on the most recently updated attendance areas for each district, the project site is within the DCJESD Creekview Ranch K-8 attendance area and the RJUHSD Woodcreek High School attendance area. As noted in Chapter 14, Transportation and Circulation, of this EIR, total enrollment at Creekview Ranch is currently approximately 731 students. As of October 2017, total enrollment at Woodcreek High School was approximately 2,182 students.

Parks and Recreational Facilities

Recreational opportunities are provided by numerous federal, state, and local jurisdictions and private entities in Placer County. At the federal level, the U.S. Forest Service (USFS) manages over 300,000 acres in portions of the Tahoe National Forest, El Dorado National Forest, and portions of the Tahoe Basin, including recreation facilities and campgrounds generally near rivers, streams, reservoirs, and lakes along the I-80 and State Route (SR) 89 corridors. At the state level, the California Department of Parks and Recreation operates eight state parks and recreation areas throughout Placer County. At the local level, the proposed project area is served by the Parks and Grounds Division of the Placer County Facilities Services Department. The nearest public park to the proposed project site is Kaseberg Park, located approximately 1-mile northeast along Main Street in the City of Roseville. The recently built Placer County Dry Creek Community Park is located approximately three miles southwest.

In October of 2016, the Placer County Board of Supervisors approved a consultant agreement to prepare the Placer County Parks and Trails Master Plan (Master Plan), which is intended to guide future park and trail development in the County. The Master Plan was released for public review

[6] Placer County. *Placer County Sheriff-Coroner-Marshal.* Available at: https://www.placer.ca.gov/departments/sheriff/contactus. Accessed April 2017.
[7] Placer County Sheriff's Department. *Placer County's Sheriff's Office 2015 Annual Report.* 2015.

in March 2019 and is anticipated for adoption in late 2019.[8] Currently, funding for maintenance of parks and recreational facilities within the project area is provided through Placer County Service Area 28, Zone 169.

Other Public Facilities

The Placer County Public Works Department is responsible for repairs and maintenance of over 1,000 miles of roadways within unincorporated Placer County from Roseville to Tahoe. The Public Works Department provides roadside tree and vegetation control, emergency roadway hazard response, bridge maintenance, maintenance of roadway signs, and striping and traffic signals. In addition to public roads, Placer County maintains various public facilities, such as public libraries and community buildings, which could potentially be used by residents of the proposed project.

The nearest libraries to the proposed project site are the Roseville Public Library, located approximately 2.3 miles east of the project site, and the Martha Riley Community Library, located approximately three miles north of the site along Woodcreek Oaks Boulevard. Placer County also operates the Placer County Library, located in the City of Auburn, approximately 20 miles northeast of the project site along I-80 and the Granite Bay Library on Douglas Boulevard, approximately eight miles east of the project site.

13.3 REGULATORY CONTEXT

The following discussion contains a summary review of regulatory controls pertaining to public services and recreation, including State and local laws and ordinances.

State Regulations

The following are applicable State regulations related to the proposed project.

Uniform Fire Code

The Uniform Fire Code with the State of California Amendments contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Proposition 1A/Senate Bill 50

Proposition 1A/Senate Bill (SB) 50 (Chapter 407, Statutes of 1998) is a school construction measure primarily for modernization and rehabilitation of older school facilities and construction of new school facilities. Proposition 1A/SB 50 implemented significant fee reforms by amending the laws governing developer fees and school mitigation.

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8 Placer County. *Parks and Trails Master Plan.* Available at: http://placerparksplan.com/. Accessed April 2017.

- Establishes the base (statutory) amount (indexed for inflation) of allowable developer fees at $1.93 per square foot for residential construction and $0.31 per square foot for commercial construction.
- Prohibits school districts, cities, and counties from imposing school impact mitigation fees or other requirements in excess of or in addition to those provided in the statute.

Proposition 1A/SB 50 also prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act […] involving […] the planning, use, or development of real property" (Government Code 65996(b)). Additionally, a local agency cannot require participation in a Mello-Roos for school facilities; however, the statutory fee is reduced by the amount of any voluntary participation in a Mello-Roos. Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation." The law identifies certain circumstances under which the statutory fee can be exceeded, including preparation and adoption of a "needs analysis," eligibility for State funding, and satisfaction of two of four requirements (post-January 1, 2000) identified in the law including: year-round enrollment, general obligation bond measure on the ballot over the last four years that received 50 percent plus one of the votes cast, 20 percent of the classes in portable classrooms, or specified outstanding debt. Assuming a district qualifies for exceeding the statutory fee, the law establishes ultimate fee caps of 50 percent of costs where the State makes a 50 percent match, or 100 percent of costs where the State match is unavailable. District certification of payment of the applicable fee is required before the County can issue the building permit.

Quimby Act

California Government Code Section 66477, Subdivision Map Act, referred to as the Quimby Act, permits local jurisdictions to require the dedication of land and/or the payment of in-lieu fees solely for park and recreation purposes. The required dedication and/or fees are based upon the residential density, parkland cost, and other factors. Land dedication and fees collected pursuant to the Quimby Act may be used for acquisition, improvement, and expansion of park, playground, and recreational facilities or the development of public school grounds.

Local Regulations

The following are applicable local regulations related to the proposed project.

Placer County General Plan

The relevant goals and policies from the Placer County General Plan related to public services and recreation are presented below.

Goal 4.A To ensure the timely development of public facilities and the maintenance of specified service levels for these facilities.

Policy 4.A.2 The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the following conditions are met:

a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means); and
b. The facilities improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant.

Goal 4.B To ensure that adopted facility and service standards are achieved and maintained through the use of equitable funding methods.

Policy 4.B.1 The County shall require that new development pay its fair share of the cost of all existing facilities it uses based on the demand for these facilities attributable to the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Policy 4.B.2 The County shall require that new development pay the cost of upgrading existing public facilities or construction of new facilities that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Policy 4.B.3 The County shall require, to the extent legally possible, that new development pay the cost of providing public services that are needed to serve the new development; exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues. This includes working with the cities to require new development within city limits to mitigate impacts on Countywide facilities and services.

Policy 4.B.6 The County shall require the preparation of a fiscal impact analysis for all major land development projects. The analysis will examine the fiscal impacts on the County and other service providers which result from large-scale development. A major project is a residential project with 100 or more dwelling units or a commercial, professional office or industrial development on 10 or more acres of land.

Goal 4.H To provide adequate law enforcement services to deter crime and to meet the growing demand for services associated with increasing population and commercial/industrial development in the County.

Policy 4.H.1 Within the County's overall budgetary constraints, the County shall strive to maintain the following staffing ratios (expressed as the ratio of officers to population):

a. 1:1,000 for unincorporated areas
b. 1:7 for jail population
c. 1:16,000 total county population for court and civil officers

Policy 4.H.2 The County Sheriff shall strive to maintain the following average response times for emergency calls for service:

a. 6 minutes in urban areas
b. 8 minutes in suburban areas
c. 15 minutes in rural areas
d. 20 minutes in remote areas

Policy 4.H.4 The County shall require new development to develop or fund sheriff facilities that, at a minimum, maintain the above standards.

Goal 4.I To protect residents of and visitors to Placer County from injury and loss of life and to protect property and watershed resources from fires.

Policy 4.I.1 The County shall encourage local fire protection agencies in Placer County to maintain the following minimum fire protection standards (expressed as Insurance Service Organization (ISO) ratings):

a. ISO 4 in urban areas
b. ISO 6 in suburban areas
c. ISO 8 in rural areas

Policy 4.I.2 The County shall encourage local fire protection agencies in the County to maintain the following standards (expressed as average response times to emergency calls):

a. 4 minutes in urban areas
b. 6 minutes in suburban areas
c. 10 minutes in rural areas

Policy 4.I.3 The County shall require new development to develop or fund fire protection facilities, personnel, and operations and maintenance that, at a minimum, maintains the above service level standards.

Policy 4.I.9 The County shall ensure that all proposed developments are reviewed for compliance with fire safety standards by responsible local fire agencies per the Uniform Fire Code and other County and local ordinances.

Goal 5.A To develop and maintain a system of conveniently located, properly-designed parks and recreational facilities to serve the needs of present and future residents, employees, and visitors.

Policy 5.A.1 The County shall strive to achieve and maintain a standard of 10 acres of improved parkland per 1,000 population. The standard shall be comprised of the following:

- 5 acres of improved active parkland per 1,000 population
- 5 acres of passive recreation area or open space per 1,000 population

Policy 5.A.3 The County shall require new development to provide a minimum of 5 acres of improved parkland and 5 acres of passive recreation area or open space for every 1,000 new residents of the area covered by the development. The park classification system shown in Table 5-1 (see Table 13-2) should be used as a guide to the type of the facilities to be developed in achieving these standards.

Table 13-2
Park Classification System

Park Type	Use Description	Desirable Site Characteristics
Mini-Park (2 acres or less)	Specialized facilities that serve a concentrated or limited population or specific group, such as children or senior citizens.	Within neighborhoods and close to high-density housing or housing for the elderly.
Neighborhood Park (2 to 15 acres)	Area for intense recreational activities, such as field games, court games, playground apparatus, skating, picnicking.	Easily-accessible to neighborhood population (geographically centered with safe walking and bike access).
Community Park (15 or more acres)	Area of diverse environmental quality. May include areas suited for intense recreational activities. May be an area of natural quality for outdoor recreation, such as walking, viewing, and picnicking. May be any combination of the above, depending on site suitability and community need.	May include natural features, such as water bodies. Easily-accessible to neighborhood served.
Linear Park	Area developed for one or more modes of travel, such as hiking, biking, horseback riding, or crosscountry skiing.	Built or natural corridors, such as utility rights-of-way, that link other elements of the recreation system or community facilities, such as school, libraries, commercial areas, and other park areas.

(Continued on next page)

Special Use	Areas for specialized or single-purpose recreational activities such as golf courses, nature centers, marinas, arenas, outdoor theaters, downhill ski areas, or areas that preserve, maintain, and interpret buildings, sites, and objects of archaeological significance. Also boulevards and parkways.	
Conservancy Areas	Protection and management of the natural/cultural environment with recreation use as a secondary objective.	Variable, depending on the resource being protected.

Policy 5.A.4 The County shall consider the use of the following open space areas as passive parks to be applied to the requirement for 5 acres of passive park area for every 1,000 residents.

- Floodways
- Protected riparian corridors and stream environment zones
- Protected wildlife corridors
- Greenways with the potential for trail development
- Open water (e.g., ponds, lakes, and reservoirs)
- Protected woodland areas
- Protected sensitive habitat areas providing that interpretive displays are provided (e.g., wetlands and habitat for rare, threatened or endangered species)

Buffer areas are not considered as passive park areas if such areas are delineated by setbacks within private property. Where such areas are delineated by public easements or are held as common areas with homeowner/property owner access or public access, they will be considered as passive park areas provided that there are opportunities for passive recreational use.

Policy 5.A.5 The County shall require the dedication of land and/or payment of fees, in accordance with state law (Quimby Act and the Mitigation Fee Act) to ensure funding for the acquisition and development of public recreation facilities. The fees are to be set and adjusted as necessary to provide for a level of funding that meets the actual cost to provide for all of the public parkland and park development needs generated by new development.

DCWPCP

The relevant goals and policies from the DCWPCP related to public services and recreation are presented below.

Community Development: Population and Housing

General Goal 1 Provide sound and adequate housing to all residents at desirable locations including consideration of transportation facilities, school facilities and proximity to major employment centers.

Policy 3 Residential areas should be located where a full range of services and facilities can be provided most efficiently and economically.

Policy 4 To subject new developments with potential for adverse fiscal and other impacts on the delivery of essential public services to an "impact analysis" so as to avoid unreasonable financial burdens on the community and other affected local governmental agencies to ensure the continued availability of essential public services.

Community Development: Community Design

Goal 6 It is a goal to create residential development which allows the following elements: human interaction, bicycle and pedestrian circulation, an appropriate relationship to the existing development in the area, and the creation of a neighborhood identity and//or focus (i.e. parks, schools, natural open space areas, creek site of historical or archaeological significance, etc.

Goal 8 A major goal of the plan is to utilize and improve the Dry Creek environs as a focal point of existing and new neighborhoods to be created in the area through the placement of park facilities, roadway, trails, interpretive areas, visibility, etc.

Policy 17 Require the construction of bicycle, pedestrian, and equestrian trails as provided in this Plan and use the policies of the Placer County Bikeways Master Plan in determining routes and trail type for areas not depicted on the Plan Trails map but still required to satisfy the policies of this Plan.

Public Services: General Public Service

Goal 1 Public service and facilities must be available to serve the needs created by the present and future development which occurs in the plan area.

Goal 2 Maintain the most feasible and acceptable balance between adequate public services, costs of providing those services and projected demand.

Goal 5 Ensure that the rate of development shall not exceed the capacity of County, community, special districts (including school districts), and utility companies to provide all needed public services in a timely, orderly, and economically feasible manner.

Policy 4	Ensure that adequate services will be available for proposed development before granting approvals.
Policy 6	Ensure, through cost-benefit studies, that new development does not place undue burdens upon existing public services.
Policy 7	Consider mitigation measures from new development to reduce impacts on local services, i.e., schools, parks, etc.

Land Use

Policy 8	Residential areas should be located where a full range of services and facilities can be provided most efficiently and economically.
Policy 43	To allow for continued increased commercial and residential development only where all public services can be provided in an adequate and timely manner.
Policy 44	The rate of development and location of projects shall not exceed the capacity of the community, special districts and utility companies to provide all needed services and facilities in an orderly and economic manner.

Parks and Recreation

Goal 1 To provide a variety of park and recreation facilities adequate to meet the needs of present and future residents of the Dry Creek Area.

Policy 1	To provide future park facilities in accordance with park standards and location guidelines as set forth in this plan.
Policy 5	To encourage private recreation facilities within residential developments (as required in planned unit developments) to off-set the demand for public facilities.
Policy 6	To require the dedication of land and/or payment of fees, in accordance with state law (Quimby Act) to ensure funding for the acquisition and development of public recreation facilities.
Policy 9	To encourage compatible recreational use of riparian areas along streams and creeks in the same area where feasible.
Policy 12	To require the development of a regional trail system which provides an alternative mode of transportation. This trail system should be designed to provide access to separated trails without requiring the trail to be done by automobile or by pedestrians traveling adjacent to motor vehicles which may be traveling at speeds in excess of 25 m.ph.

Open Space

Policy 11 Open spaces should be linked visually and physically to form a system of open spaces. Where appropriate, trails shall connect open space areas. Dedication of easements shall be encouraged and in many cases required as lands are developed and built.

Open Space

Goal 8 A community trail system shall be developed to:

a. Provide safe, pleasant, convenient travel by foot, horse or bicycle within the Community Plan area.
b. Provide recreational opportunities to residents of the Community Plan area.
c. Connect local trails to regional trail systems.
d. Establish an off-street, non-vehicular community trail system which links school facilities, parks and recreation, community

Dry Creek Greenway Regional Vision Plan

In 2011, the Placer County Board of Supervisors adopted The Dry Creek Greenway Regional Vision (Vision Plan), a proposed regional open space greenway and park system that protects the natural waterways, riparian corridors, natural and cultural resources and sensitive habitat lands. The Vision Plan area consists of Dry Creek and its major tributaries including Miners Ravine, Secret Ravine, Strap Ravine, Antelope Creek, Cirby Creek, Clover Valley Creek, and Linda Creek. The Vision Plan includes a coordinated multi-jurisdiction management strategy to address hiking, biking, equestrian trails and public access, habitat preservation, flood control, and water quality. The concept of the Vision Plan is for a connected open space system linking the Dry Creek Parkway with Folsom Lake State Recreation Area and the uplands of the watershed.

The Vision Plan consists of the following objectives:

- Preserve and enhance riparian and aquatic habitats;
- Conserve and protect significant historic, cultural and scenic resources;
- Connect the Dry Creek Parkway to the Folsom Lake State Recreation Area;
- Provide for the management of Greenway resources;
- Provide active and passive recreation opportunities;
- Preserve floodwater conveyance capacity and reduce property damage due to flooding;
- Work with existing plans and policies;
- Secure funding to sustain and complete the Greenway;
- Function as a local and regional asset; and
- Facilitate land use planning and management within the Greenway.

The unnamed tributary on the west side of the project site is classified in the Vision Plan as a “Habitat Only” corridor. The goal of the “Habitat Only” corridors is to provide high quality, contiguous riparian and aquatic habitat from the more recreationally focused corridors in the lower reaches of the Greenway to the upper parts of the watershed. The plan for these corridors is that they will be managed for quality of habitat, if in public ownership. If privately held, property owners will be encouraged to maintain existing riparian areas and enhance degraded locations. While the Vision Plan did not require a trail or public access along this tributary, it did not prohibit it, and the proposed trail will further the Vision Plan goals and will be an important public recreation amenity.

Placer County Code

Sections from the Placer County Code related to fire protection services and park and recreational facilities are discussed below.

Development Fees for Fire Protection

Article 15.36, Development Fees for Fire Protection, of the Placer County Code requires new development within the unincorporated areas of the County to pay a development fee to the relevant fire protection agency for the benefit of the owners or residents of the development. The responsibility for compliance with the requirements of Government Code Section 66000 et seq., and for the collection, receipting, and management of fees collected from new development projects shall rest with the serving fire protection agency.

Parks and Recreational Facilities Fees

Article 15.34, Parks and Recreational Facilities Fees, of the Placer County Code requires payment of parks and recreational facility fees to implement the goals and objectives of the Placer County General Plan and mitigate impacts caused by new developments. The purpose of the park and recreation facilities impact fee is to provide funding for expansion of park land and recreation facilities required to serve new development in unincorporated Placer County. Payment of fees is required prior to the issuance of building permits or at the earliest time permitted by law.

Section 16.08.100 of the Placer County Code requires that as a condition of approval for a final subdivision or parcel map, a portion of such land must be dedicated for park or recreational purposes, a fee paid in lieu thereof, or a combination of both. The portion to be dedicated must be sufficient to provide five acres of park land per 1,000 residents of the subdivision. In addition, while not included in the Placer County Code, General Plan Policy 5.A.1 sets a standard of five acres of passive recreation area or open space per 1,000 residents.

13.4 IMPACTS AND MITIGATION MEASURES

The section below describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential project-specific impacts related to public services and recreation. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines and the County's Initial Study Checklist, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, a public services and recreation impact is considered significant if the proposed project would:

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

  - Maintenance of public facilities, including roads;
- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and/or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Method of Analysis

In order to determine the potential for the project to result in substantial adverse impacts associated with the provision of new or altered government facilities, relevant public services and recreation planning documents were reviewed, including, but not limited to, the Placer County General Plan, the Placer County General Plan EIR, the DCWPCP, the Placer County LAFCo Municipal Service Review for Fire and Emergency Services,[9] and direct communication with service providers.

It should be noted that in addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order to meet the County's affordable housing requirements. However, the total number of residential lots would remain unchanged, as would the overall disturbance area associated with the project. In addition, the 12 additional Accessory Dwelling Units (ADUs), if included, would include a smaller household size relative to standard market-rate single-family units. For example, as can been seen in the ADU discussion in the Transportation chapter of the EIR, the trip generation is based on the assumption that the multi-family trip rate is a good approximation of the trips generated by ADUs. Assuming this, the projected population increase from up to 12 ADUs at the project site would be an additional 23 persons.[10] Therefore, the potential inclusion of an additional 12 units on-site would not result in new impacts or substantially more severe impacts beyond the analysis presented herein.

Project-Specific Impacts and Mitigation Measures

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

13-1 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. Based on the analysis below, the impact is *less than significant*.

The proposed project would include annexation into the Dry Creek Zone of Benefit (CSA 28, Zone 165) for provision of fire protection services to the site. Given that fire protection and emergency medical services within Zone 165 are the responsibility of Placer County,

[9] Placer County Local Agency Formation Commission. *Municipal Service Review for Fire and Emergency Services West Placer County Area Draft Final.* May 25, 2017.

[10] 12 ADUs * 1.91 persons per multi-family unit, based upon adjustment of single-family rate (e.g., 3.08 persons per SF household * 0.62, where 0.62 is the trip rate dwelling unit equivalent for multi-family uses).

the requested annexation would be subject to approval by the County Board of Supervisors.

Fire protection services for the project site would be provided by PCF by way of Station 100, located at 8350 Cook Riolo Road. Station 100 is located approximately 1.25 miles from the project site. Although implementation of the proposed project would increase the amount of structures protected by the PCF, the County, in conjunction with the County's contract fire services provider, CAL FIRE, has confirmed that a new station or alteration of the existing station would not be necessary in order to adequately serve the proposed project.[11]

As previously mentioned, CAL FIRE is responsible to provide emergency services in Placer County and has stated their ability to serve not only the proposed project, but future planned growth in the Dry Creek area, and still maintain compliance with established safety response times. As is currently the case, incidents will occur where the City of Roseville (Roseville) Fire Department is called upon to provide mutual aid at or near the project area to send the closest available unit to an emergency incident, regardless of jurisdictional boundaries. In that spirit of cooperation to provide the fastest and highest level of service to the surrounding area, Roseville Fire Department has signed onto a Closest Resource Agreement (CRA) with Placer County Fire and other surrounding fire departments to provide mutual aid between all participating fire departments. As outlined in the CRA, Roseville, can adjust the amount of reciprocal coverage by setting draw-down levels, or withdraw from the CRA entirely. Timing and triggers for public service improvements occur when impacts associated with additional development exceeds established safety standards, which is not the case for the proposed project. As residential units are constructed and fire impact fees are collected, projects are required to pay their fair share towards existing and planned fire protection improvements, which will mitigate the project's impacts to fire services for all safety providers and increase the County's ability to serve unincorporated areas, in addition to continuing to provide reciprocal aid to the City of Roseville and surrounding local governments.

PCF collects a Fire Facilities Fee specific to fire services for each sub area within the PCF service area. The development impact fee is calculated based on a "fair share portion" of anticipated capital needs through 2060. Currently, the PCF's Fire Facilities Fee is $0.84 per square foot of residential development. Final improvement plans for the proposed project would be subject to review by the PCF as part of the County's approval process in order to ensure compliance with fire and safety standards.

Although implementation of the proposed project would increase the amount of building space within the project site, all structures included in the proposed project would be constructed consistent with the CBC and CFC. In compliance with the CBC (specifically Section 903.2.1.3, Group A-3), the design of the residences would include the installation and use of automatic fire sprinklers, and fire alarm systems would be incorporated pursuant to CFC requirements. Such features would reduce the potential for fires to occur within the proposed structures, which would reduce the demand for fire protection services from the project site.

[11] Hudson, Jim and Estes, Brian , Unit Chiefs, CAL FIRE. Personal communication [phone] with Nick Pappani, Vice President, Raney Planning & Management, Inc. April 23, 2019.

Per Policy 4.4.2, the County maintains an average response time goal of 6 minutes for suburban areas. Given the proximity of the project site to Station 100, the response time to the project site would be within the achievable response time goal.[12] As such, response times for the proposed project would be consistent with General Plan Policy 4.4.2, and CAL FIRE would be capable of serving the project site with existing equipment and facilities.

Given that the proposed project would not increase population such that PCF would require new or altered facilities, the proposed project would not result in a need for new, or improvements to existing, fire protection facilities, construction of which could cause significant environmental impacts. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

13-2 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for law enforcement services. Based on the analysis below, the impact is *less than significant*.

The proposed project is located within the jurisdiction of and would be provided services by the PCSO. As described above, the proposed project would be primarily served by the South Placer Substation located in Loomis at the intersection of Horseshoe Bar Road and I-80, approximately 15 miles to the northeast of the project site. In addition, limited law enforcement services may be provided by the PCSO's community service station located southwest of the project site.

The threshold for this impact, as identified in Appendix G of the CEQA Guidelines, is related to whether the project would result in substantial adverse physical impacts associated with the provision of new or physically altered sheriff facilities, the construction of which could cause significant environmental impacts in order to maintain acceptable service ratios or performance objectives.

The PCSO has indicated that new or physically altered law enforcement facilities would not be needed to adequately serve the proposed project.[13] In addition, though response times are dependent upon the location of patrol officers at the time of the emergency call, on average, response times to the project site would be anticipated to be within the Placer County General Plan's eight minute response time standard for suburban areas. As a result, the proposed project would not result in a need for new, or improvements to existing, sheriff protection facilities, construction of which could cause significant environmental impacts, and a ***less-than-significant*** impact would occur.

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[12] Jim Hudson, Assistant Chief, CAL FIRE/Placer County Fire Department. Personal communication [email] with Nick Pappani, Vice President, Raney Planning & Management, Inc. June 20, 2019.

[13] Barnhart, Josh, Lieutenant at the Placer County Sheriff's Office. Personal communication [email] with Nick Pappani, Vice President, Raney Planning & Management, Inc. May 14, 2019.

Mitigation Measure(s)
None required.

13-3 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for schools. Based on the analysis below, the impact is *less than significant*.

As noted previously, the proposed project would develop 119 single-family lots within the DCJESD and RJUHSD school districts. Based on the student generation rates provided by the DCJESD and the RJUHSD[14], the proposed project is expected to generate 85 students in kindergarten through grade eight and 13 students in grades nine through 12 (see Table 13-3).

Table 13-3
Enrollment, Capacity, and Student Generation by School District

District	Enrollment	Capacity	Student Generation Rate Per Unit	Students Generated by Project	Project Plus Existing Enrollment
DCJESD	6,731	8,482	0.713	85	6,816
RJUHSD	10,164	9,896	0.110	13	10,177

Sources:
- ***Dry Creek Joint Elementary School District, 2015.***
- ***Roseville Joint Union High School District, 2016.***

As shown in Table 13-3, the available capacity of the DCJESD would be sufficient to accommodate the 85 K-8 students generated by the proposed project. The RJUHSD is currently over capacity, and the proposed project would contribute an additional 13 students; however, the number of students generated by the proposed project would represent approximately only 0.1 percent of the total capacity. In addition, Woodcreek High School, which would serve the proposed project site, is currently under capacity. The RJUHSD plans to open a new high school in August of 2021, which is expected to result in a decrease in enrollment at Woodcreek High School.[15]

Furthermore, according to SB 50, payment of the necessary school impact fees for the project would be considered full and satisfactory CEQA mitigation. As discussed previously, proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act […] involving […] the planning, use, or development of real property" (Government Code 65996[b]). Therefore, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically

[14] Roseville Joint Union High School District. *Developer Fee Justification Study.* March 5, 2016
[15] Jungsten, Laura, Administrative Secretary III, Roseville Joint Union High School District. Personal communication [phone] with Nick Pappani, Vice President, Raney Planning & Management, Inc. January 2, 2018.

altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of schools. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

13-4 Result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated, or include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. Based on the analysis below, the impact is *less than significant*.

As noted above, the project would include the construction of 119 single-family homes, and, based on an average of 2.54 persons per household used for the *Placer County Park and Recreation Facilities Fee Study* (Fee Study), would be anticipated to house approximately 302 new residents on the project site.[16] In the event that up to 12 ADUs are also built on-site, there would be an additional estimated 23 residents. Such residents could increase demand on existing parks and recreational facilities, potentially requiring provision of new facilities or expansion of existing facilities. As noted in Chapter 11 of this EIR, the U.S. Census Bureau identifies an average household size of 3.08 persons per household for the DCWPCP area.[17] However, the 2.54 persons per household figure is used in this chapter in order to maintain consistency with the Fee Study.

Both the Placer County General Plan and the DCWPCP require dedication of land and/or payment of fees in accordance with State law to ensure funding for the acquisition and development of public recreation facilities. Consistent with goals and policies in the Placer County General Plan and the DCWPCP, Section 16.08.100 of the Placer County Code requires dedication of land for park or recreational purposes, or a fee paid in lieu thereof, or a combination of both, as a condition of approval for final subdivision or parcel maps. The land areas required for dedication may be up to an amount equivalent to the land necessary to provide five acres of park land per 1,000 residents of the proposed subdivision.

As part of the proposed project, a total of 6.34 acres of the site would be retained as open space, including areas planned for on-site trails. A total of 1.25 acres are planned for three linear parks. In addition, 1.44 acres within the site would consist of landscaped lots. The park areas would provide active open space and play areas including a tot-lot, picnic tables, benches, rain gardens, and open lawn. Based on the County's requirement of five acres of park land per 1,000 residents (Section 16.08.100 of the Placer County Code and General Plan Policy 5.A.1), the proposed project would be required to provide a minimum of approximately 1.5 acres of parks (0.005 acres/resident * 302 estimated residents), and with inclusion of up to 12 ADUs, would require 1.65 acres of parks. Thus, by providing

[16] Placer County. *Placer County Park and Recreation Facilities Fee Study.* September 2003.
[17] ESRI Business Analyst. *Comparison Reports, DCWPCP Area*. February 2019.

1.25 acres of park area, the proposed project would not meet the park requirements and payment of an in-lieu fee would be required.[18] Where a combination of land and fees is required, the total value of the dedication would not exceed the cost of providing fully developed park land and recreational facilities. Given that the project would include development of park land and payment of fees to meet the demand created by future residents, the project would not be anticipated to substantially increase demand on existing or future parks or recreational facilities in the surrounding area. Furthermore, per Article 15.34 of the Placer County Code, the project applicant would be required to pay a parks and recreational facility fee. The purpose of the park and recreation facilities impact fee is to provide funding for expansion of park land and recreation facilities required to serve new development in unincorporated Placer County. Therefore, the proposed project would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of such facilities would occur or be accelerated.

In addition to requiring a minimum of five acres of active parkland per 1,000 residents, General Plan Policy 5.A.1 sets a standard of five acres of passive recreation area or open space per 1,000 residents. Using the calculations noted above, approximately 1.5 acres of passive recreation area or open space would be required for the proposed 119 single-family unit project (and 1.65 acres with inclusion of 12 ADUs). Because the project would include approximately 6.34 acres of open space and a public multi-purpose trail, the project would comply with General Plan Policy 5.A.1 related to the provision of passive recreation area or open space. Based on the above, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

13-5 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of public facilities, including roads, or for other government services. Based on the analysis below, the impact is *less than significant*.

The following section describes the proposed project's potential adverse physical effects associated with maintenance and construction of County roads and library facilities.

Roads

The proposed project would result in the construction of 119 new single-family residences and associated infrastructure, including a private internal road network that would connect to a public road (Brady Lane). In addition, the project would include off-site widening of Vineyard Road and Brady Lane in the project vicinity. All roadway improvements included

[18] The estimation of 23 residents associated with up to 12 ADUs would result in an additional need for approximately 0.12-acre of park.

in the proposed project would be funded by the project applicant. In addition, the project applicant would be required by the County to pay a Traffic Impact Fee. The Traffic Impact Fee, along with other Development Impact Fees levied by the County, is intended to fund and sustain necessary improvements resulting from new development, such as road widening, signalization of intersections, and bridge replacements.

While project-generated traffic could result in an incremental increase in maintenance of County roads in the project area, such an increase would be negligible. Currently, the County uses gasoline tax and federal and State funding for transportation infrastructure maintenance. Payment of Traffic Impact Fees by the applicant prior to the issuance of building permits for the proposed project, as well as payment of applicable taxes by future project residents, would minimize any adverse physical impacts associated with maintenance of existing County roads or construction of new County road facilities.

Libraries and Other Public Facilities and Services

Placer County maintains public facilities such as public libraries and community buildings which could potentially be used by residents of the proposed project. In addition, the residents could potentially use public facilities in the nearby City of Roseville. However, given the size of the proposed development, any additional demand generated by the proposed project would be relatively minor, and is not likely to result in the need to alter existing facilities or construct new facilities. Furthermore, the project applicant would be required to pay a Capital Facilities Fee to the County prior to issuance of building permits on a per unit basis. Capital Facilities Fees are used to construct or expand a range of facilities, including jails, office space, libraries, health labs, and clinics.[19] A list of the specific facilities to be constructed is included in the County's Multi-Year Capital Plan.

Conclusion

Based on the above, the proposed project would not result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or performance objectives for maintenance of public facilities, including roads, or for other government services. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

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

[19] Placer County. *Memorandum, Office of the County Executive, FY 2014-15 Capital Facilities Impact Fee Annual Report.* September 15, 2015.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 17, Statutorily Required Sections of this EIR.

13-6 Cumulative impacts to public services. Based on the analysis below, the cumulative impact is *less than significant*.

Potential cumulative impacts related to fire and Sheriff protection services, schools, public services and government facilities, and parks and recreation are discussed below.

Fire Protection Services

Neither the Placer County General Plan EIR nor the DCWPCP EIR identified cumulative impacts related to fire protection. Rather, impacts were determined to be reduced to less-than-significant levels through implementation of the goals and policies included in the General Plan and DCWPCP. Such policies require provision of adequate funding and an adequate water supply as a component of new development approval.

As discussed above, the response times to the proposed project would be consistent with General Plan Policy 4.4.2, and CAL FIRE would be capable of serving the project site with existing equipment and facilities. In addition, the project would be required to pay a Fire Facilities Fee to PCF. The development impact fee is calculated based on a "fair share portion" of anticipated capital needs through 2060. In addition, development within the proposed project site, as well as other future development throughout Placer County and the DCWPCP area, would be required to comply with all applicable regulations imposed by PCF and the California Fire Code, as adopted by Section 15.04.510 of the Placer County Code. Based on the above, the proposed project would result in a less-than-significant cumulative impact related to fire protection services.

Sheriff Protection Services

Neither the Placer County General Plan EIR nor the DCWPCP EIR identified cumulative impacts related to sheriff protection services. Rather, impacts were determined to be reduced to less-than-significant levels through implementation of the goals and policies included in the General Plan and DCWPCP. Policy 4.H.1 of the Placer County General Plan sets a response time goal of eight minutes for suburban areas such as the DCWPCP area.

The Placer County Sheriff's Office has indicated that new or physically altered law enforcement facilities would not be needed to adequately serve the proposed project.[20] In addition, though response times are dependent upon the location of patrol officers at the time of the emergency call, on average, response times to the project site would be anticipated to be within the Placer County General Plan's eight-minute response time standard for suburban areas. As a result, the proposed project would not result in a need for new, or improvements to existing, sheriff protection facilities, construction of which could cause significant environmental impacts. Similar to the proposed project, other future development within the region would be required to address impacts related to sheriff protection services on a project-by-project basis. Based on the above, the proposed

[20] Barnhart, Josh, Lieutenant at the Placer County Sheriff's Office. Personal communication [email] with Nick Pappani, Vice President, Raney Planning & Management, Inc. May 14, 2019.

project, in combination with future development occurring under buildout of Placer County, would have a less-than-significant impact to sheriff protection services.

Schools

Cumulative buildout within the County and surrounding area could result in overcrowding at schools in the area. However, each individual development would be required to pay SB 50 school impact fees, similar to the proposed project, which would contribute to the facilitation of school expansions in order to serve the needs of the area. As discussed above, the DCJUESD has adequate capacity to serve the students that would be generated by the proposed project, and the project would not contribute a significant number of students to the RJUHSD, which is currently over capacity. Furthermore, according to SB 50, payment of the necessary school impact fees for the project would be considered full and satisfactory CEQA mitigation. Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act […] involving […] the planning, use, or development of real property" (Government Code 65996(b)). Therefore, the proposed project, in combination with future development occurring under buildout of Placer County, would result in a less-than-significant cumulative impact related to the need for new, or improvements to existing, school facilities.

Parks and Recreation

The proposed project would include the provision of on-site private parks as well as payment of in-lieu fees and would not result in an increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of such facilities would occur or be accelerated. Per Article 15.34 of the Placer County Code, future development projects within unincorporated Placer County, including the proposed project, would be required to pay a parks and recreational facility fee. The purpose of the park and recreation facilities impact fee is to provide funding for expansion of park land and recreation facilities required to serve new development in unincorporated Placer County. Furthermore, the proposed project would provide 1.25 acres of on-site parks, which would be just below the County's requirement of five acres of park land per 1,000 residents (Section 16.08.100 of the Placer County Code and General Plan Policy 5.A.1), assuming an average household size of 2.54 persons. In order to supplement the requirement, the applicant would pay an in-lieu fee to mitigate for the remaining 0.25-acre of required park space. Future development within the DCWPCP would similarly be required to comply with the County's park dedication/in-lieu fee standards. Therefore, the proposed project, in combination with future buildout in the County, would result in a less-than-significant cumulative impact related to parks and recreation.

Public Facilities and Government Services

As discussed above, while project-generated traffic could result in an incremental increase in maintenance of County roads in the project area, such an increase would be negligible. Similarly, given the size of the proposed development, any additional demand on libraries or other public facilities and services generated by the proposed project would be relatively minor, and is not likely to result in the alteration of existing facilities or the construction of new facilities. The proposed project, as well as other development in the unincorporated County, would be required by the County to pay Development Impact Fees, which would help to fund and sustain public facilities and services, including public roads, within Placer

County. The proposed project, in combination with future development occurring under buildout of the DCWPCP, would result in a less-than-significant cumulative impact.

Conclusion

Based on the above, the proposed project, in combination with future development occurring under buildout of the DCWPCP, would result in a ***less-than-significant*** cumulative impact related to public services and recreation.

Mitigation Measure(s)

None required.

14. Transportation and Circulation

14. TRANSPORTATION AND CIRCULATION

14.1 INTRODUCTION

The Transportation and Circulation chapter of the EIR discusses the existing transportation and circulation facilities within the project vicinity, as well as applicable policies and guidelines used to evaluate operation of such facilities. Where development of the proposed project would conflict with applicable policies or guidelines, mitigation measures are identified. The information contained within this chapter is primarily based on the Traffic Impact Analysis prepared for the proposed project by KD Anderson & Associates, Inc. (see Appendix K),[1] as well as the Placer County General Plan,[2] the Placer County General Plan EIR,[3] and the *Dry Creek-West Placer Community Plan* (DCWPCP).[4] It should be noted that the Transportation and Circulation Element of the DCWPCP was updated in July of 2011.

14.2 EXISTING ENVIRONMENTAL SETTING

The section below describes the physical and operational characteristics of the existing transportation system within the study area, including the surrounding roadway network, transit, bicycle and pedestrian facilities.

Existing Roadways

The following sections provide a summary of the existing roadways within the project area.

Baseline Road

Baseline Road is a major east-west arterial that connects the City of Roseville with State Route (SR) 70/99 in Sutter County. Within Sutter County, the roadway becomes Riego Road, while east of Foothills Boulevard the roadway becomes Main Street. Baseline Road has two lanes from SR 70/99 to Walerga Road, three lanes (two westbound and one eastbound) from Walerga Road to Brady Lane, and four lanes from Brady Lane to Foothills Boulevard. The posted speed limit on Baseline Road is 45 mph west of Foothills Boulevard

Vineyard Road

Vineyard Road is an east-west, two-lane minor collector that connects Crowder Lane to the City of Roseville. In the City of Roseville, Vineyard Road transitions to a four-lane roadway. The posted speed limit on Vineyard Road is 45 mph in Placer County and 40 mph east of Brady Lane in Roseville.

PFE Road

PFE Road is an east-west rural collector that links Atkinson Street in the City of Roseville with the Watt Avenue intersection in Placer County. The posted speed limit on PFE Road is 45 mph.

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1 KD Anderson & Associates, Inc. *Traffic Impact Analysis for Brady Vineyard Subdivision, Placer County, California.* August 5, 2019.
2 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
3 Placer County. *Countywide General Plan EIR*. July 1994.
4 Placer County. *Dry Creek-West Placer Community Plan.* Amended May 12, 2009.

Walerga Road
Walerga Road is a north-south, two-lane minor arterial (with some four-lane sections) that connects Baseline Road at Fiddyment Road to Sacramento County. The posted speed limit is 45 mph.

Crowder Lane
Crowder Lane is a north-south, two-lane minor collector that connects Vineyard Road and Baseline Road. The posted speed limit on Crowder Lane is 35 mph.

Cook Riolo Road
Cook Riolo Road is a north-south two-lane rural collector that connects PFE Road and Baseline Road. North of Baseline Road, in the City of Roseville, the roadway becomes Woodcreek Oaks Boulevard. The posted speed limit on Cook Riolo Road is 35 mph.

Brady Lane
Brady Lane is a two-lane local road that links Vineyard Road and Baseline Road near the easterly limits of the DCWPCP. The posted speed limit on Brady Lane is 40 mph.

Antelope Road
Antelope Road is a north-south, two-lane rural collector that connects PFE Road to Sacramento County. Between PFE Road and Poker Lane in the DCWPCP area, Antelope Road is a two-lane roadway, and the roadway transitions to a four-lane roadway in Sacramento County. Within Placer County, the roadway does not include a posted speed limit; therefore, the speed limit is 55 mph under the maximum speed law in the California Vehicle Code.

Foothills Boulevard
Foothills Boulevard is a major arterial street through the City of Roseville and Placer County. Foothills Boulevard originates at the Roseville Road/Cirby Way intersection and continues northerly through the study area to Blue Oaks Boulevard. The posted speed limit on Foothills Boulevard is 45 mph in the study area.

Existing Intersections
The following sections provide a summary of the existing intersections within the project area.

Baseline Road / Walerga Road / Fiddyment Road
The Baseline Road/Walerga Road/Fiddyment Road intersection is located within the City of Roseville and is controlled by an actuated traffic signal that operates with protected left-turn movements on all approaches. The north, south and westbound approaches include a left-turn lane, two through lanes and a right-turn lane. The eastbound approach includes a left-turn lane, a through lane and a shared through-right lane. Crosswalks are striped across each leg of the intersection.

Baseline Road / Cook Riolo Road – Woodcreek Oaks Boulevard
The Baseline Road/Cook Riolo Road – Woodcreek Oaks Boulevard intersection is a Roseville intersection controlled by an actuated traffic signal that operates with protected left-turn movements along the east and west approaches. The northbound and southbound approaches operate under a split phase configuration. The north and southbound approaches include a shared through-left lane and a right-turn lane. The eastbound approach includes a left-turn lane

and a shared through-right lane while the westbound approach includes a left-turn lane, two through lanes and a right-turn lane. Crosswalks are striped across the south, east and north legs of the intersection.

Baseline Road / Brady Lane

The Baseline Road/Brady Lane intersection is a Roseville intersection and a "tee" controlled by a stop sign on the northbound Brady Lane approach. A continuous Two-Way Left-Turn (TWLT) lane exists on Baseline Road. The westbound Baseline Road approach has two through travel lanes; the other approaches are single lanes.

Baseline Road / Foothills Boulevard

The Baseline Road/Foothills Boulevard intersection is in Roseville and is controlled by an actuated traffic signal. Each Foothills Boulevard approach has three through travel lanes, dual left-turn lanes and separate right-turn lanes. The Baseline Road approaches have two through lanes, single left-turn lanes and separate right-turn lanes.

Vineyard Road / Crowder Lane

The Vineyard Road/Crowder Lane intersection is a "tee" controlled by an all-way stop. Each approach is a single travel lane.

Cook Riolo Road / Vineyard Road

The Cook Riolo Road/Vineyard Road intersection is currently controlled by stop signs on all approaches. The intersection is a four-way intersection. All approaches to the intersection are single lanes and there are no crosswalks at this intersection.

Vineyard Road / Brady Lane

The Vineyard Road/Brady Lane intersection is controlled by an all-way stop. Each approach has a single travel lane, and the south leg is private access to two residences.

Vineyard Road / Foothills Boulevard

The Vineyard Road/Foothills Boulevard intersection is a Roseville intersection controlled by an actuated traffic signal. Each Foothills Boulevard approach has three through travel lanes and separate left-turn lanes. A separate right-turn lane exists on the northbound approach. The eastbound Baseline Road approach has two through lanes, a single left-turn lane and separate right-turn lane. The westbound approach has dual left-turn lanes, and single through and right-turn lanes.

Cook Riolo Road / Creekview Ranch School

The Cook Riolo Road/Creekview Ranch School (CRS) intersection is controlled by an actuated traffic signal that operates with protected left-turn movements on the north and south approaches and split phase movements along the east and west approaches. The northbound approach includes separate left, through and right-turn lanes while the southbound approach includes a left-turn lane and a through-right lane. The eastbound approach includes a single lane driveway while the westbound approach includes a through-left lane and a right-turn lane. The northbound right-turn lane includes an overlap phase with the westbound green phase, and a similar overlap exists on the westbound approach. Crosswalks are striped across the north, east and west legs of the intersection.

PFE Road / Walerga Road

The PFE Road/Walerga Road intersection is controlled by an actuated traffic signal that operates with protected left-turn movements on all approaches. Today each approach to the intersection includes a left-turn lane and a through-right lane. Placer County is currently in the process of completing an intersection improvement project that will add a through lane in each direction on Walerga Road. In addition, separate right-turn lanes will be constructed on the southbound and eastbound approaches and the two-lane westbound approach will be reconfigured to allow left turns from the through/right-turn lane under split phase operation. Crosswalks are striped across each leg of the intersection. The aforementioned improvements have been assumed to be in place under cumulative conditions.

PFE Road / Cook Riolo Road

The PFE Road/Cook Riolo Road intersection is currently controlled by stop signs on all approaches. The intersection is a four-way intersection. All approaches to the intersection are single lanes and there are crosswalks across the south, east and west legs. A multi-use pathway is also present along the west side of Cook Riolo Road, from PFE Road to the CRS intersection.

PFE Road / Antelope Road

The PFE Road/Antelope Road intersection is a “tee” intersection and is currently controlled by stop signs on all approaches. The northbound approach to the intersection is a single lane while the westbound approach includes a left-turn lane and a through lane; the eastbound approach includes a right-turn lane and a through lane. The intersection does not include crosswalks.

Freeway Interchanges

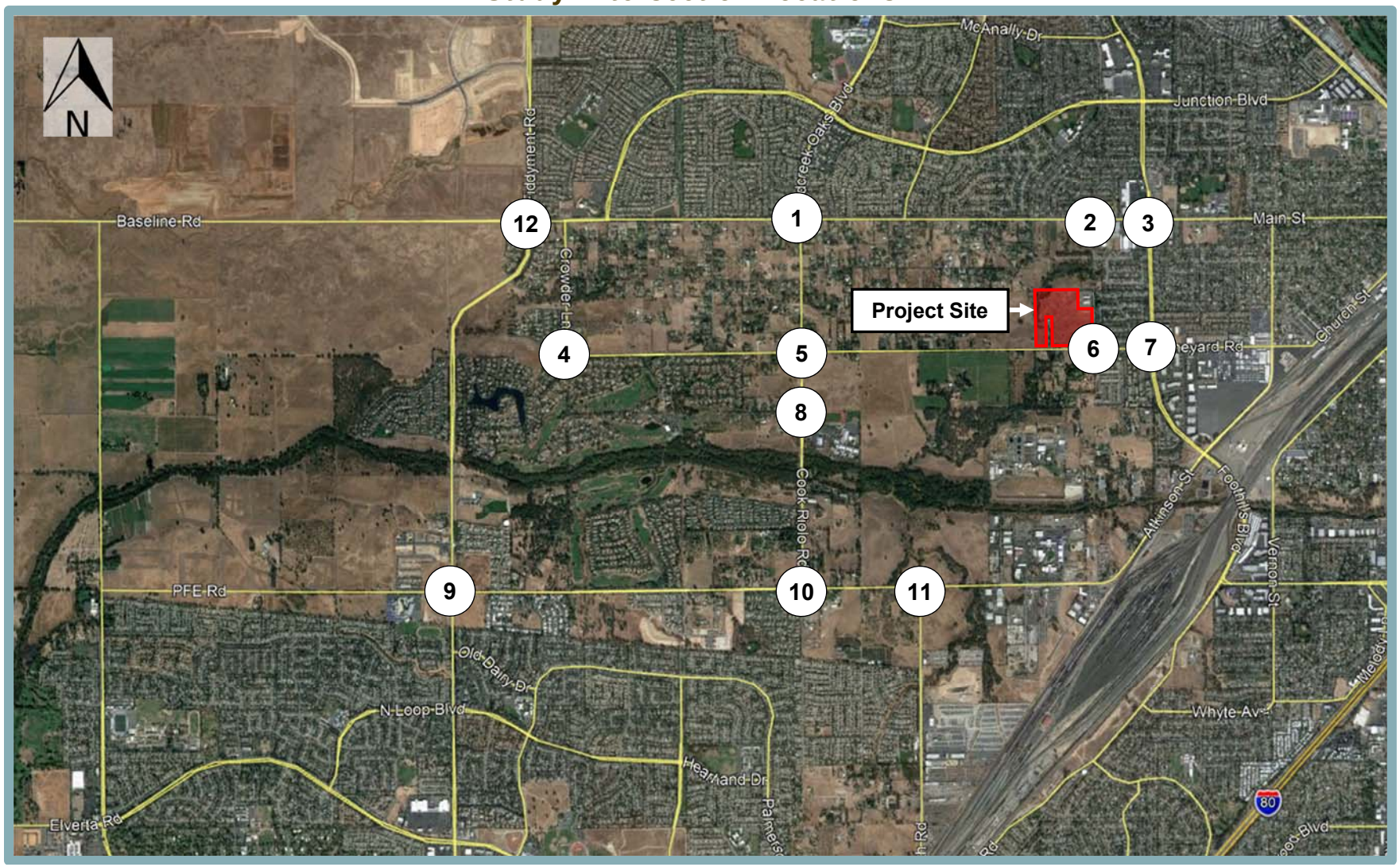
During the Notice of Preparation response period for the proposed project, Caltrans District 3 expressed initial concern regarding the project’s potential impact to State highways, particularly with regards to interchanges on SR 65 and I-80. To address such concerns, the volume of project traffic added to regional facilities was estimated using the “select link” function of the regional travel demand forecasting model employed for this analysis. The “select link” function isolated trips generated by residential uses in the project area and determined the share of project traffic at interchanges on I-80 and on SR 65. The results indicated very small traffic volume contributions at these locations, which did not warrant additional analysis. This information was shared with Caltrans District 3, which subsequently withdrew their request for any analysis of conditions/impacts to State facilities. Therefore, freeway interchanges were not analyzed in the Traffic Impact Analysis prepared for the project.

Study Intersections

The following study intersections are analyzed in the Traffic Impact Analysis (see Figure 14-1):

1. Baseline Road/Cook Riolo Road/Woodcreek Oaks Boulevard (Roseville);
2. Baseline Road/Brady Lane (Roseville);
3. Baseline Road/Foothills Boulevard (Roseville);
4. Vineyard Road/Crowder Lane;
5. Cook Riolo Road/Vineyard Road;
6. Vineyard Road/Brady Lane;
7. Vineyard Road/Foothills Boulevard (Roseville);
8. Cook Riolo Road/Creekview Ranch School Access;
9. PFE Road/Walerga Road;
10. PFE Road/Cook Riolo Road;

Figure 14-1
Study Intersection Locations



Source: KD Anderson & Associates, Inc.

11. PFE Road/Antelope Road; and
12. Baseline Road/Walerga Road/Fiddyment Road (Roseville).

Study Roadway Segments

The operation of study area roadways under Placer County's jurisdiction was addressed quantitatively. Because roadway segment LOS is not a significance criterion under City of Roseville guidelines, segments of arterial roadways under Roseville jurisdiction were not evaluated. The following study roadway segments are analyzed in the Traffic Impact Analysis:

1. PFE Road from Walerga Road to Cook Riolo Road;
2. PFE Road from Cook Riolo Road to Antelope Road;
3. Cook Riolo Road from Baseline Road to Vineyard Road;
4. Cook Riolo Road from Vineyard Road to Creekview Ranch School;
5. Cook Riolo Road from Creekview Ranch School to PFE Road;
6. Antelope Road from PFE Road to Great Valley Drive;
7. Vineyard Road from Crowder Lane to Cook Riolo Road;
8. Vineyard Road from Cook Riolo Road to Brady Lane;
9. Vineyard Road from Brady Lane to Foothills Boulevard; and
10. Brady Lane from Baseline Road to PFE Road.

Common Traffic Analysis Terms

Level of Service (LOS) is a qualitative measure of traffic operating conditions, whereby a letter grade, from A to F is assigned, based on quantitative measurements of delay per vehicle. The grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions, and LOS F represents severe delay under stop-and-go conditions. Table 14-1 summarizes the general characteristics associated with each LOS grade.

Table 14-1
Level of Service (LOS) Definitions

LOS	Signalized Intersections	Unsignalized Intersections	Roadway Segments
A	Uncongested operations, all queues clear in a single-signal cycle. Delay ≤ 10 sec/veh	Little or no delay. Delay ≤ 10 sec/veh	Completely free flow.
B	Uncongested operations, all queues clear in a single cycle. Delay > 10 sec/veh and ≤ 25 sec/veh	Short traffic delays. Delay > 10 sec/veh and ≤ 15 sec/veh	Free flow, presence of other vehicles noticeable.
C	Light congestion, occasional backups on critical approaches. Delay > 25 sec/veh and ≤ 35 sec/veh	Average traffic delays. Delay > 15 sec/veh and ≤ 25 sec/veh	Ability to maneuver and select operating speed affected.
D	Significant congestions of critical approaches but intersection functional. Cars required to wait through more than one cycle during short peaks. No long queues formed. Delay > 35 sec/veh and ≤ 55 sec/veh	Long traffic delays. Delay > 25 sec/veh and ≤ 35 sec/veh	Unstable flow, speeds and ability to maneuver restricted.

(Continued on next page)

Table 14-1
Level of Service (LOS) Definitions

LOS	Signalized Intersections	Unsignalized Intersections	Roadway Segments
E	Severe congestion with some long-standing queues on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements. Traffic queue may block nearby intersection(s) upstream of critical approach(es). Delay > 55 sec/veh and ≤ 80 sec/veh	Very long traffic delays, failure, extreme congestion. Delay > 35 sec/veh and ≤ 50 sec/veh	At or near capacity, flow quite unstable.
F	Total breakdown, stop-and-go operation. Delay > 80 sec/veh	Intersection often blocked by external causes. Delay > 50 sec/veh	Forced flow, breakdown.

Source: KD Anderson & Associates, Inc., 2018.

The quality of traffic flow on Placer County roadway segments is determined based on the daily traffic volumes and generalized LOS thresholds. The Placer County General Plan EIR includes daily traffic volume thresholds that may be used to identify general operating LOS on County streets and highways. The Placer County volume thresholds are summarized in Table 14-2 below.

Table 14-2
Placer County Evaluation Criteria for Roadway Segment LOS

Roadway Capacity Class	Maximum Daily Traffic Volume Per Lane				
	LOS A	LOS B	LOS C	LOS D	LOS E
Freeway – Level Terrain	6,300	10,620	13,680	17,740	18,000
Freeway – Rolling Terrain	5,290	8,920	11,650	14,070	15,120
Freeway – Mountainous Terrain	3,400	5,740	7,490	9,040	9,720
Arterial – High Access Control	6,000	7,000	8,000	9,000	10,000
Arterial – Moderate Access Control	5,400	6,300	7,200	8,100	9,000
Arterial – Low Access Control	4,500	5,250	6,000	6,870	7,500
Rural Two-lane Highway – Level Terrain	1,500	2,950	4,800	7,750	12,500
Rural Two-lane highway – Rolling Terrain	800	2,100	3,800	5,700	10,500
Rural Two-lane highway – Mountainous Terrain	400	1,200	2,100	3,400	7,000

Source: KD Anderson & Associates, Inc., 2018.

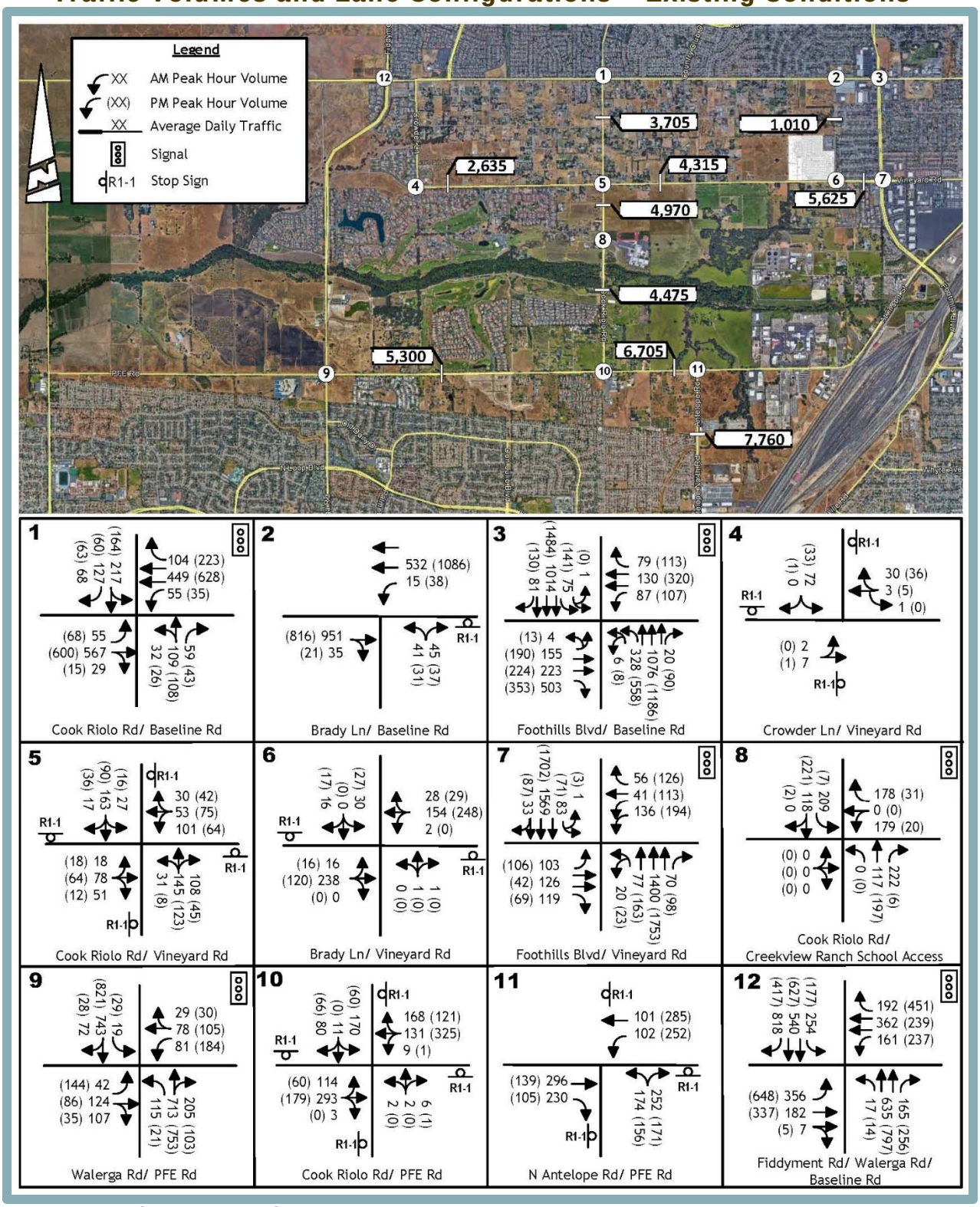
Intersection LOS – Existing Conditions

New AM and PM peak hour intersection turning movement counts were conducted for this analysis on October 17, 2018, when area schools were in session, with the exception of the traffic volume counts for the Baseline Road/Walerga Road/Fiddyment Road intersection, which were collected on April 2, 2019.

Figure 14-2 presents the existing lane configurations at the study intersections, as well as the observed peak hour traffic volumes at each study intersection. The study intersection LOS results are summarized in Table 14-3 for the AM and PM peak hours. As shown in the table, all study intersections currently operate acceptably, with the exception of the following intersections:

3. The City of Roseville's Baseline Road/Foothills Boulevard intersection operates at LOS D in the PM peak hour, which exceeds the City's minimum LOS C goal.

Figure 14-2
Traffic Volumes and Lane Configurations – Existing Conditions



Source: KD Anderson & Associates, Inc.

Table 14-3
Intersection LOS – Existing Conditions

Location - Jurisdiction	Control	AM Peak Hour		PM Peak Hour		Traffic Signal Warranted?
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
1. Baseline Rd/Cook Riolo Rd/Woodcreek Oaks Blvd (R)	Signal	C	32.0	C	30.5	N/A
2. Baseline Rd/Brady Lane (R) Northbound approach Westbound left turn	NB Stop	 C B	 24.5 10.5	 C A	 21.5 10.0	Yes (AM)
3. Baseline Rd/Foothills Blvd (R)	Signal	C	32.0	**D**	**40.5**	N/A
4. Vineyard Rd/Crowder Ln (overall)* Southbound approach Eastbound left turn	SB Stop	 (A) A A	 (9.0) 9.0 7.5	 (A) A A	 (9.0) 9.0 0.0	No
5. Cook Riolo Rd/Vineyard Rd	AWS	B	13.5	B	11.0	No
6. Vineyard Rd/Brady Ln	AWS	A	9.0	A	9.0	No
7. Vineyard Rd/Foothills Blvd (R)	Signal	C	24.0	C	28.0	N/A
8. Cook Riolo Rd/Creekview Ranch School	Signal	B	12.0	A	6.0	N/A
9. PFE Rd/Walerga Rd	Signal	D	36.0	**E**	**71.0**	N/A
10. PFE Rd/Cook Riolo Rd	AWS	D	28.0	B	14.0	Yes
11. PFE Rd/Antelope Rd	AWS	C	17.5	C	15.5	Yes
12. Baseline Rd/Walerga Rd/Fiddyment Rd (R)	Signal	**D**	**40.0**	**F**	**81.0**	N/A

Notes:
- (R) indicates City of Roseville jurisdiction. Minimum LOS C standard applies.
- **Bold** indicates minimum LOS threshold exceeded.

* Overall Average Delay = Σ (Delay x Volume of each delayed movement) / Σ Volume of each delayed movement.

Source: KD Anderson & Associates, Inc.

9. The PFE Road/Walerga Road intersection operates at LOS E in the PM peak hour. While LOS E exceeds the County's minimum LOS D standard, the DCWPCP ultimately accepts LOS F at this location once improvements have been fully constructed. Placer County has a CIP funded project to widen the intersection and deliver a four-lane Walerga Road at the intersection. The improvement is being designed by a private development project but has not yet been constructed.
12. The City of Roseville's Baseline Road/Walerga Road-Fiddyment Road intersection operates at LOS D in the AM peak hour and LOS F in the PM peak hour, both of which exceeds the City's minimum LOS C goal.

The Cook Riolo Road/Creekview Ranch School intersection operates at LOS B in the AM peak hour and LOS A in the PM peak hour. While conditions at the intersection would be considered acceptable based on HCM LOS calculation methods, in actuality, appreciable delays occur during the peak periods of school traffic within the overall AM peak hour. At that time the school circulation system's internal capacity for on-site curbside drop-off is exceeded by the actual arriving vehicle demand, and traffic waiting to use the drop-off zones can create queueing that extends onto Cook Riolo Road. The Dry Creek School District completed a project to add a new parking lot with additional on-site drop-off space, and while conditions in 2019 are better than before, some queueing onto Cook Riolo Road remains during the school's morning drop-off and afternoon loading periods. It should be noted that Placer County does not recognize this intersection as being regionally significant and, therefore, does not apply the County's LOS standard to this intersection. Given that the Creekview Ranch School access is used primarily by traffic generated by the school, the information regarding this location is presented for informational purposes only.

Roadway LOS – Existing Conditions

New roadway 24-hr traffic counts were conducted for this analysis on October 18, 2018 when area schools were in session. Table 14-4 summarizes the LOS at the study roadway segments based on the current daily traffic volumes on study area roads with the existing roadway configuration. Applicable LOS thresholds and roadway classifications are presented in the table. For the purpose of this analysis, LOS D is the minimum acceptable condition unless specifically accepted by the DCWPCP after planned future improvements have been made (see the Standards of Significance section below for exceptions). As shown in the table, all the study roadway segments currently operate within accepted Placer County DCWPCP minimum thresholds.

Pedestrian, Bicycle and Transit Facilities

The sections below describe the existing pedestrian, bicycle and transit facilities located within the vicinity of the project site. As shown in Figure 14-3, the facilities are primarily limited to locations where frontage roadway improvements have been completed as a result of development.

Sidewalks and Paths

Currently, sidewalks exist on the north side of Baseline Road and on the south side of the road east of Brady Lane. In addition, sidewalks exist on both sides of Chignahuapan Way between Brady Lane and Foothills Boulevard. Sidewalks or paths are provided along Vineyard Road at the following locations:

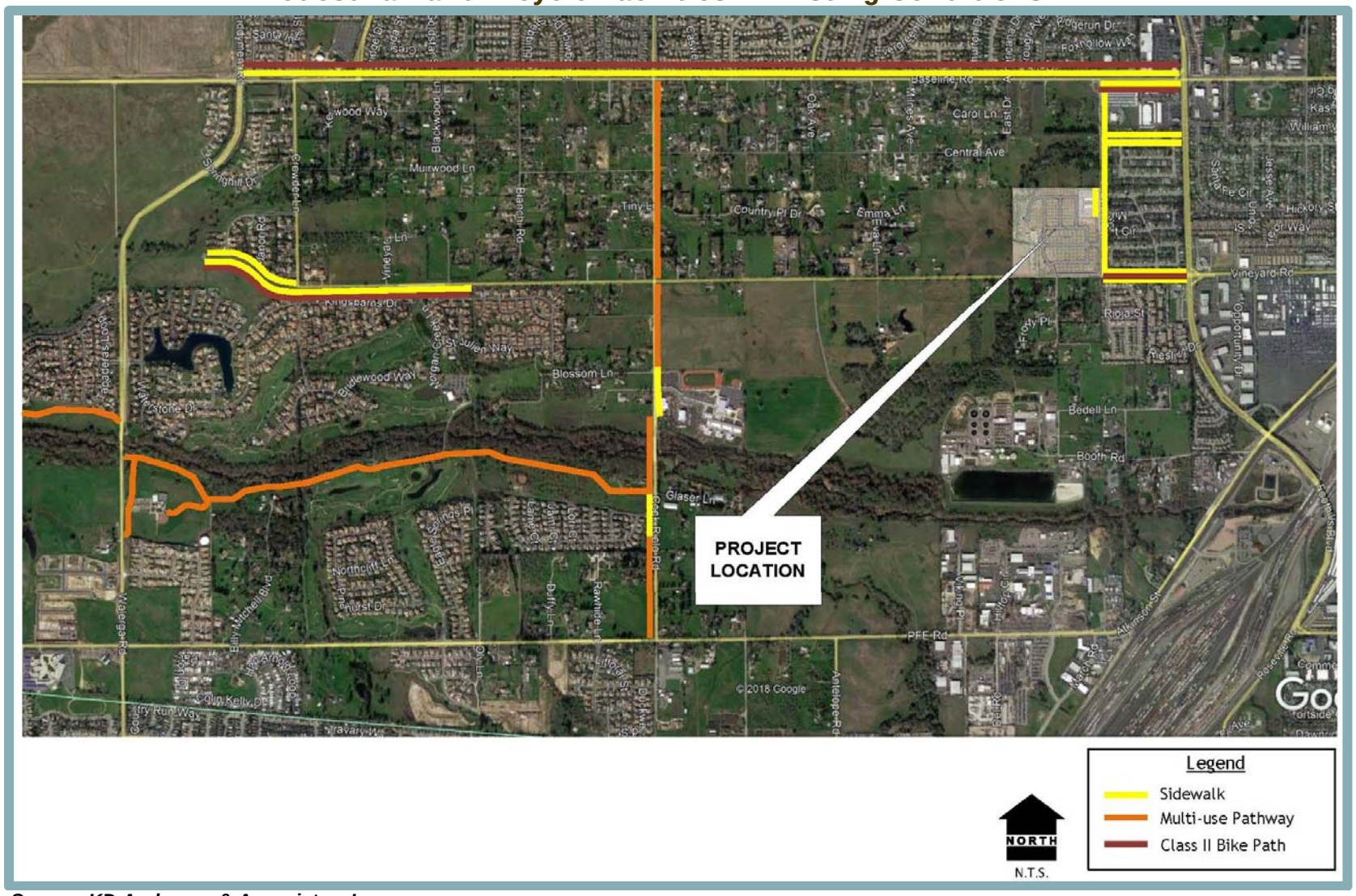
Table 14-4
Roadway Segment LOS – Existing Conditions

Roadway	Location	Number of Lanes – Facility Classification	Standard		Daily Volume/LOS		
					Existing		
			LOS	Volume Threshold Per Lane (veh/ln)	Daily Volume	V/C	LOS
1. PFE Road	Walerga Rd to Cook Riolo Rd	2-lane Level Terrain Rural Highway	D	7,750	5,300	0.21	B
2. PFE Road	Cook Riolo Rd to Antelope Rd	2-lane Rolling Terrain Rural Highway	D	5,700	6,705	0.32	C
3. Cook Riolo Road	Baseline Rd to Vineyard Rd		D	5,700	3,705	0.18	B
4. Cook Riolo Road	Vineyard Rd to Creekview Ranch School		D	5,700	4,970	0.24	C
5. Cook Riolo Road	Creekview Ranch School to PFE Rd		D	5,700	4,475	0.21	C
6. Antelope Road	PFE Rd to Great Valley Dr		D	5,700	7,760	0.37	D
7. Vineyard Road	Crowder Ln to Cook Riolo Rd		D	5,700	2,635	0.13	B
8. Vineyard Road	Cook Riolo Rd to Brady Ln		D	5,700	4,315	0.21	C
9. Vineyard Road	Brady Ln to Foothills Blvd (R)	2-lane Arterial – Low Access Control	D	6,875	5,625	0.38	A
10.Brady Lane	Baseline Rd to Project (R)	2-lane Rolling Terrain Rural Highway	D	5,700	1,010	0.05	A
11.Brady Lane	Project to Vineyard Rd (R)		D	5,700	1,010	0.05	A

Notes:
- **Bold** values exceed minimum LOS threshold.
- **Highlighted** values are a significant impact.
- (R) is City of Roseville jurisdiction.

Source: KD Anderson & Associates, Inc.

Figure 14-3
Pedestrian and Bicycle Facilities – Existing Conditions



Source: KD Anderson & Associates, Inc.

- West of Crowder Lane;
- Separated path on south side from Crowder Lane to 0.5-mile west of Cook Riolo Road;
- East of Brady Lane.

Along Cook Riolo Road, a multi-use pathway is available on the west side of the road for pedestrians and bicyclists from PFE Road to Creekview Ranch School. A Placer County project to construct a multi-use trail on the east side of Cook Riolo Road from Creekview Ranch School to Baseline Road was completed in the summer of 2018. Sidewalks are also present along the school frontage. To the northeast of the site, a sidewalk is provided along the east side of Brady Lane between Vineyard Road and Mercedes Place, and on a local street that joins Brady Lane and Foothills Boulevard.

Bicycle Facilities and Trails

The Placer County Regional Bikeway Plan provides information regarding the regional system of bikeways for transportation and recreation purposes. The regional bikeway plan was approved by the Placer County Transportation Planning Agency (PCTPA) Board in 2018 and subsequently adopted by the Placer County Board of Supervisors. The Placer County Regional Bikeway Plan includes the following system classifications:

- Class I Bikeway (Bike Path) provides a completely separated facility designed for the exclusive use of cycles and pedestrians.
- Class II Bikeway (Bike Lane) provides on-road striped lanes with signs and pavement markings and legends with restricted travel to motor vehicles and pedestrians. Through travel by motor vehicles or pedestrians is prohibited, but crossflows by pedestrians and motorists is permitted.
- Class III Bikeway (Bike Route) provides on-street routes designated by signs or permanent markings and shared with pedestrians and motorists.
- Class IV Bikeway (Separated Bikeway) is a bikeway for the exclusive use of bicycles similar to a Class II facility, but includes a separation between the bike facility and through vehicular traffic. Separation facilities may include flexible posts, inflexible physical barriers or on-street parking. Class IV facilities also allow for two-way bicycle traffic.

Per the Placer County Regional Bikeway Plan, Class I trails are proposed to extend the Dry Creek Greenway west to Atkinson Street and east to Watt Avenue and between Walerga Road and Crowder Lane along a Dry Creek tributary. On-street bikeways (Class II or III) are currently planned for the following roads in the project vicinity:

- Baseline Road – Walerga Road to Foothills Boulevard;
- PFE Road – Walerga Road to Atkinson Street;
- Vineyard Road – Crowder Lane to Foothills Boulevard;
- Walerga Road – Sacramento County Line to Dry Creek.

Existing bicycle facilities in the project area include the following:

- On Baseline Road, Class II bike lanes on the north and south sides of the road east of Brady Lane.
- On Vineyard Road, Class II lanes are marked west of Crowder Lane and on the south side from Crowder Lane to 0.25-mile west of Cook Riolo Road. Within the vicinity of the project site, Class II bike lanes are striped east of Brady Lane on both sides of Vineyard Road.

Transit System

Transit service in the vicinity of the project site is currently provided by Roseville Transit. The closest Roseville Transit route is the 'D' route, which follows Baseline Road between Junction Boulevard and Cook Riolo Road, Monday through Saturday. Route R follows Foothills Boulevard and passes the Baseline Road and Vineyard Road intersections on weekdays. Currently, future transit routes are not identified along Vineyard Road, however, the DCWPCP notes that routes could be extended to serve future growth in the project area if warranted by demand.

14.3 REGULATORY CONTEXT

Existing transportation policies, laws, and regulations that would apply to the proposed project are summarized below and provide a context for the impact discussion related to the project's consistency with the applicable regulatory conditions. Federal and/or State plans, policies, regulations, or laws related to transportation and circulation are not directly applicable to the proposed project. Rather, the analysis presented herein focuses on local Placer County regulations, which govern the regulatory environment related to transportation and circulation at the project level.

Local Regulations

Local rules and regulations applicable to the proposed project are discussed below.

Placer County General Plan

The following goals and policies from the Placer County General Plan are applicable to the proposed project:

Goal 3.A To provide for the long-range planning and development of the County's roadway system to ensure the safe and efficient movement of people and goods.

Policy 3.A.1 The County shall plan, design, and regulate roadways in accordance with the functional classification system described in Part I of this Policy Document and reflected in the Circulation Plan Diagram.

Policy 3.A.2 Streets and roads shall be dedicated, widened, and constructed according to the roadway design and access standards generally defined in Section I of this Policy Document and, more specifically in community plans, specific plans, and the County's Highway Deficiencies Report (SCR 93). Exceptions to these standards may be considered due to environmental, geographical, historical, or other similar limiting factors. An exception may be permitted only upon determination by the Public Works Director that safe and adequate public access and circulation are preserved.

Policy 3.A.7. The County shall develop and manage its roadway system to maintain the following minimum levels of service (LOS), or as otherwise specified in a community or specific plan).

a. LOS "C" on rural roadways, except within one-half mile of state highways where the standard shall be LOS "D".
b. LOS "C" on urban/suburban roadways except within one-half mile of state highways where the standard shall be LOS "D".
c. An LOS no worse than specified in the Placer County Congestion Management Program (CMP) for the state highway system.

Temporary slippage in LOS C may be acceptable at specific locations until adequate funding has been collected for the construction of programmed improvements.

The County may allow exceptions to the level of service standards where it finds that the improvements or other measures required to achieve the LOS standards are unacceptable based on established criteria. In allowing any exception to the standards, the County shall consider the following factors:

- The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard.
- The ability of the required improvement to significantly reduce peak hour delay and improve traffic operations.
- The right-of-way needs and the physical impacts on surrounding properties.
- The visual aesthetics of the required improvement and its impact on community identity and character.
- Environmental impacts including air quality and noise impacts.
- Construction and right-of-way acquisition costs.
- The impacts on general safety.
- The impacts of the required construction phasing and traffic maintenance.
- The impacts on quality of life as perceived by residents.
- Consideration of other environmental, social, or economic factors on which the County may base findings to allow an exceedance of the standards.

Exceptions to the standards will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Policy 3.A.13 The County shall assess fees on new development sufficient to cover the fair share portion of that

development's impacts on the local and regional transportation system. Exceptions may be made when new development generates significant public benefits (e.g., low income housing, needed health facilities) and when alternative sources of funding can be identified to offset foregone revenues.

Goal 3.B To promote a safe and efficient mass transit system, including both rail and bus, to reduce congestion, improve the environment, and provide viable non-automotive means of transportation in and through Placer County.

Policy 3.B.1 The County shall work with transit providers to plan and implement additional transit services within and to the County that are timely, cost-effective, and responsive to growth patterns and existing and future transit demand.

Policy 3.C.4 During the development review process, the County shall require that proposed projects meet adopted Trip Reduction Ordinance (TRO) requirements.

Policy 3.D.5 The County shall continue to require developers to finance and install pedestrian walkways, equestrian trails, and multi-purpose paths in new development, as appropriate.

Policy 3.D.8 The CDRA Engineering and Surveying Division and the Department of Public Works shall view all transportation improvements as opportunities to improve safety, access, and mobility for all travelers and recognize cycling, pedestrian, and transit modes as integral elements of the transportation system.

DCWPCP

The following goals policies from the DCWPCP are applicable to the proposed project:

Community Development Element

Goal 1/Policy 1 Encourage residential development in areas which provide an adequate and accessible transportation network and which reduce commuting distances to areas of employment.

Community Design Element

Policy 16 Require the dedication of sufficient road right-of-way as outlined in the Circulation Element and as needed to provide all roadside amenities required herein.

Policy 17 Require the construction of bicycle, pedestrian, and equestrian trails as provided in this Plan and use the policies of the Placer County Bikeways Master Plan in determining routes and trail type for areas not depicted on the Plan Trails map but still required to satisfy the policies of this Plan.

Transportation and Circulation Element

Goal 5 The road network within the Community Plan area shall be coordinated with road networks of adjacent jurisdictions.

Goal 6 The Capital Improvement Program (CIP) shall be sufficient to maintain LOS D on the *Community Plan* area road network – given the projected buildout of the *Community Plan* area and implementation of the CIP, except for the following arterial roadways, roadway segments, and intersections that will operate at the listed LOS when fully improved.

Arterial Roadways

- Baseline Road – Sutter County Line to Walerga Road/Fiddyment Road: LOS E
- Watt Avenue – Sacramento County Line to Baseline Road: LOS F

Roadway Segments

- Cook Riolo Road – Vineyard Road to Baseline Road: LOS E
- Cook Riolo Road – PFE Road to Vineyard Road: LOS F
- Antelope Road – PFE Road to Sacramento County Line: LOS E
- PFE Road – Cook Riolo Road to Antelope Road: LOS F
- Vineyard Road – Cook Riolo Road to Foothills Blvd: LOS F

Intersections

- Baseline Road/Watt Avenue: LOS F
- Baseline Road/Walerga Road/Fiddyment Road: LOS F
- PFE Road/Cook Riolo Road: LOS F
- PFE Road/Walerga Road: LOS F
- PFE Road/Antelope Road: LOS F

Based on this LOS policy, roadway improvements in the *Community Plan* area would have an adverse impact if the following were to occur.

- The LOS would worsen from acceptable A, B, C, D, or E (for the selected locations identified above) to unacceptable E or F.
- Any worsening of LOS E or F conditions as measured by increased volume-to-capacity (v/c) ratio of 0.05 for roadways and signalized intersections or by increased delay of 5 seconds for unsignalized intersections.

Policy 3 The road network for the Community Plan area shall be planned in a manner which avoids the need for additional lanes on Cook Riolo Road.

Policy 4 The road network for the Community Plan area shall be planned in a manner which reduces future traffic volumes to the extent practicable on both PFE Road and Cook Riolo Road, and past the historic Dry Creek Elementary School site.

Policy 6 The rights-of-way for roads shall be wide enough to accommodate roadways, trails, bikeways, drainage, public utilities, landscaping/vegetation, and suitable separation between facilities. Minimum right-of-way widths are shown in the following table for roadways within the Community Plan area (summarized as Table 14-5 below):

Table 14-5
Roadway Right-of-Way Standards

Roadway	Right-of-Way
Baseline Road (Sutter County line to Walerga Road/Fiddyment Road)	106 feet
Antelope Road	100 feet
PFE Road (Watt Avenue to Walerga Road)	64 feet
PFE Road (Antelope Road to City of Roseville)	100 feet
Watt Avenue	130 feet
Walerga Road	106 feet
All Other 2 Lane Roads	60 feet

The County may modify these right-of-way standards at their discretion, and may elect to exclude landscaped areas, sidewalks, utilities, and other roadway appurtenances from the defined public right-of-way.

Policy 7 Street lighting, traffic signals, and signage shall be kept to a minimum.

Policy 8 Off-street vehicular parking shall be provided for all new development.

Policy 9 The LOS on roadways and intersections identified in the Capital Improvement Program (CIP) shall be at LOS D. Specific exceptions to this standard will be roadways and intersections that shall be LOS E or F as defined by Goal 6. The County may allow exceptions to this LOS standard where it finds that the improvements or other measures required to achieve the LOS standard are unacceptable based on established criteria. In allowing any exception to the standard, the County shall consider the following factors:

- The number of hours per day that the intersection or roadway segment would operate at conditions worse than the standard.
- The ability of the required improvement to significantly reduce peak-hour delay and improve traffic operations. The County shall weigh the costs versus the benefit of each proposed improvement.
- The right-of-way needs and the physical impacts on surrounding properties.

- The visual aesthetics of the required improvement and its impact on community identity and character.
- Environmental impacts including air quality and noise impacts.
- Construction and right-of-way acquisition costs.
- The impacts on general safety.
- The impacts of the required construction phasing and traffic maintenance.
- The impacts on quality of life as perceived by residents.
- Consideration of other environmental, social, or economic factors on which the County may base findings to allow the standards to be exceeded.
- The County shall also meet and obtain feedback from the West Placer Municipal Advisory Committee in consideration of these exceptions to established standards. Exceptions to the standard will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.
- The CIP shall be constructed in response to build out.

Exceptions to the standard will only be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Policy 11 On-site and "frontage" improvements of projects which comprise the CIP shall be required as conditions of approval for all land development projects. Priority and scheduling of projects from the CIP shall be determined by the Placer County Board of Supervisors.

Policy 13 Community Plan area roadways shall be designed and maintained to encourage safe, alternative forms of transportation that contribute to a rural atmosphere (such as walking, biking, horseback riding, etc.). Roadways which provide access to the linear "parkway" along Dry Creek and residential areas shall be designed to discourage through traffic. Alignment, width, signage, etc., shall all be appropriate for a minor residential street rather than a major arterial.

Policy 14 As development of the Community Plan area occurs, public dedication of rights-of-way shall be required for the roads, trails, and bikeways identified in this Community Plan. Construction of such roads, trails, and bikeways shall be required as conditions of approval placed on land development project approvals.

Policy 16	Bus stop turnouts and shelters shall be required at appropriate locations as conditions of approval for land development. The review of such facilities shall be coordinated with the appropriate school district(s) to assure proper locations for student pick-up and drop-off "park-n-ride" shelters and parking areas shall be required at appropriate locations as conditions of approval.
Policy 18	Land development projects shall be designed to minimize the number of access points onto major roadways.
Policy 19	Adequate safety precautions shall be provided at major intersections. Such precautions may include crossing guards, signalization, and other measures to improve the safety for pedestrians and reduce the risk of accidents.
Policy 20	A full environmental analysis under the California Environmental Quality Act at a project level shall be undertaken, and public hearings shall be held prior to approval of the widening of any road scheduled for expansion under this Community Plan.

Placer County Transportation Planning Agency (PCTPA)

The PCTPA is the State-designated Regional Transportation Planning Agency for Placer County and is responsible for making decisions about the County's transportation system. In addition to developing and adopting the regional transportation plans and strategies, the PCTPA also allocates the local transportation fund and has entered into a Memorandum of Understanding with Caltrans and SACOG to govern federal transportation planning and programming in Placer County.

Funding Sources/Fee Programs

In April 1996, the Placer County Board of Supervisors adopted the Countywide Traffic Impact Fee Program, which required new development within the County to mitigate impacts to the roadway system by paying traffic impact fees. The fees collected through the program, in addition to other funding sources, make it possible for the County to construct roads and other transportation facilities and improvements needed to accommodate new development. The fee was last updated in August of 2017. The County's fee program and CIP are divided into eleven districts. The proposed project site is included in the Dry Creek – West Placer Benefit District. Current study area improvements included in the fee program are noted in Table 14-6.

Other fee programs deal with specific areas of the County or are linked to particular development. For example, Placer County and the City of Roseville have adopted a specific City-County fee. The South Placer Regional Transportation Authority (SPRTA) SR 65 GPA fee addresses improvements to SR 65 and a Tier 2 Placer Parkway Fee.

Table 14-6
Dry Creek/West Placer CIP Improvements

Street	Location	Description
Cook Riolo Road	PFE Road to Baseline Road	Traffic calming/safety measures
Antelope Road	Sacramento County line to PFE Road	Widen to four lanes
	At PFE Road	Traffic signal
PFE Road	Antelope Road to City of Roseville	Widen to four lanes
	Walerga Road to Cook Riolo Road	Traffic calming/control
	Watt Avenue to Walerga Road	Construct four lanes
Vineyard Road	Crowder Lane to Foothills Boulevard	Safety measures
Walerga Road	Baseline Road to Sacramento County	Widen to six lanes
	At PFE Road	Traffic signal/intersection improvements

14.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential impacts related to transportation and circulation.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the proposed project would be considered to result in a significant adverse impact on the environment in relation to transportation and circulation if the project would result in any of the following:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b);
- Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access or access to nearby uses;
- An increase in traffic which may be substantial in relation to the existing and/or planned future year traffic load and capacity of the roadway system (i.e. result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections); or
- Exceeding, either individually or cumulatively, an LOS standard established by the County General Plan and/or Community Plan for roads affected by project traffic.

It should be noted that Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. However, the provisions of Section 15064.3 apply only prospectively; determination of impacts based on VMT is not required Statewide until July 1, 2020. In addition, the County has not adopted a project-level VMT threshold. Thus, while this chapter includes a discussion of the project's VMT for informational purposes, a VMT impact determination is not provided.

Specific application of the general thresholds is provided in the following section, based on guidance from Placer County and the City of Roseville.

Placer County/DCWPCP Standards of Significance

Minimum acceptable LOS standards within this area of Placer County are defined by the Placer County General Plan and the DCWPCP. The Placer County General Plan notes that the LOS on

major roadways (i.e., arterial and collector routes) and intersections shall be at LOS C or better during the AM and/or PM peak hour except at locations within 0.5-mile of a State highway.

Goal 6 in the Transportation and Circulation Element of the DCWPCP identifies LOS D as the minimum in the community plan area, but notes the following exceptions when the area street system is fully built out:

Intersections

- Baseline Road/Walerga Road/Fiddyment Road: LOS F;
- PFE Road/Walerga Road: LOS F;
- PFE Road/Cook Riolo Road: LOS F; and
- PFE Road/Antelope Road: LOS F.

Roadway Segments

- Watt Avenue from Sacramento County Line to Baseline Road: LOS F;
- PFE Road from Cook Riolo Road to Antelope Road: LOS F;
- Cook Riolo Road from Vineyard Road to Baseline Road: LOS E;
- Cook Riolo Road from PFE Road to Vineyard Road: LOS F;
- Vineyard Road from Cook Riolo Road to Foothills Blvd: LOS F; and
- Antelope Road from PFE Road to Sacramento County Line: LOS E.

Placer County Impact Assessment

Placer County has adopted methodologies for determining the significance of traffic impacts within the context of the LOS goals established by the General Plan and various community plans. Methodologies for evaluating intersections and roadway segments within Placer County are described in the following sections.

Signalized Intersections

For signalized intersections, a project may be considered to exceed the established Placer County minimum LOS standard if:

- An intersection operating at or above the established Placer County LOS standard without the project would decrease to an unacceptable LOS with the project;
- An intersection currently operating below the established Placer County LOS standard would experience an increase in V/C of 0.05 (5 percent) or greater; or
- An intersection currently operating below the established Placer County LOS standard would experience an increase in overall average intersection delay of 4.0 seconds or greater.

Unsignalized Intersections

For unsignalized intersections, a project may be considered to exceed the established Placer County minimum LOS standard if:

- An all-way stop or side-street stop (i.e., two-way stop) controlled intersection which currently operates at or above the established Placer County LOS standard without the project would deteriorate to an unacceptable LOS with the project <u>and</u> cause the intersection to meet MUTCD traffic signal warrant(s); or

- An all-way stop or side-street stop-controlled intersection which currently operates below the established Placer County LOS standard and meets MUTCD traffic signal warrant(s) would experience an overall increase in delay of 2.5 seconds or more with the project (Note: the DCWPCP Circulation Element Goal 6 accepts a 5.0 second increase under cumulative conditions).

Intersection delay for all-way stop-controlled intersections is defined as "overall intersection delay". Intersection delay for side-street stop-controlled intersections is defined as the "overall weighted-average delay for movements yielding the right-of-way". The applicable MUTCD signal warrants for the proposed project were determined in consultation with the Placer County Department of Public Works transportation staff.

Roadway Segments

A project may be considered to exceed the established Placer County minimum LOS standard if:

- A roadway segment operating at or above the established Placer County LOS standard without the project would decrease to an unacceptable LOS with the project;
- A roadway segment currently operating below the established Placer County LOS standard would experience an increase in V/C ratio of 0.05 or greater; or
- A roadway segment currently operating below the established Placer County LOS standard experiences an increase in ADT of 100 or more project-generated vehicle trips per lane (vpl).

Further consideration is given in situations where the existing LOS is just above or at the approved minimum LOS and any increase in vehicle trips, or even daily fluctuations in traffic, would deteriorate the LOS to an unacceptable level. In such cases, the County may determine the second and third bullet points of the above exceptions are more applicable and should be used to analyze a project's impacts.

It should be noted that the Placer County traffic operational analysis requirements and methods of assessment apply to the intersections of public roads. The LOS occurring at private driveways are not considered to be an impact significance criterion. Thus, information regarding the operation of Creekview Ranch Middle School's access on Cook Riolo Road would not normally be included in traffic studies prepared for a project in Placer County, but is offered herein due to the unique circumstances of school operations and public interest in this location.

City of Roseville Impact Assessment

The City of Roseville's General Plan 2035 identifies an LOS policy that calls for maintaining LOS C or better operations at a minimum of 70 percent of all signalized intersections and roadway segments in the City during the AM and PM peak hours. Exceptions to the LOS C standard may be considered for intersections where the City finds that the required improvements are unacceptable based on established criteria identified in the implementation measures (i.e., the City of Roseville CIP/LOS criteria, the City's development review process, or applicable Specific Plans).[5] The City's LOS policy is not applicable in Pedestrian Overlay Districts, which represent areas of the City in which a comfortable walking environment is prioritized over wider streets that may produce less vehicle delay.

[5] City of Roseville. *Roseville General Plan, Circulation Element* [pg. III-33]. June 15, 2016.

Signalized Intersections

For the purposes of this analysis, a significant impact would occur to City of Roseville intersections if the project would result in either of the following:

- Cause a signalized intersection in Roseville to be degraded as follows under existing conditions during the AM or PM peak hours:
    - For intersections currently operating at LOS C or better: worsen operations to LOS D or worse.
    - For intersections that currently operate at LOS D or E: cause operations to further worsen by one or more service levels.
    - For intersections that currently operate at LOS F: cause intersection delay to worsen by 12.5 seconds or greater.
- Cause the overall percentage of signalized intersections throughout the City of Roseville operating at LOS C or better during the AM and PM peak hours to fall below 70 percent.

Based on the above, this analysis assumes LOS C is the City's minimum LOS goal. However, the City of Roseville has determined that some intersections will operate with Level of Service that exceeds LOS C under Year 2035 conditions (refer to Circulation Element Table III-3). Within the study area such intersections include the following:

1. Baseline Road/Cook Riolo Road/Woodcreek Oaks Boulevard (LOS E AM/LOS D PM);
3. Baseline Road/Foothills Boulevard (LOS E AM/LOS D PM); and
12. Baseline Road/Walerga Road/Fiddyment Road (LOS D AM/LOS D PM).

The City of Roseville General Plan policy has been structured to allow the City some flexibility to identify any case where LOS C might not be able to be maintained or the identified major improvements (such as grade separations) are determined to be undesirable. Per the City's General Plan, while this could lead to some intersections operating at worse than LOS C conditions for a limited amount of time per day, the overall number of intersections predicted to operate at below LOS C is considered acceptable to the City.[6]

Unsignalized Intersections

The City of Roseville does not typically consider LOS at un-signalized intersections or roadway segments to be a significance criterion under CEQA. For this analysis, the criteria employed by Placer County in the Placer County Sports and Event Complex Project Draft EIR was employed. Consistent with other studies that have analyzed unsignalized City of Roseville intersections, impacts are determined based on delay/LOS and whether or not the peak hour signal warrant would be met.

For purposes of this analysis, a significant impact would occur if the project would result in any of the following at a study intersection:

- Cause an unsignalized intersection in Roseville outside of the Pedestrian Overlay District to be degraded as follows under existing or cumulative conditions:
    - For intersections currently (or projected to be) operating at LOS C or better, worsen operations to LOS D or worse and meet the MUTCD peak hour signal warrant.
    - For intersections currently (or projected to be) operating at less than LOS C, cause

[6] City of Roseville. *General Plan 2035* [pg. III-16]. Adopted June 15, 2016.

operations to further worsen by one or more service levels and meet the MUTCD peak hour signal warrant.

- For intersections currently (or projected to be) operating at LOS F, cause intersection delay to worsen by 12.5 seconds or greater and meet the MUTCD peak hour signal warrant.

Roadway Segments

The City of Roseville does not typically consider daily traffic volume on roadway segments to be a significance criterion. LOS based on Placer County thresholds has been presented on selected City of Roseville facilities for illustrative purposes.

Method of Analysis

The analysis methodology provided in the Traffic Impact Study prepared for the proposed project by KD Anderson & Associates, Inc. is discussed below.

Analysis Scenarios

The following analysis scenarios are included in this chapter:

- **Existing Condition:** LOS based on current traffic counts, existing roadway geometry, and existing traffic control.
- **Existing Plus Project Condition:** Existing traffic volumes, roadway geometry, and traffic control plus trips from the proposed project.
- **Cumulative No Project Condition:** Traffic volumes associated with cumulative (year 2035) buildout of the project region without traffic generated by the proposed project. The Cumulative No Project Condition includes reasonably certain projected changes to intersection geometry and roadway segments.
- **Cumulative Plus Project Condition:** Traffic associated with the Cumulative No Project Condition plus traffic generated by the proposed project under full buildout.

Project Trip Generation

The number of automobile trips that would be generated by the proposed project was estimated through application of trip generation rates acceptable to Placer County. For operation of the project, applicable trip generation rates were obtained from the Institute of Transportation Engineer's (ITE) publication, Trip Generation Manual, 10th edition. Table 14-7 below identifies the trip generation applied to the proposed residential subdivision. As shown in the table, the proposed project would generate an estimated 1,123 daily trips, with 88 trips expected in the AM peak hour and 118 new trips generated during the PM peak hour.

Table 14-7
Project Trip Generation

Land Use	Unit / Quantity	Trip Generation						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Single Family Residential	*Dwelling unit*	*9.44*	*25%*	*75%*	*0.74*	*63%*	*37%*	*0.99*
Proposed Project	**119 units**	**1,123**	**22**	**66**	**88**	**74**	**64**	**118**

Source: KD Anderson & Associates, Inc.

In addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order to meet the County's affordable housing requirements. Under the most intensive scenario, the project would include 119 single-family lots and between six and 12 Accessory Dwelling Units (ADUs). KD Anderson & Associates determined the trip generation associated with the ADUs by applying applicable trip generation rates published in the ITE Trip Generation Manual for Multiple Family Residential – Low Rise (category 220).[7] As shown in Table 14-8 below, if included, the additional 12 ADUs would result in a total of 88 average daily trips, with six trips expected in the AM peak hour and seven trips generated during the PM peak hour.

Table 14-8
Project Trip Generation – with ADUs

Land Use	Unit / Quantity	Trip Generation						
			AM Peak Hour			PM Peak Hour		
		Daily	In	Out	Total	In	Out	Total
Single Family Residential	*Dwelling unit*	*9.44*	*25%*	*75%*	*0.74*	*63%*	*37%*	*0.99*
Proposed Single Family	119 units	1,123	22	66	88	74	64	118
Multiple Family Residential	*Dwelling unit*	*7.32*	*23%*	*77%*	*0.46*	*63%*	*37%*	*0.56*
Proposed ADUs	12 units	88	1	5	6	4	3	7
Total		**1,211**	**23**	**71**	**94**	**78**	**67**	**125**

Source: KD Anderson & Associates, Inc.

Project Trip Distribution and Assignment

The distribution of trips to and from the project site was determined by conducting a select zone analysis for the project site using the Placer Vineyards Regional Travel Demand Forecasting Model. Model results were reviewed in coordination with Placer County staff. Manual adjustments were made for the AM peak hour distribution due to the probable interaction between the proposed project and Creekview Ranch School, as some future residents of the project may drop off students before continuing on to a destination projected by the traffic model. The share of project trips that may first visit Creekview Ranch School was determined based on the following factors:

- Availability of Bussing by the DCUSD. Because continuous pedestrian facilities are not available between the project site and the Creekview Ranch School, the DCJESD would likely provide bussing to and from the project site.
- Share of Creekview Ranch School's Eligible Regular Students Who Elect to Ride Buses. Currently, roughly 145 regular students out of a total of 731 Creekview Ranch School students are bussed. Students in the Morgan Creek area south of the school are not bussed, and school-wide, roughly 520 students appear to be eligible to be bussed. Thus, approximately 28 percent of eligible students elect to ride busses.
- Mode Share. The DCJESD estimates a yield of 0.71 Creekview Ranch School students per residence. Thus, the 119 proposed homes could yield 85 new students. Assuming that the school's average bussing rate continues, approximately 24 bus riders would be

[7] KD Anderson & Associates, Inc. *Traffic Impact Analysis for Brady Vineyard Subdivision: Assessment of 12 Ancillary Units.* August 21, 2019.

generated by the project, and 61 students would be driven to school. At a typical automobile occupancy rate for school traffic (i.e., 1.5 students per vehicle), 41 project vehicles would be destined for Creekview Ranch School.

- Share of Total AM Peak Hour Traffic. The Brady Vineyard project would generate 22 inbound and 66 outbound trips in the AM peak hour. Trips first made to Creekview Ranch School represent 62 percent of the outbound total (41/66). Assuming 62 percent of the project's inbound AM peak hour trips are also from Creekview Ranch then 14 trips (i.e., 62 percent of 22 total project inbound trips) of the trips to the school will return to the project site and 27 trips will continue to regional destinations (i.e., of the 41 project trips destined for Creekview Ranch School, 14 would return to the project site and the remaining 27 would continue to regional destinations).

The trip distribution assumption, which was approved by County staff, is shown in Figure 14-4 and Table 14-9 below.

Table 14-9
Project Trip Distribution

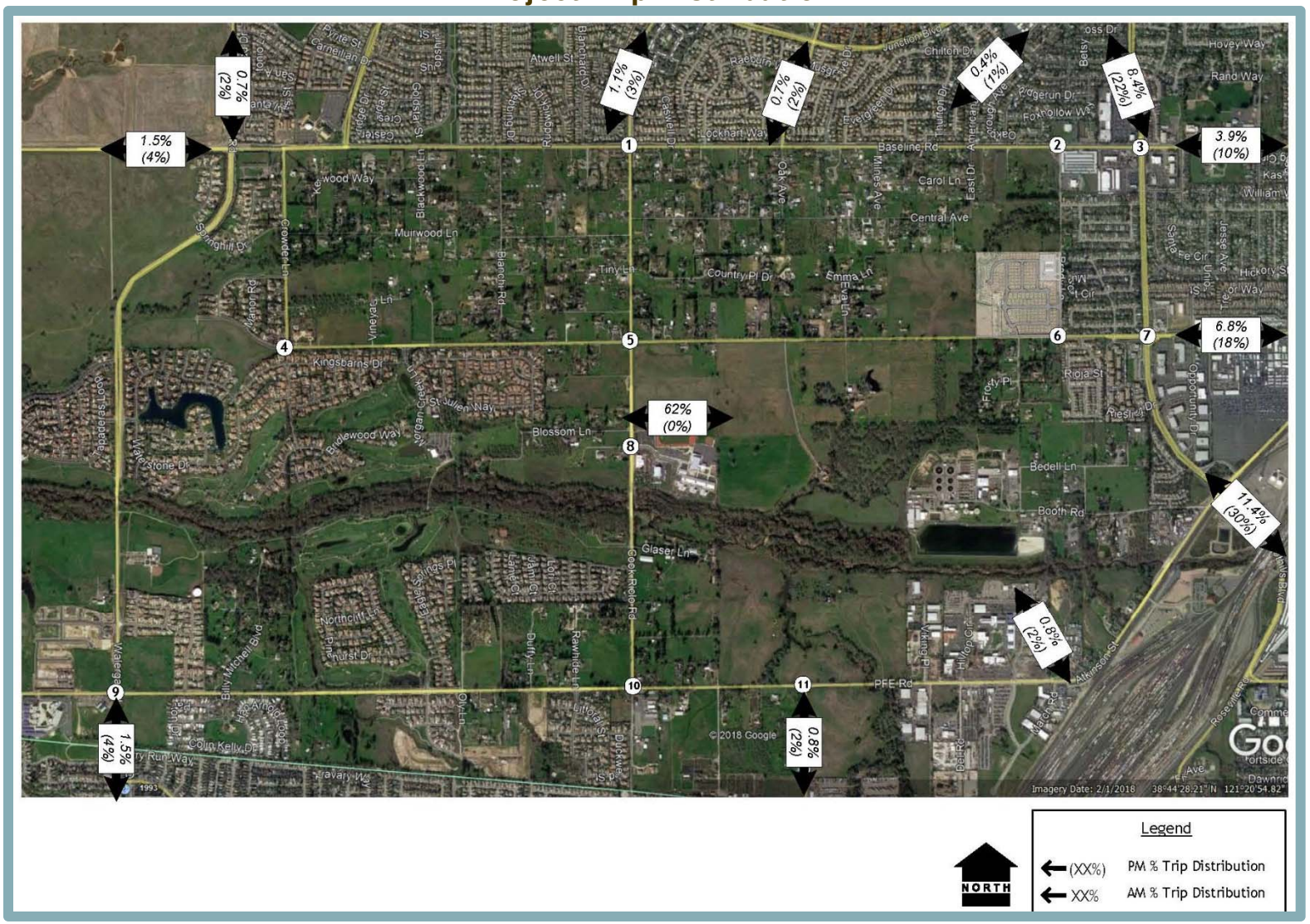
Direction	Route	Percent of Total Trips		
		AM	PM	Daily
North	Woodcreek Oaks	1.1%	3%	2.9%
	Americana Dr/Country Club Dr	1.1%	3%	2.9%
	Foothills Blvd	8.4%	22%	20.8%
East	Baseline Rd	3.9%	10%	9.5%
	Vineyard Rd	6.8%	18%	17.1%
West	Baseline Rd west of Cook Riolo Rd	2.2%	6%	5.7%
	Creekside Ranch School	62.0%	0%	5%
South	Walerga Rd	1.5%	4%	3.8%
	Foothills Blvd	11.4%	30%	28.5%
	Off of Atchison	0.8%	2%	1.9%
	Antelope Road	0.8%	2%	1.9%
	Total	**100.00%**	**100.00%**	**100.00%**

Source: KD Anderson & Associates, Inc.

While the proposed project would have only one regular access point, multiple off-site routes are available to reach most destinations. To determine the choice of routes, the relative travel time along each route was estimated, and the project's trips were assigned to the local street system in response to comparative times. Resulting "project only" trips, including trips continuing from Creekside Ranch School, are illustrated in Figure 14-5.

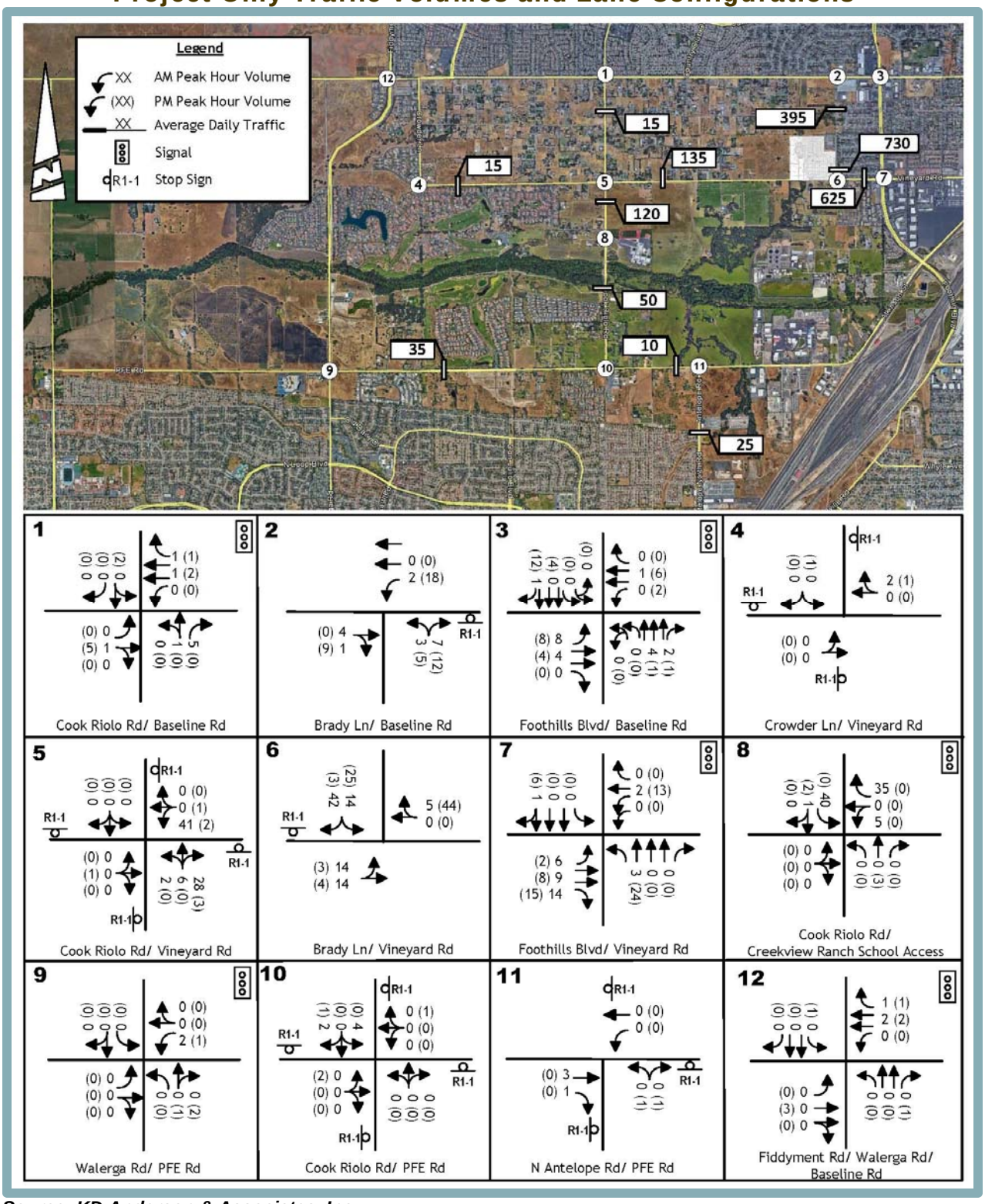
In the event that the proposed project includes the construction of ADUs, in addition to the 119 proposed single-family units, the distribution of trips to and from the ADUs would be similar to the assumptions discussed above, including the share of project trips that may first visit Creekview Ranch School. Resulting trips from the ADUs, including trips continuing from Creekside Ranch School, are illustrated in Figure 14-6.

Figure 14-4
Project Trip Distribution



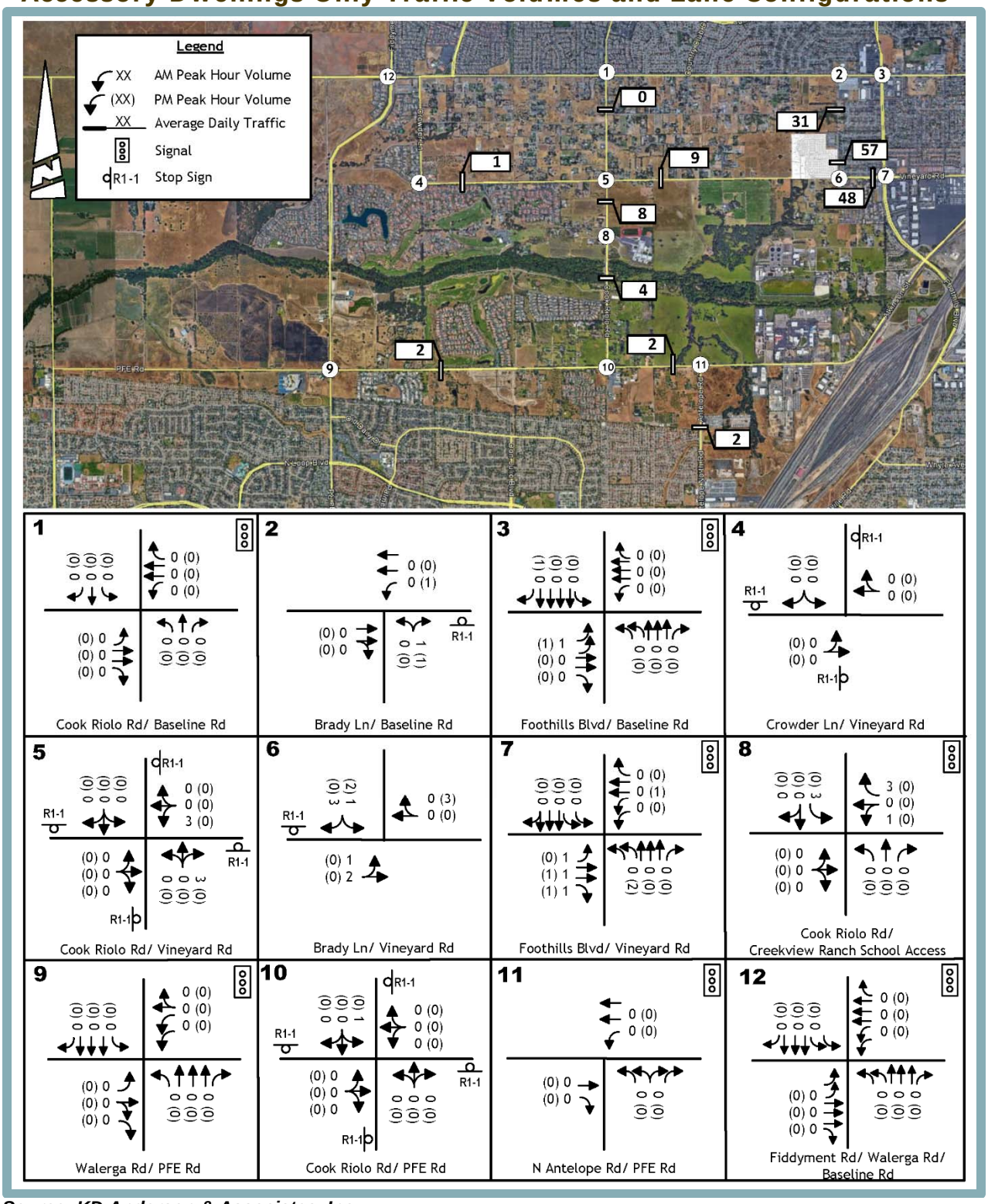
Source: KD Anderson & Associates, Inc.

Figure 14-5
Project Only Traffic Volumes and Lane Configurations



Source: KD Anderson & Associates, Inc.

Figure 14-6
Accessory Dwellings Only Traffic Volumes and Lane Configurations



Source: KD Anderson & Associates, Inc.

Existing Plus Project Circulation System Improvements

Figure 14-5 above presents the intersection geometry assumed under the "plus project" condition. The project would complete frontage improvements that would allow for the widening of Brady Lane and Vineyard Road. Brady Lane would be widened to its ultimate width along the project frontage, allowing for a creation of a southbound left turn lane at the Vineyard Road/Brady Lane intersection. A Two-Way Left-Turn (TWLT) lane would be available at the project access intersection, which would be side-street stop controlled. In addition, while a pending improvement project at the PFE Road/Walerga Road intersection may be completed before the Brady Vineyard project is occupied, to provide a conservative estimate of project impacts, this analysis assumes that this improvement is not in place under "Existing Plus Project" conditions, consistent with direction from County staff.

Project Vehicle Miles Travelled

As part of the Traffic Impact Analysis, KD Anderson & Associates, Inc. estimated per capita vehicle miles travelled (VMT) associated with the proposed project. Project-related VMT was calculated using the Placer Vineyards traffic model, which addresses travel across the six-county SACOG area, while isolating travel associated with land uses on the project site.

The model results indicate that the proposed project would generate 6,879 VMT under Existing Plus Project conditions and 6,640 VMT under Cumulative Plus Project conditions. The "per capita" VMT was determined by dividing the total VMT by the anticipated 367 residents (based on a rate of 3.08 persons per household in the DCWPCP area, as discussed in Chapter 11 of this EIR). The per capita VMT for the project is 18.7 under Existing Plus Project Conditions and 18.1 under Cumulative Plus Project Conditions.

Project-Specific Impacts and Mitigation Measures

The proposed project impacts on the transportation system are evaluated in this section based on the thresholds of significance and methodology described above. Each impact is followed by recommended mitigation to reduce the identified impacts, if needed.

14-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, substantially increase traffic in relation to the existing traffic load and capacity of the roadway system, or exceed an established LOS standard during construction activities. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Construction of the project, including site preparation, grading, construction, and delivery activities, would generate vehicle trips on local roadways, including heavy-duty haul truck trips. In addition, the project would include improvements to Brady Lane and Vineyard Road within the project site vicinity, which could temporarily impede traffic. As a result, construction activities could include disruptions to the transportation network near the project site, including the possibility of temporary lane closures.

Nonetheless, construction workers typically arrive before the morning peak hour and leave before the evening peak hours of the traditional commute time periods. Deliveries of building material (lumber, concrete, asphalt, etc.) would also normally occur outside of the traditional commute time periods. However, without proper planning of construction

activities, construction traffic and potential street closures could interfere with existing roadway operations during the construction phase. Therefore, project traffic related to construction activities could result in a ***significant*** impact.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

14-1 *The Improvement Plans shall include a striping and signing plan and shall include all on- and off-site traffic control devices. Prior to the commencement of construction, a construction signing and traffic control plan shall be provided to the Engineering and Surveying Division for review and approval. The construction signing and traffic control plan shall include (but not be limited to) items such as:*

- *Guidance on the number and size of trucks per day entering and leaving the project site;*
- *Identification of arrival/departure times that would minimize traffic impacts;*
- *Approved truck circulation patterns;*
- *Locations of staging areas;*
- *Locations of employee parking and methods to encourage carpooling and use of alternative transportation;*
- *Methods for partial/complete street closures (e.g., timing, signage, location and duration restrictions);*
- *Criteria for use of flaggers and other traffic controls;*
- *Preservation of safe and convenient passage for bicyclists and pedestrians through/around construction areas;*
- *Monitoring for roadbed damage and timing for completing repairs;*
- *Limitations on construction activity during peak/holiday weekends and special events;*
- *Preservation of emergency vehicle access;*
- *Coordination of construction activities with construction of other projects that occur concurrently in the DCWPCP to minimize potential additive construction traffic disruptions, avoid duplicative efforts (e.g., multiple occurrences if similar signage), and maximize effectiveness of traffic mitigation measures (e.g., joint employee alternative transportation programs);*
- *Removing traffic obstructions during emergency evacuation events; and*
- *Providing a point of contact for DCWPCP residents and guests to obtain construction information, have questions answered, and convey complaints.*

The construction signing and traffic control plan shall be developed such that the following minimum set of performance standards is achieved throughout project construction. It is anticipated that additional performance standards would be developed once details of project construction are better known.

- *All construction employees shall park in designated lots owned by the project applicant or on private lots otherwise arranged for by the project applicant.*
- *Roadways shall be maintained clear of debris (e.g., rocks) that could otherwise impede travel and impact public safety.*

14-2 Conflict with a program, plan, ordinance or policy addressing study intersections, substantially increase traffic in relation to the existing traffic load and capacity of the study intersections, or exceed an established LOS standard under Existing Plus Project conditions. Based on the analysis below, impacts to all study intersections under Existing Plus Project Conditions would be less than significant, with the exception of the Baseline Road/Brady Lane intersection. Given the lack of feasible mitigation, the impact is *significant and unavoidable*.

As noted previously, development of the proposed project would result in an increase of approximately 1,123 ADT on local roadways. Figure 14-7 displays the Existing Plus Project conditions traffic volumes at each study intersection for both AM and PM peak hours. Table 14-10 below summarizes operations at each of the study intersections with the proposed 119 single-family units.

Table 14-11 below summarizes operations at each of the study intersections with the proposed 119 single-family units plus 12 additional ADUs. As shown in the tables, all study intersections operate acceptably under Existing conditions without the addition of project traffic, with the exception of the following three intersections:

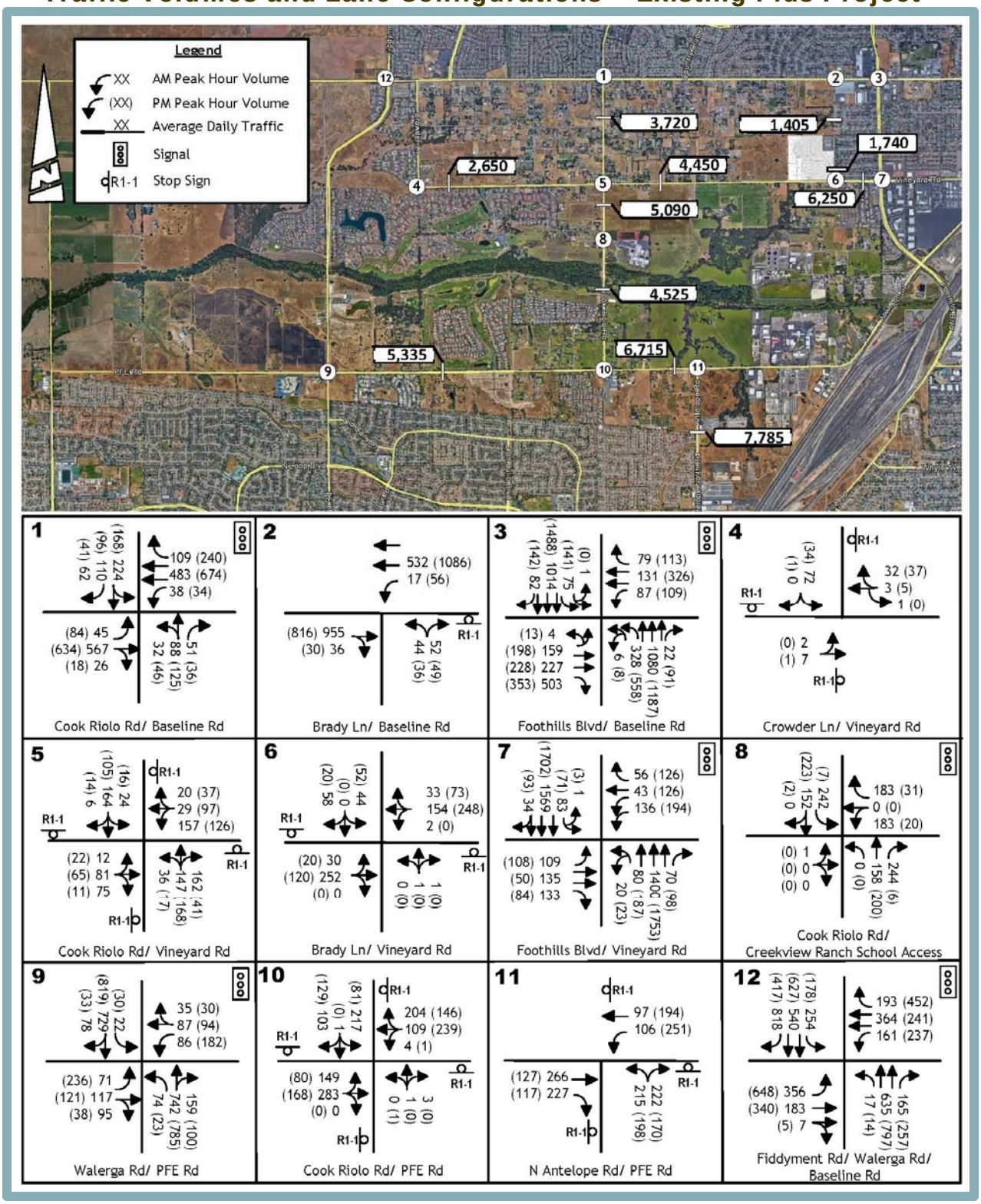
3. Baseline Road/Foothills Boulevard (City of Roseville);
9. PFE Road/Walerga Road; and
12. Baseline Road/Walerga Road/Fiddyment Road (City of Roseville).

The proposed project would not result in degradation of any of the above intersections from an acceptable LOS to an unacceptable LOS under Existing Plus Project conditions. Because the intersections listed above are already deficient under Existing conditions, the project's impact is determined based on the incremental change in overall delay and the satisfaction of traffic signal warrants. However, at the Baseline Road/Brady Lane intersection, the operations would degrade from an acceptable LOS under Existing conditions to an unacceptable LOS D under Existing Plus Project conditions. The following sections provide an analysis of potential impacts related to operations at the listed intersections.

Baseline Road/Brady Lane

In the City of Roseville, the side street delay at the Baseline Road/Brady Lane intersection would deteriorate from LOS C to LOS D in the AM peak hour, and peak hour traffic signal warrant would be satisfied at that time. Therefore, a significant impact would occur.

Figure 14-7
Traffic Volumes and Lane Configurations – Existing Plus Project



Source: KD Anderson & Associates, Inc.

Table 14-10
Intersection LOS – Existing Plus Project Conditions

Location	Control	AM Peak Hour				PM Peak Hour				Traffic Signal Warrant Met?
		Existing		Existing Plus Project		Existing		Existing Plus Project		
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
1. Baseline Rd/Cook Riolo Rd/Woodcreek Oaks Blvd (R)	Signal	C	32.0	C	32.0	C	30.5	C	30.5	N/A
2. Baseline Rd/Brady Ln (R) Northbound approach Westbound left turn	NB Stop	C B	25.0 10.5	**D** B	**26.0** 10.5	C A	21.5 10.0	C B	23.0 10.0	Yes
3. Baseline Rd/Foothills Blvd (R)	Signal	C	32.0	C	32.0	**D**	**40.5**	**D**	**41.0**	N/A
4. Vineyard Rd/Crowder Ln (overall) Southbound approach Eastbound left turn	SB Stop	(A) A A	(9.0) 9.0 7.5	(A) A A	(9.0) 9.0 7.5	(A) A A	(9.0) 9.0 0.0	(A) A A	(9.0) 9.0 0.0	No
5. Cook Riolo Rd/Vineyard Rd	AWS	B	13.5	C	16.0	B	11.0	B	11.0	No
6. Vineyard Rd/Brady Ln	AWS	A	9.0	A	10.0	A	9.0	B	9.5	No
7. Vineyard Rd/Foothills Blvd (R)	Signal	C	24.0	C	25.5	C	28.0	C	30.5	N/A
8. Cook Riolo Rd/Creekview Ranch School	Signal	B	12.0	B	13.4	A	6.0	A	6.0	N/A
9. PFE Rd/Walerga Rd	Signal	D	35.9	D	36.0	**E**	**71.0**	**E**	**72.0**	N/A
10. PFE Rd/Cook Riolo Rd	AWS	D	28.0	D	28.5	B	14.0	B	14.0	Yes
11. PFE Rd/Antelope Rd	AWS	C	17.5	C	17.5	C	15.5	C	15.5	Yes
12. Baseline Rd/Walerga Rd/Fiddyment Rd (R)	Signal	**D**	**40.0**	**D**	**40.5**	**F**	**81.0**	**F**	**81.0**	N/A
13. Brady Lane / Project Access (overall) Eastbound approach Northbound left turn	EB Stop			(A) A A	(8.5) 9.0 7.5			(A) A A	(8.5) 7.5 9.5	No

Notes:
- (R) indicates City of Roseville jurisdiction. Minimum LOS C standard applies.
- **Bold** indicates minimum LOS threshold exceeded; **Highlighted** values indicate a significant impact.
- Overall Average Delay = Σ (Delay x Volume of each delayed movement) / Σ Volume of each delayed movement.

Source: KD Anderson & Associates, Inc.

Table 14-11
Intersection LOS – Existing Plus Project Conditions: With 12 ADUs

Location	Control	AM Peak Hour				PM Peak Hour				Traffic Signal Warrant Met?
		Existing		Existing Plus Project + 12 ADUs		Existing		Existing Plus Project + 12 ADUs		
		LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	LOS	Average Delay (veh/sec)	
1. Baseline Rd/Cook Riolo Rd/Woodcreek Oaks Blvd (R)	Signal	C	32.0	C	32.0	C	30.5	C	30.5	N/A
2. Baseline Rd/Brady Ln (R) Northbound approach Westbound left turn	NB Stop	C B	25.0 10.5	**D** B	**26.0** 10.5	C A	21.5 10.0	C B	23.0 10.0	Yes
3. Baseline Rd/Foothills Blvd (R)	Signal	C	32.0	C	32.0	**D**	**40.5**	**D**	**41.0**	N/A
4. Vineyard Rd/Crowder Ln (overall) Southbound approach Eastbound left turn	SB Stop	(A) A A	(9.0) 9.0 7.5	(A) A A	(9.0) 9.0 7.5	(A) A A	(9.0) 9.0 0.0	(A) A A	(9.0) 9.0 0.0	No
5. Cook Riolo Rd/Vineyard Rd	AWS	B	13.5	C	16.0	B	11.0	B	11.0	No
6. Vineyard Rd/Brady Ln	AWS	A	9.0	A	10.0	A	9.0	B	9.5	No
7. Vineyard Rd/Foothills Blvd (R)	Signal	C	24.0	C	25.5	C	28.0	C	31.0	N/A
8. Cook Riolo Rd/Creekview Ranch School	Signal	B	12.0	B	13.5	A	6.0	A	6.0	N/A
9. PFE Rd/Walerga Rd	Signal	D	35.9	D	36.0	**E**	**71.0**	**E**	**72.0**	N/A
10. PFE Rd/Cook Riolo Rd	AWS	D	28.0	D	28.5	B	14.0	B	14.0	Yes
11. PFE Rd/Antelope Rd	AWS	C	17.5	C	17.5	C	15.5	C	15.5	Yes
12. Baseline Rd/Walerga Rd/Fiddyment Rd (R)	Signal	**D**	**40.0**	**D**	**40.5**	**F**	**81.0**	**F**	**81.0**	N/A
13. Brady Lane / Project Access (overall) Eastbound approach Northbound left turn	EB Stop			(A) A A	(8.5) 9.0 7.5			(A) A A	(8.5) 7.5 9.5	No

Notes:
- (R) indicates City of Roseville jurisdiction. Minimum LOS C standard applies.
- **Bold** indicates minimum LOS threshold exceeded; **Highlighted** values indicate a significant impact.
- Overall Average Delay = Σ (Delay x Volume of each delayed movement) / Σ Volume of each delayed movement.

Source: KD Anderson & Associates, Inc.

Baseline Road/Foothills Boulevard

The City of Roseville's Baseline Road/Foothills Boulevard intersection would continue to operate at LOS D in the PM peak hour with the addition of project traffic. Because project traffic would not cause the intersection LOS to further deteriorate, per City of Roseville policy, a less-than-significant impact would occur.

PFE Road/Walerga Road

In Placer County, the PFE Road/Walerga Road intersection would continue to operate at LOS E conditions in the PM peak hour with the addition of project traffic. However, the incremental change in average delay resulting from the project falls below the County's 5.0-second increase threshold. Thus, a less-than-significant impact would occur.

Baseline Road/Walerga Road/Fiddyment Road

The City of Roseville's Baseline Road/Walerga Road/Fiddyment Road intersection would continue to operate at LOS D in the AM peak hour and LOS F in the PM peak hour with the addition of project traffic. Project traffic would not cause the intersection LOS to further deteriorate, and vehicle delay during the PM peak hour would not increase relative to Existing conditions. Thus, per City of Roseville policy, a less-than-significant impact would occur.

Conclusion

Based on the above, the proposed project would have a less-than-significant impact to the Baseline Road/Foothills Boulevard, PFE Road/Walerga Road, and Baseline Road/Walerga Road/Fiddyment Road intersections. However, the addition of project traffic to the Baseline Road/Brady Lane intersection would deteriorate the intersection operations from LOS C to LOS D in the AM peak hour, and peak hour traffic signal warrants would be satisfied. Thus, a ***significant*** impact to the Baseline Road/Brady Lane intersection would occur under the Existing Plus Project Condition. The potential inclusion of 12 additional on-site ADUs would not result in any additional significant impacts.

Mitigation Measure(s)

Installation of a traffic signal at the Baseline Road/Brady Lane intersection or restricting left-turn movements on the northbound approach would improve operations at the intersection to acceptable (i.e., LOS C) levels. However, given that the intersection is located within the City of Roseville, outside of the County's jurisdiction, completion of the required improvements cannot be guaranteed. Furthermore, the City Engineer has indicated that the City of Roseville would not require a signal as a result of the proposed project, and restricting left turns at the intersection is not currently recommended by the City.[8] Thus, feasible mitigation to reduce the above impact to a less-than-significant level does not exist and the impact would remain *significant and unavoidable*.

[8] Mark Stout, City Engineer, City of Roseville. Personal communication [email] with KD Anderson & Associates, Inc.

14-3 Conflict with a program, plan, ordinance or policy addressing study roadway segments, substantially increase traffic in relation to the existing traffic load and capacity of the study roadway segments, or exceed an established LOS standard under Existing Plus Project conditions. Based on the analysis below, the impact is *less than significant*.

Table 14-12 below summarizes operations at each of the study roadway segments under the Existing Plus Project Condition with the proposed 119 single-family units. Table 14-13 below summarizes operations at each of the study roadway segments with the proposed 119 single-family units plus 12 additional ADUs. As shown in the tables, development of the proposed project would increase the volume of traffic along the study roadway segments. However, all study roadway segments would continue to operate within accepted Placer County minimum LOS thresholds. Therefore, impacts to study roadway segments under the Existing Plus Project Condition would be ***less than significant***. The potential inclusion of 12 on-site ADUs, in addition to the 119 single-family units, would not result in the generation of any significant impacts.

Mitigation Measure(s)

None required.

14-4 Conflict with a program, plan, ordinance or policy addressing transit, bicycle and pedestrian facilities. Based on the analysis below, the impact is *less than significant*.

The following discussion evaluates whether the proposed project would result in impacts to existing or planned pedestrian facilities, bicycle facilities, or transit facilities and services within the project area.

Pedestrian System

Future residents of the proposed project may elect to walk to and from the site to access local destinations such as the commercial development within the City of Roseville along Foothills Boulevard. In addition, school-age residents may walk to the nearby Creekview Ranch School.

As noted previously, sidewalks are currently provided on Vineyard Road from Brady Lane to Foothills Boulevard. To the northeast of the site, a sidewalk is provided along the east side of Brady Lane between Vineyard Road and Baseline Road, and on a local street that joins Brady Lane and Foothills Boulevard. With completion of the proposed frontage improvements on Brady Lane and Vineyard Road, sidewalks would be available between the project site and the Vineyard Road/Brady Lane intersection, thereby providing for pedestrian connectivity between the project site and existing facilities in the project area. The project would not conflict with regional planning for pedestrian facilities. The proposed multi-purpose trail within the open space area could potentially be extended to the north or west if/when future development occurs. The trail also advances the goals of the Dry Creek Greenway Vision.

Table 14-12
Roadway Segment LOS – Existing Plus Project Conditions

Roadway	Location	Standard			Existing			Existing Plus Project				
		LOS	Volume Threshold Per Lane (veh/ln)	Max 2-Way Volume at LOS Standard	Daily Volume	V/C	LOS	Daily Volume		V/C	LOS	Change in V/C
								Project Only	Total			
1. PFE Road	Walerga Rd to Cook Riolo Rd	D	7,750	15,500	5,300	0.21	B	35	5,335	0.21	B	0.00
2. PFE Road	Cook Riolo Rd to Antelope Rd	D	5,700	11,400	6,705	0.32	C	10	6,715	0.32	C	0.00
3. Cook Riolo Road	Baseline Rd to Vineyard Rd	D	5,700	11,400	3,705	0.18	B	15	3,720	0.18	B	0.00
4. Cook Riolo Road	Vineyard Rd to Creekview Ranch School	D	5,700	11,400	4,970	0.24	C	120	5,090	0.24	C	0.00
5. Cook Riolo Road	Creekview Ranch School to PFE Rd	D	5,700	11,400	4,475	0.21	C	50	4,525	0.22	C	0.00
6. Antelope Road	PFE Rd to Great Valley Dr	D	5,700	11,400	7,760	0.37	D	25	7,785	0.37	D	0.00
7. Vineyard Road	Crowder Ln to Cook Riolo Rd	D	5,700	11,400	2,635	0.13	B	15	2,650	0.13	B	0.00
8. Vineyard Road	Cook Riolo Rd to Brady Ln	D	5,700	11,400	4,315	0.21	C	135	4,450	0.21	C	0.00
9. Vineyard Road	Brady Ln to Foothills Blvd (R)	D	6,870	13,740	5,625	0.38	A	625	6,250	0.42	A	0.04
10.Brady Lane	Baseline Rd to Project (R)	D	5,700	11,400	1,010	0.05	A	395	1,405	0.07	A	0.02
11.Brady Lane	Project to Vineyard Rd (R)	D	5,700	11,400	1,010	0.05	A	730	1,740	0.08	B	0.03

Notes:
- All study roadways are two lanes.
- **Bold** values exceed minimum LOS threshold.
- **Highlighted** values are a significant impact.
- (R) is City of Roseville jurisdiction.

Source: KD Anderson & Associates, Inc.

Table 14-13
Roadway Segment LOS – Existing Plus Project Conditions: With 12 ADUs

Roadway	Location	Standard			Existing			Existing Plus Project Plus 12 ADUs				
		LOS	Volume Threshold Per Lane (veh/ln)	Max 2-Way Volume at LOS Standard	Daily Volume	V/C	LOS	Daily Volume: Project + ADUs Only	Daily Volume: Total	V/C	LOS	Change in V/C
1. PFE Road	Walerga Rd to Cook Riolo Rd	D	7,750	15,500	5,300	0.21	B	37	5,337	0.21	B	0.00
2. PFE Road	Cook Riolo Rd to Antelope Rd	D	5,700	11,400	6,705	0.32	C	12	6,717	0.32	C	0.00
3. Cook Riolo Road	Baseline Rd to Vineyard Rd	D	5,700	11,400	3,705	0.18	B	15	3,720	0.18	B	0.00
4. Cook Riolo Road	Vineyard Rd to Creekview Ranch School	D	5,700	11,400	4,970	0.24	C	128	5,098	0.24	C	0.00
5. Cook Riolo Road	Creekview Ranch School to PFE Rd	D	5,700	11,400	4,475	0.21	C	54	4,529	0.22	C	0.00
6. Antelope Road	PFE Rd to Great Valley Dr	D	5,700	11,400	7,760	0.37	D	27	7,787	0.37	D	0.00
7. Vineyard Road	Crowder Ln to Cook Riolo Rd	D	5,700	11,400	2,635	0.13	B	17	2,651	0.13	B	0.00
8. Vineyard Road	Cook Riolo Rd to Brady Ln	D	5,700	11,400	4,315	0.21	C	144	4,459	0.21	C	0.00
9. Vineyard Road	Brady Ln to Foothills Blvd (R)	D	6,870	13,740	5,625	0.38	A	673	6,298	0.42	A	0.04
10. Brady Lane	Baseline Rd to Project (R)	D	5,700	11,400	1,010	0.05	A	426	1,436	0.07	A	0.02
11. Brady Lane	Project to Vineyard Rd (R)	D	5,700	11,400	1,010	0.05	A	787	1,797	0.09	B	0.03

Notes:
- All study roadways are two lanes.
- **Bold** values exceed minimum LOS threshold.
- **Highlighted** values are a significant impact.
- (R) is City of Roseville jurisdiction.

Source: KD Anderson & Associates, Inc.

While a continuous pedestrian route would not be available between the project site and the Creekview Ranch School, bussing would be available to students. The project would include a new school bus turnout along the west side of Brady Lane, south of the project site access. Therefore, a less-than-significant impact would occur.

Bicycle Facilities

As discussed previously, dedicated bicycle facilities are currently provided on Baseline Road, as well as Vineyard Road east of Brady Lane. Bicycle facilities are not provided on Brady Lane or on the County roads to the west of the site along Vineyard Road. As part of the project, Vineyard Road would be widened to accommodate one-half of a future 14-foot, two-way, left-turn lane, one 12-foot through lane, and a new Class II bike lane along the project frontage, consistent with the Placer County Regional Bikeway Plan. With future construction of the Class II bike lane, continuous bike facilities would be provided between the project site and the existing facilities along Vineyard Road to the east. Therefore, the proposed project would not conflict with planned bicycle facilities identified in adopted plans, and a less-than-significant impact would occur.

Transit System

As noted previously, transit service in the vicinity of the project site is currently provided by Roseville Transit. The nearest bus stop is located at Baseline Road and Foothills Boulevard, approximately 0.75-mile from the project site. In addition, the project includes a school bus turnout along the west side of Brady Lane, south of the project site access. Inclusion of a proposed bus turnout would provide sufficient infrastructure to allow for school buses to service the project site and nearby residences. Currently, future transit routes are not identified along Vineyard Road, however, the DCWPCP notes that routes could be extended to serve future growth in the project area if warranted by demand. Thus, the project would not conflict with any planning efforts related to public transit. Furthermore, while residents of the project may result in a slight increase in demand on existing transit services in the region, per the Traffic Impact Study, such demand is unlikely to cause an appreciable change in system ridership, and the project would not degrade transit operations. Thus, a less-than-significant impact would occur.

Conclusion

Based on the above, the proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation (i.e., bus turnouts, bicycle lanes, bicycle racks, public transit, pedestrian facilities, etc.). Thus, the project would result in a ***less-than-significant*** impact to pedestrian, bicycle, and transit facilities under Existing Plus Project conditions.

Mitigation Measure(s)

None required.

14-5 Substantially increase hazards to vehicle safety due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Based on the analysis below, the impact is *less than significant*.

Potential impacts related to gated access at project entrances, roadway design features, and incompatible uses are discussed below.

Gated Access

The proposed project would include gated access at the project entry along Brady Lane. While such a feature does not normally affect the quality of traffic flow on the adjoining street system and is not anticipated to affect the LOS at the project access, safety issues could arise if traffic queues back from the gates. As such, the Traffic Impact Analysis includes an evaluation of traffic queues at the gated project access.

Placer County has adopted a design standard for gated access to residential subdivisions (Plate 115). The proposed gates would likely employ a system to monitor the approach of residents using “proximity tags”, or an in-vehicle push-button key to automatically open the gates as the resident’s vehicle arrives. Visitors would manually punch in a gate code. The type of gate to be used at the entrances would be a metal swing gate. Per the Traffic Impact Analysis, the following five key design features would affect the adequacy of access design:

- Available distance for storage from the gates back to the edge of the travel way (PFE Road and Antelope Road);
- Available storage for guest vehicles from the push-button point back to the travel way;
- Length of time required for a resident to activate the gate and for the gate to open;
- Length of time required for the system to identify a visitor and to activate the gate; and
- External factors that could create platoons of inbound traffic, such as adjoining signalized access.

Storage Distance

The median islands, where the push button for the gate actuation would be located, would be situated approximately 60 feet from Brady Lane, and the gate would be located approximately 120 feet from Brady Lane. Assuming 25 feet per vehicle, the gate queuing area could accommodate four to five waiting vehicles. Pedestrians would be able to bypass waiting vehicles to access the site through dedicated pedestrian entrances.

Gate Activation and Opening Assumptions

A resident’s proximity tag or push button would be detected by the system as a vehicle approaches the gate. From the time the system is activated, a metal swing gate would move at 1.2 to 2.0 feet per second and would require 11 to 18 seconds to open a 14-foot to 16-foot swing gate, depending on the size of the operator mechanism. In-pavement magnetic loop detectors located on both sides of the gate would ensure that the swing gate would remain open for any following vehicles. Visitors would call for access, or input a code number to activate the gate, but may be less familiar with its operation than

residents. The additional time required for a visitor to activate the system could add five to 10 seconds to the time expected for a resident.

Technical Approach

Vehicles are expected to generally arrive randomly and the number of vehicles queuing behind the proposed gate can be based on the overall inbound traffic demand, the overall capacity flow rate through the gate and the passage time for subsequent vehicles following the first vehicle. For a combination of resident vehicles and an occasional visitor vehicle (i.e., 10 percent of visitors), the average time needed for the system to detect a vehicle and fully open the gate would be no more than 20 seconds, which implies a capacity for 180 openings per hour. The probability of a queue of any length can be determined using standard queue theory, and in this case the length of queue occurring at the 95th percentile level is the determining factor.

Per the Traffic Impact Analysis, the worst PM peak hour inbound traffic forecast at the Brady Lane entrance would be 74 vehicles. During the PM peak hour, the probability of zero vehicle queuing is 59 percent, the probability of a queue of one vehicle or less is 83 percent, and the probability of a two-vehicle queue or less is 93 percent. The probability of three vehicles or less during the PM peak hour would be approximately 97 percent. Given the project access point would be capable of accommodating up to four vehicles, the presence of the gates at the access points would not pose an appreciable safety problem.

Roadway Design Features and Incompatible Uses

The proposed project would not include any new sharp curves or dangerous intersections and would not be located in the vicinity of any such roadway features. The proposed project would include a number of improvements to Brady Lane and Vineyard Road along the project frontages. The Brady Lane improvements would be consistent with the City of Roseville design standards, while the Vineyard Road improvements would meet Placer County standards. In addition, the design of the on-site circulation system would not involve any features that would increase traffic hazards at the site. The project identification monument at the project access would be required to be placed outside of all roadway and utility easements, as well as the sight distance triangle of the access.

All roadway improvements would be designed consistent with applicable Placer County standards. Furthermore, the proposed project would not introduce incompatible uses, such as heavy-duty truck traffic, to area roadways during operations. Potential impacts related to project construction traffic are discussed under Impact 14-1 above.

Conclusion

Based on the above, the proposed gated access point at Brady Lane would not create a substantial vehicle safety risk. The proposed internal circulation system and off-site roadway improvements would be designed to minimize hazardous roadway design features, and the project would not introduce incompatible uses to area roadways. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

14-6 Result in inadequate emergency access or access to nearby uses. Based on the analysis below, the impact is *less than significant*.

Several factors determine whether a project has sufficient access for emergency vehicles, including the following:

1. Number of access points (both public and emergency access only);
2. Width of access points; and
3. Width of internal roadways.

The proposed project would include two access points for emergency vehicles: a dedicated EVA at the southern site boundary along Vineyard Road, and the primary site access at Brady Lane. The EVA, as well as the proposed private internal roadways, would be designed consistent with applicable Placer County standards. The Brady Lane access would be subject to City of Roseville standards. In addition, the proposed gated access at Brady Lane would be required to comply with the emergency vehicle access conditions established by Section 15.04.580 of the Placer County Code. As such, the internal roadways would comply with applicable Placer County and City of Roseville standards for roadway widths, and emergency vehicles would be afforded unimpeded access to the site. In addition, the proposed roadway improvements, including widening of Brady Lane and Vineyard Road, would not impede access to existing nearby uses. A ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

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

It should be noted that increased traffic volumes on local roadway facilities under cumulative conditions would not substantially alter performance related to bicycle facilities, pedestrian facilities, transit facilities and services, and emergency vehicle access. Rather, impacts to such facilities under Cumulative Plus Project conditions would be identical to those discussed above under Impact 14-4. In addition, construction activities associated with the project would be complete prior to the cumulative analysis year. Therefore, such topics are not discussed further in the cumulative analysis presented herein.

Cumulative Assumptions

The regional traffic model last updated for the Placer Vineyards Specific Plan EIR was selected as the most valid source of future background traffic volumes in the study area at locations in Placer County. The model reflects current land use assumptions for development in the DCWPCP area. As part of the Traffic Impact Analysis, the traffic model was run and forecasts were made for the Cumulative No Project scenario. The Cumulative Plus Project condition was identified by

manually adding the proposed project's trips to the No Project condition based on the regional distribution pattern derived from the traffic model.

Alternative assumptions were made for two locations within the City of Roseville and addressed by the City Year 2035 CIP traffic model. The Year 2035 Plus Amoruso Project traffic volume forecasts contained in the Amoruso Ranch DEIR traffic study were employed as the base Cumulative No Project conditions at the Foothills Boulevard/Baseline Road and Foothills Boulevard/Vineyard Road intersections.

The presence of other recent development projects that have not been addressed in the County's regional traffic model was considered in consultation with Placer County staff. For example, traffic volumes associated with the approved Placer County Sports and Event Center project were manually added to the background cumulative traffic volume forecasts. Trips associated with the Midweek Evening Volleyball Practice Scenario, as well as trips associated with the planned culinary facility, were assigned to the study area street system based on the distribution assumptions made in the Placer County Sports and Event Center EIR.

It should be noted that some study intersections will be improved under cumulative conditions based on projects already included in the County's CIP or City of Roseville 2035 CIP. Such improvements are detailed in the Traffic Impact Study (see Appendix K). The County CIP includes funds for improvements to Cook Riolo Road, from PFE Road to Baseline Road, and for Vineyard Road, from Crowder Lane to Foothills Boulevard, although the nature of such improvements is not defined. Table 14-14 provides a summary of the roadway geometries and classifications assumed to occur under cumulative conditions. All planned roadway improvements for which funding and timing has been identified were included in both the Cumulative No Project and Cumulative Plus Project conditions evaluated herein.

Table 14-14
Cumulative Roadway Geometry/Classification

Roadway	Segment	Classification	Lanes
PFE Rd	Watt Ave to Walerga Rd	Arterial – Low Access Control	4
	Walerga Rd to Cook Riolo Rd	Arterial – Low Access Control	2
	Cook Riolo Rd to Antelope Rd	Arterial – Low Access Control	2
	Antelope Rd to Hilltop Rd	Arterial – Moderate Access Control	4
Cook Riolo Rd	Baseline Rd to Vineyard Rd	Arterial – Low Access Control	2
	Vineyard Rd to Creekview Ranch School	Arterial – Low Access Control	2
	Creekview Ranch School to PFE Rd	Arterial – Low Access Control	2
Vineyard Rd	Crowder Ln to Cook Riolo Rd	Arterial – Low access Control	2
	Cook Riolo Rd to Brady Ln	Arterial – Low Access Control	2
Antelope Rd	PFE Rd to Great Valley Dr	Arterial – Moderate Access Control	4

Source: KD Anderson & Associates, Inc.

14-7 Conflict with a program, plan, ordinance or policy addressing study intersections, substantially increase traffic in relation to the planned future year traffic load and capacity of the study intersections, or exceed an established LOS standard under Cumulative Plus Project conditions. Based on the analysis below,

impacts to all study intersections under Cumulative Plus Project Conditions would be less than significant, with the exception of the Baseline Road / Brady Lane, Cook Riolo Road / Vineyard Road, and Vineyard Road / Brady Lane intersections. Even with mitigation, the project's incremental contribution to the significant cumulative impacts at the intersections would be *cumulatively considerable* and *significant and unavoidable*.

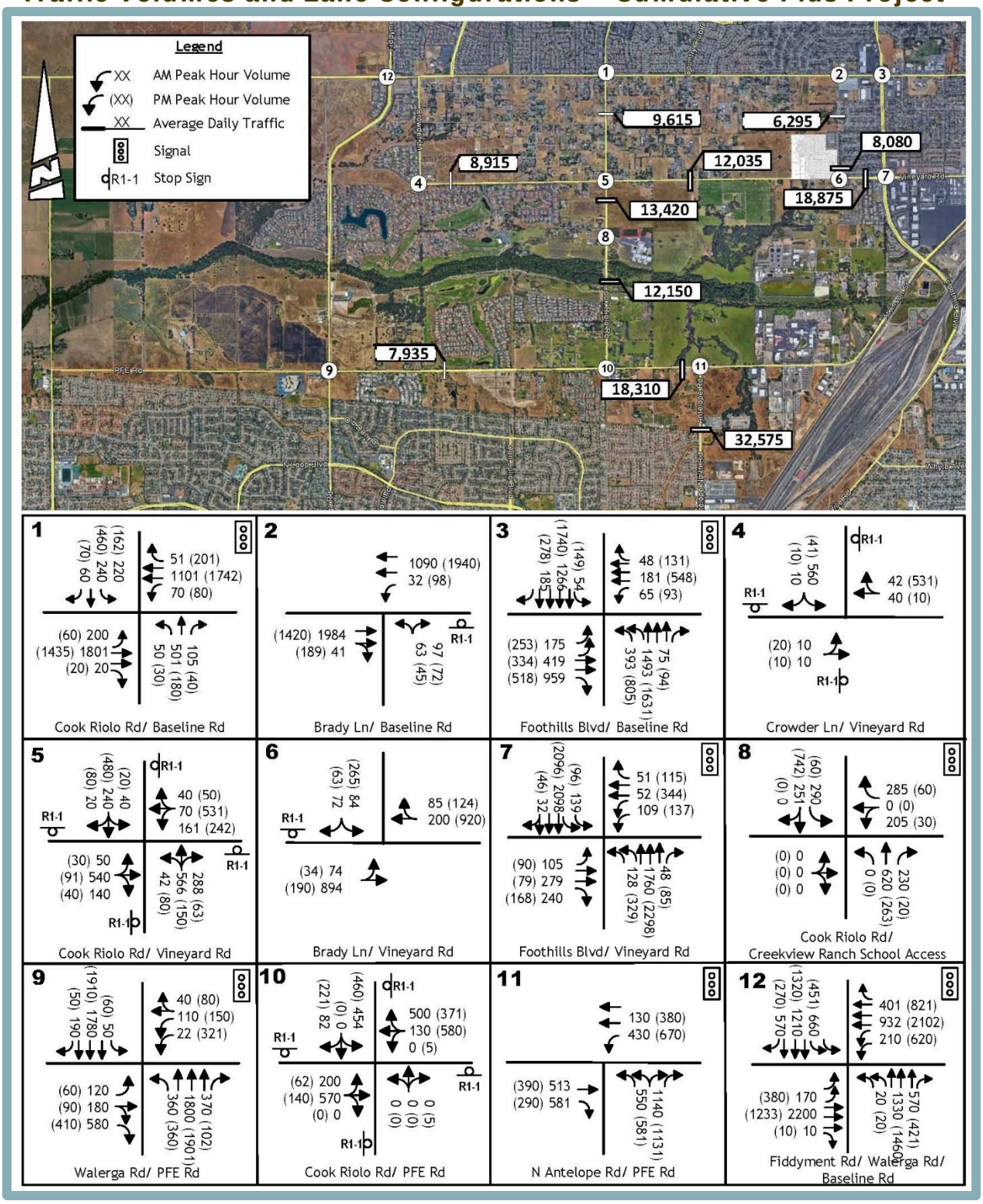
Figure 14-8 displays the Cumulative Plus Project conditions traffic volumes at each study intersection for both AM and PM peak hours. Table 14-15 below summarizes operations at each of the study intersections with the proposed 119 single-family units. Table 14-16 below summarizes operations at each of the study intersections with the proposed 119 single-family units plus 12 additional ADUs. As shown in the tables, the following study intersections operate unacceptably under Cumulative No Project conditions; the remaining intersections will operate acceptably:

1. Baseline Road/Cook Riolo Road/Woodcreek Oaks Boulevard (City of Roseville);
2. Baseline Road/Brady Lane (City of Roseville);
3. Baseline Road/Foothills Boulevard (City of Roseville);
5. Cook Riolo Road/Vineyard Road;
6. Vineyard Road/Brady Lane;
9. PFE Road/Walerga Road;
10. PFE Road/Cook Riolo Road;
11. PFE Road/Antelope Road;
12. Baseline Road/Walerga Road/Fiddyment Road (City of Roseville).

The proposed project would not result in degradation of any intersection from an acceptable LOS to an unacceptable LOS under Cumulative Plus Project conditions. Because the intersections listed above are already deficient under Cumulative No Project conditions, the project's impact is determined based on the following criteria, as shown on pages 4-22 and 4-24 of this chapter:

- Placer County Facilities
  - Signalized Intersections
    - Increase in V/C of 0.05 (5 percent) or greater; or
    - Increase in overall average intersection delay of 4.0 seconds or greater.
  - Unsignalized Intersections
    - MUTCD traffic signal warrant(s) met; <u>and</u>
    - Increase in delay of 5.0 seconds or more with the project.
- City of Roseville Facilities
  - Signalized Intersections
    - For intersections that currently operate at LOS D or E: cause operations to further worsen by one or more service levels;

Figure 14-8
Traffic Volumes and Lane Configurations – Cumulative Plus Project



Source: KD Anderson & Associates, Inc.

Table 14-15
Intersection LOS – Cumulative Plus Project Conditions

Location	Control	AM Peak Hour				PM Peak Hour				Traffic Signal Warrant Met?
		Cumulative No Project		Cumulative Plus Project		Cumulative No Project		Cumulative Plus Project		
		LOS	Average Delay or V/C	LOS	Average Delay or V/C	LOS	Average Delay or V/C	LOS	Average Delay or V/C	
1. Baseline Rd/Cook Riolo Rd/Woodcreek Oaks Blvd (R)	Signal	**F**	**97.5**	**F**	**98.0**	**D**	**54.5**	**D**	**54.5**	N/A
2. Baseline Rd/Brady Ln (R) Northbound approach Westbound left turn	NB Stop	F C	**>300** 22.0	F C	**>300** 22.0	**F** C	**>300** 17.5	**F** **C**	**>300** 18.5	YES
	Signal and 2nd EB thru lane	*B*	*17.0*	*B*	*18.0*	*B*	*10.0*	*B*	*12.0*	
3. Baseline Rd/Foothills Blvd (R)	Signal	**D**	**46.5**	**D**	**46.5**	**D**	**50.0**	**D**	**50.5**	N/A
4. Vineyard Rd/Crowder Ln (overall)* Southbound approach Eastbound left turn	SB Stop	(C) C A	(17.0) 17.0 7.5	(C) C A	(17.0) 17.0 7.5	(B) B A	(11.5) 12.0 9.0	(B) B A	(11.5) 12.0 9.0	No
5. Cook Riolo Rd/Vineyard Rd	AWS	**F**	**>300**	**F**	**(>300)**	**F**	**294.5**	**F**	**297.5**	YES
	Roundabout (1)	***F***	***102.5***			***F***	***57.0***			
	Roundabout (2)	*C*	*15.0*	*C*	*16.0*	*B*	*11.5*	*B*	*11.5*	
6. Vineyard Rd/Brady Ln	AWS	**F**	**160.5**	**F**	**191.5**	**F**	**248.5**	**F**	**292.5**	YES
	Roundabout (1)	*B*	*12.0*	*B*	*13.5*	*C*	*15.5*	*C*	*18.0*	
	Signal	*A*	*8.5*	*B*	*10.0*	*D*	*36.5*	*D*	*50.5*	
7. Vineyard Rd/Foothills Blvd (R)	Signal	C	32.5	C	34.5	C	31.5	C	33.5	N/A
8. Cook Riolo Rd/Creekview Ranch School	Signal	D	36.5	D	46.0	A	7.0	A	7.0	N/A
9. PFE Rd/Walerga Rd	Signal	**F**	**80.0**	**F**	**80.0**	**F**	**86.5**	**F**	**86.5**	N/A
10. PFE Road/Cook Riolo Rd	AWS	**F**	**281.0**	**F**	**282.0**	**F**	**>300**	**F**	**>300**	YES
	Roundabout (1)	*C*	*19.5*	*C*	*20.0*	*B*	*14.0*	*B*	*14.0*	
11. PFE Rd/Antelope Rd	Signal	**F**	**176.0**	**F**	**176.0**	**F**	**170.0**	**F**	**170.0**	N/A
12. Baseline Rd/Walerga Rd/Fiddyment Rd (R)	Signal	**F**	**116.5**	**F**	**116.5**	**F**	**115.0**	**F**	**115.5**	N/A

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Table 14-15
Intersection LOS – Cumulative Plus Project Conditions

Location	Control	AM Peak Hour				PM Peak Hour				Traffic Signal Warrant Met?
		Cumulative No Project		Cumulative Plus Project		Cumulative No Project		Cumulative Plus Project		
		LOS	Average Delay or V/C	LOS	Average Delay or V/C	LOS	Average Delay or V/C	LOS	Average Delay or V/C	
13. Brady Ln/Project Access (overall)* Eastbound approach Northbound left turn	EB Stop	-	-	(A) A A	(9.1) 9.5 7.5	-	-	(A) B A	(9.5) 11.0 8.0	No

Notes:
- (R) indicates City of Roseville jurisdiction. Minimum LOS C standard applies.
- **Bold** indicates minimum LOS threshold exceeded; **Highlighted** values indicate a significant impact.
- Overall Average Delay = Σ (Delay x Volume of each delayed movement) / Σ Volume of each delayed movement.

Source: KD Anderson & Associates, Inc.

Table 14-16
Intersection LOS – Cumulative Plus Project Conditions: With 12 ADUs

Location	Control	AM Peak Hour				PM Peak Hour				Traffic Signal Warrant Met?
		Cumulative No Project		Cumulative Plus Project		Cumulative No Project		Cumulative Plus Project		
		LOS	Average Delay or V/C	LOS	Average Delay or V/C	LOS	Average Delay or V/C	LOS	Average Delay or V/C	
1. Baseline Rd/Cook Riolo Rd/Woodcreek Oaks Blvd (R)	Signal	**F**	**97.5**	**F**	**98.0**	**D**	**54.5**	**D**	**54.5**	N/A
2. Baseline Rd/Brady Ln (R) Northbound approach Westbound left turn	NB Stop	F C	**>300** 22.0	F C	**>300** 22.0	**F** C	**>300** 17.5	**F** **C**	**>300** 18.5	YES
	Signal and 2nd EB thru lane	*B*	*17.0*	*B*	*18.0*	*B*	*10.0*	*B*	*12.0*	
3. Baseline Rd/Foothills Blvd (R)	Signal	**D**	**46.5**	**D**	**46.5**	**D**	**50.0**	**D**	**50.5**	N/A
4. Vineyard Rd/Crowder Ln (overall)* Southbound approach Eastbound left turn	SB Stop	(C) C A	(17.0) 17.0 7.5	(C) C A	(17.0) 17.0 7.5	(B) B A	(11.5) 12.0 9.0	(B) B A	(11.5) 12.0 9.0	No
5. Cook Riolo Rd/Vineyard Rd	AWS	**F**	**>300**	**F**	**(>300)**	**F**	**294.5**	**F**	**297.5**	YES
	Roundabout (1)	***F***	***102.5***			***F***	***57.0***			
	Roundabout (2)	*C*	*15.0*	*C*	*16.0*	*B*	*11.5*	*B*	*11.5*	
6. Vineyard Rd/Brady Ln	AWS	**F**	**160.5**	**F**	**194.5**	**F**	**248.5**	**F**	**295.0**	YES
	Roundabout (1)	*B*	*12.0*	*B*	*13.5*	*C*	*15.5*	*C*	*18.0*	
	Signal	*A*	*8.5*	*B*	*10.0*	*D*	*36.5*	*D*	*50.5*	
7. Vineyard Rd/Foothills Blvd (R)	Signal	C	32.5	C	34.5	C	31.5	C	33.5	N/A
8. Cook Riolo Rd/Creekview Ranch School	Signal	D	36.5	D	47.0	A	7.0	A	7.0	N/A
9. PFE Rd/Walerga Rd	Signal	**F**	**80.0**	**F**	**80.0**	**F**	**86.5**	**F**	**86.5**	N/A
10. PFE Road/Cook Riolo Rd	AWS	**F**	**281.0**	**F**	**282.0**	**F**	**>300**	**F**	**>300**	YES
	Roundabout (1)	*C*	*19.5*	*C*	*20.0*	*B*	*14.0*	*B*	*14.0*	
11. PFE Rd/Antelope Rd	Signal	**F**	**176.0**	**F**	**176.0**	**F**	**170.0**	**F**	**170.0**	N/A
12. Baseline Rd/Walerga Rd/Fiddyment Rd (R)	Signal	**F**	**116.5**	**F**	**116.5**	**F**	**115.0**	**F**	**115.5**	N/A

(Continued on next page)

Table 14-16
Intersection LOS – Cumulative Plus Project Conditions: With 12 ADUs

Location	Control	AM Peak Hour				PM Peak Hour				Traffic Signal Warrant Met?
		Cumulative No Project		Cumulative Plus Project		Cumulative No Project		Cumulative Plus Project		
		LOS	Average Delay or V/C	LOS	Average Delay or V/C	LOS	Average Delay or V/C	LOS	Average Delay or V/C	
13. Brady Ln/Project Access (overall)*	EB Stop	-	-	(A)	(9.1)	-	-	(A)	(9.5)	No
Eastbound approach				A	9.5			B	11.0	
Northbound left turn				A	7.5			A	8.0	

Notes:
- (R) indicates City of Roseville jurisdiction. Minimum LOS C standard applies.
- **Bold** indicates minimum LOS threshold exceeded; **Highlighted** values indicate a significant impact.
- Overall Average Delay = Σ (Delay x Volume of each delayed movement) / Σ Volume of each delayed movement.

Source: KD Anderson & Associates, Inc.

        - For intersections that currently operate at LOS F: cause intersection delay to worsen by 12.5 seconds or greater; or
        - Cause the overall percentage of signalized intersections throughout the City of Roseville operating at LOS C or better during the AM and PM peak hours to fall below 70 percent.
    - Unsignalized Intersections
        - For intersections currently (or projected to be) operating at less than LOS C, cause operations to further worsen by one or more service levels and meet the MUTCD peak hour signal warrant; or
        - For intersections currently (or projected to be) operating at LOS F, cause intersection delay to worsen by 12.5 seconds or greater and meet the MUTCD peak hour signal warrant.

The following sections provide an analysis of potential impacts related to operations at the listed intersections.

Baseline Road/Cook Riolo Road/Woodcreek Oaks Boulevard (Roseville)

In the City of Roseville, the Baseline Road/Cook Riolo Road/Woodcreek Oaks Boulevard intersection would operate at LOS F in the AM peak hour and LOS D in the PM peak hour with and without the project. The project would increase average vehicle delay by 0.5-second during the AM peak hour; during the PM peak hour, delay would not increase. Because the incremental increase in delay resulting from the project is less than the applicable 12.5 second standard employed by the City of Roseville, under City of Roseville policy, the project's incremental contribution to the cumulative impact would be less than significant.

Baseline Road/Brady Lane (Roseville)

In the City of Roseville, Baseline Road/Brady Lane is projected to operate at LOS F during the AM and PM peak hours with and without the project. The maximum incremental increase in side street delay resulting from the addition of project traffic would be approximately 149 seconds, which exceeds the measure applied for Roseville intersections. In addition, traffic signal warrants would continue to be met. Thus, the project's incremental contribution to the cumulative impact would be cumulatively considerable.

Baseline Road/Foothills Boulevard (Roseville)

In the City of Roseville, the Baseline Road/Foothills Boulevard intersection is projected to operate at LOS D during the AM and PM peak hours with and without the project. However, as noted previously, LOS D is considered acceptable for the intersection per the City. Thus, a less-than-significant cumulative impact would occur.

Cook Riolo Road/Vineyard Road

In Placer County, the Cook Riolo Road/Vineyard Road intersection is projected to operate at LOS F in the AM and PM peak hours with and without the project. Because conditions in excess of LOS D are projected with and without the project, the significance of project impact is based on the incremental change in delay caused by the project. The incremental increase in delay occurring as a result in the project would exceed the 5.0 second standard established by the DCWPCP and, thus, the project's incremental contribution to the cumulative impact would be cumulatively considerable.

Vineyard Road/Brady Lane

In Placer County, the Vineyard Road/ Brady Lane intersection is projected to operate at LOS F during the AM and PM peak hours with and without the project. Because conditions in excess of LOS D are projected with and without the project, the significance of project impact is based on the incremental change in delay caused by the project. The incremental increase in delay occurring as a result of the project would exceed the 5.0 second standard established by the DCWPCP and, thus, the project's incremental contribution to the cumulative impact would be cumulatively considerable.

PFE Road/Walerga Road

In Placer County, the PFE Road/Walerga Road intersection is projected to operate at LOS F in the AM and PM peak hours; however, such conditions are considered acceptable per Goal 6 in the Transportation and Circulation Element of the DCWPCP. In addition, the project would not increase average vehicle delay during either peak hour. Thus, the project's incremental contribution to the cumulative impact would be less than cumulatively considerable.

PFE Road/Cook Riolo Road

In Placer County, the PFE Road/Cook Riolo Road intersection is projected to operate at LOS F in both the AM and PM peak hours; however, such conditions are considered acceptable per Goal 6 in the Transportation and Circulation Element of the DCWPCP. In addition, the increase in delay at the intersection would be below the County's five-second threshold. Thus, the project's incremental contribution to the cumulative impact would be less than cumulatively considerable.

PFE Road/Antelope Road

In Placer County, the PFE Road/Antelope Road intersection is projected to operate at LOS F in the AM and PM peak hours; however, such conditions are considered acceptable per Goal 6 in the Transportation and Circulation Element of the DCWPCP. In addition, the project would not increase average vehicle delay during either peak hour. Thus, the project's incremental contribution to the cumulative impact would be less than cumulatively considerable.

Baseline Road/Walerga Road/Fiddyment Road (Roseville)

In the City of Roseville, the Baseline Road/Walerga Road/Fiddyment Road intersection would operate at LOS F during the AM and PM peak hours with and without the project. Per the City, LOS D is considered acceptable for this intersection. However, the project would increase average vehicle delay by 0.5-second during the PM peak hour; during the AM peak hour, delay would not increase. Because the incremental increase in delay resulting from the project is less than the applicable 12.5 second standard employed by the City of Roseville, the project's incremental contribution to the cumulative impact would be less than significant under City of Roseville policy.

Conclusion

Based on the above, the project would not conflict with applicable County or City thresholds at the Baseline Road/Cook Riolo Road/Woodcreek Oaks Boulevard, PFE Road/Walerga Road, PFE Road/Cook Riolo Road, PFE Road/Antelope Road, or Baseline Road/Walerga Road/Fiddyment Road intersections. However, the addition of project

traffic under Cumulative Plus Project conditions could contribute to significant cumulative impacts at the following study intersections:

2. Baseline Road/Brady Lane (City of Roseville);
5. Cook Riolo Road/Vineyard Road; and
6. Vineyard Road/Brady Lane.

Therefore, under Cumulative Plus Project Conditions, the proposed project's incremental contribution to cumulative impacts could be ***cumulatively considerable***. The potential inclusion of 12 additional on-site ADUs would not result in any additional significant impacts.

Mitigation Measure(s)

The following sections provide a discussion of potential circulation system improvements to address impacts to the three study intersections listed above, and the reasons for their infeasibility.

Baseline Road/Brady Lane

As discussed for Impact 14-2, the impact to this intersection would require either installation of a traffic signal at the Baseline Road/Brady Lane intersection or restricting left-turn movements on the northbound approach, both of which would improve operations at the intersection to acceptable (i.e., LOS C) levels. However, as discussed under Impact 14-2 above, given that the intersection is located within the City of Roseville, outside of the County's jurisdiction, completion of the required improvements cannot be guaranteed. Furthermore, the City Engineer has indicated that the City of Roseville would not require a signal as a result of the proposed project, and restricting left turns at the intersection is not currently recommended by the City.[9] Thus, the impact would remain significant and unavoidable.

Cook Riolo Road/Vineyard Road

Installation of a two-lane roundabout would improve operations to an acceptable LOS for both the AM and PM peak hours. However, this type of capacity enhancement is not included in the County's CIP for the DCWPCP area and would not be consistent with the DCWPCP. Thus, the impact would remain significant and unavoidable.

Vineyard Road/Brady Lane

Installation of a single-lane roundabout would improve operations to an acceptable LOS (LOS C or better) for both the AM and PM peak hours. Such an improvement is suggested in the DCWPCP, but is not included in the County's CIP for the DCWPCP area. While the County may elect to include installation of a roundabout at the Vineyard Road/Brady Lane intersection in the CIP in the future, inclusion of the improvement cannot be guaranteed. Thus, the impact would remain significant and unavoidable.

Conclusion

The Baseline Road/Brady Lane is located outside of the County's jurisdiction, and completion of the required improvements is not currently recommended by the City of Roseville. For the Cook Riolo Road/Vineyard Road and Vineyard Road/Brady Lane

[9] Mark Stout, City Engineer, City of Roseville. Personal communication [email] with KD Anderson & Associates, Inc.

intersections, the required improvements are not included in the County's CIP and, thus, completion of the improvements cannot be guaranteed. Therefore, even with payment of applicable traffic impact fees, the project's incremental contribution to the cumulative impacts at the affected intersections would remain *cumulatively considerable* and *significant and unavoidable*.

14-7(a) *Prior to issuance of any Building Permits, this project shall be subject to the payment of traffic impact fees that are in effect in this area (Dry Creek), pursuant to applicable Ordinances and Resolutions. The applicant is notified that the following traffic mitigation fee(s) shall be required and shall be paid to Placer County DPWF:*

A. County Wide Traffic Limitation Zone: Article 15.28.010, Placer County Code;
B. South Placer Regional Transportation Authority (SPRTA);
C. "Bizz Johnson" Highway Interchange Joint Powers Authority; and
D. Placer County / City of Roseville JPA (PC/CR).

The current total combined estimated fee is $593,810 (based on $4,877 per single family residential dwelling unit). An additional amount of $37,125.60 (based on $3,093.80 per accessory dwelling unit) would be added to the total fee if the additional 12 secondary units are included with the project. The fees were calculated using the information supplied. If either the use or the number of units changes, then the fees will change. The fees to be paid shall be based on the fee program in effect at the time the application is deemed complete.

14-7(b) *Prior to Improvement Plan approval, the applicant shall pay their fair share contribution toward the cost of constructing a future one-lane roundabout at the intersection of Brady Lane and Vineyard Road. The applicant shall develop an engineer's cost estimate for said improvement and submit the estimate to the ESD/DPW for review and approval in order to determine the total dollar amount owed. The applicant's fair share has been identified as 6.9 percent.*

If the Placer County CIP is updated to include the one-lane roundabout improvement at the intersection of Brady Lane and Vineyard Road, then the payment of the Countywide Traffic Mitigation Fee at Building Permit issuance, as required in Mitigation Measure 14-7(a) will satisfy this fair share contribution requirement.

14-8 Conflict with a program, plan, ordinance or policy addressing study roadway segments, substantially increase traffic in relation to the planned future year traffic load and capacity of the study roadway segments, or exceed an established LOS standard under Cumulative Plus Project conditions. Based on the analysis below, the impact is *less than cumulatively considerable*.

Table 14-17 below summarizes operations at each of the study roadway segments under the Cumulative Plus Project Condition with the proposed 119 single-family units. Table 14-18 below summarizes operations at each of the study roadway segments with the proposed 119 single-family units plus 12 additional ADUs. As shown in the tables, the segment of PFE Road from Cook Riolo Road to Antelope Road would operate unacceptably (LOS F) with and without the project. In addition, the segment of Antelope Road from PFE Road to Great Valley Drive would operate unacceptably (LOS E) with and without the project. Both roadway segments are located within Placer County. All other study roadway segments would operate acceptably under Cumulative Plus Project conditions.

Because the two unacceptable study roadway segments noted above are already deficient under Cumulative No Project conditions, the project's impact is determined based on whether the addition of project traffic would increase V/C ratio by 0.05 or greater or result in an increase in ADT of 100 or more project-generated vehicle trips per lane (vpl). The following sections provide an analysis of potential impacts related to operations at the two study roadway segments.

PFE Road from Cook Riolo Road to Antelope Road

PFE Road from Cook Riolo Road to Antelope Road will operate at LOS F with and without the project. While the DCWPCP accepts LOS F on this segment, because the incremental change in V/C does not exceed the 0.05 significance threshold and the incremental increase in volume is less than the 100 daily vehicles per lane threshold allowed under County guidelines, the project's incremental contribution to the cumulative impact would be less than cumulatively considerable.

Antelope Road from PFE Road to Great Valley Drive

Antelope Road from PFE Road to Great Valley Drive is projected to operate at LOS E. The DCWPCP accepts LOS E on this roadway. Because the incremental change in V/C does not exceed the 0.05 significance threshold and the incremental increase in volume is less than the 100 daily vehicles per lane threshold allowed under County guidelines, the project's incremental contribution to the cumulative impact would be less than cumulatively considerable.

Table 14-17
Roadway Segment LOS – Cumulative Plus Project Conditions

Roadway	Location	Standard			Cumulative No Project			Cumulative Plus Project				
								Daily Volume				
		LOS	Volume Threshold Per Lane (veh/ln)	Max 2-Way Volume at LOS Standard	Daily Volume	V/C	LOS	Project Only	Total	V/C	LOS	Change in V/C
1. PFE Road	Walerga Rd to Cook Riolo Rd	D	6,870	13,740	7,900	0.53	A	35	7,935	0.53	A	0.00
2. PFE Road	Cook Riolo Rd to Antelope Rd	**F**	**6,870**	**13,740**	**18,300**	**1.22**	**F**	**10**	**18,310**	**1.22**	**F**	**0.00**
3. Cook Riolo Road	Baseline Rd to Vineyard Rd	F	6,870	13,740	9,600	0.64	B	15	9,615	0.64	B	0.00
4. Cook Riolo Road	Vineyard Rd to Creekview Ranch School	F	6,870	13,740	13,300	0.89	D	120	13,420	0.89	D	0.01
5. Cook Riolo Road	Creekview Ranch School to PFE Rd	F	6,870	13,740	12,100	0.81	D	50	12,150	0.81	D	0.00
6. Antelope Road	PFE Rd to Great Valley Dr	**E**	18,000[2]	36,000	**32,550**	**0.90**	**E**	**25**	**32,575**	**0.91**	**E**	**0.01**
7. Vineyard Road	Crowder Ln to Cook Riolo Rd	D	6,870	13,740	8,900	0.59	A	15	8,915	0.59	A	0.00
8. Vineyard Road	Cook Riolo Rd to Brady Ln	D	6,870	13,740	11,900	0.79	C	135	12,035	0.80	D	0.01
9. Vineyard Road	Brady Ln to Foothills Blvd (R)	D	7,500	15,000	18,250	1.22	F	625	18.875	1.26	F	0.04
10.Brady Lane	Baseline Rd to Project (R)	D	5,700	11,400	5,900	0.28	C	395	6,295	0.30	C	0.02
11.Brady Lane	Project to Vineyard Rd (R)	D	5,700	11,400	7,360	0.35	C	730	8,090	0.39	D	0.04

Notes:
- All study roadways are two lanes.
- **Bold** values exceed minimum LOS threshold.
- **Highlighted** values are a significant impact.
- (R) is City of Roseville jurisdiction.

Source: KD Anderson & Associates, Inc.

Table 14-18
Roadway Segment LOS – Cumulative Plus Project Conditions: With 12 ADUs

Roadway	Location	Standard			Cumulative No Project			Cumulative Plus Project Plus 12 ADUs				
								Daily Volume				
		LOS	Volume Threshold Per Lane (veh/ln)	Max 2-Way Volume at LOS Standard	Daily Volume	V/C	LOS	Project + ADUs Only	Total	V/C	LOS	Change in V/C
1. PFE Road	Walerga Rd to Cook Riolo Rd	D	6,870	13,740	7,900	0.53	A	37	7,937	0.53	A	0.00
2. PFE Road	Cook Riolo Rd to Antelope Rd	**F**	**6,870**	**13,740**	**18,300**	**1.22**	**F**	**12**	**18,312**	**1.22**	**F**	**0.00**
3. Cook Riolo Road	Baseline Rd to Vineyard Rd	F	6,870	13,740	9,600	0.64	B	15	9,615	0.64	B	0.00
4. Cook Riolo Road	Vineyard Rd to Creekview Ranch School	F	6,870	13,740	13,300	0.89	D	128	13,428	0.89	D	0.01
5. Cook Riolo Road	Creekview Ranch School to PFE Rd	F	6,870	13,740	12,100	0.81	D	69	12,154	0.81	D	0.00
6. Antelope Road	PFE Rd to Great Valley Dr	**E**	18,000[2]	36,000	**32,550**	**0.90**	**E**	**27**	**32,577**	**0.91**	**E**	**0.01**
7. Vineyard Road	Crowder Ln to Cook Riolo Rd	D	6,870	13,740	8,900	0.59	A	16	8,916	0.59	A	0.00
8. Vineyard Road	Cook Riolo Rd to Brady Ln	D	6,870	13,740	11,900	0.79	C	144	12,044	0.80	D	0.01
9. Vineyard Road	Brady Ln to Foothills Blvd (R)	D	7,500	15,000	18,250	1.22	F	673	18,923	1.26	F	0.04
10.Brady Lane	Baseline Rd to Project (R)	D	5,700	11,400	5,900	0.28	C	426	6,326	0.30	C	0.02
11.Brady Lane	Project to Vineyard Rd (R)	D	5,700	11,400	7,360	0.35	C	787	8,147	0.39	D	0.04

Notes:
- All study roadways are two lanes.
- **Bold** values exceed minimum LOS threshold.
- **Highlighted** values are a significant impact.
- (R) is City of Roseville jurisdiction.

Source: KD Anderson & Associates, Inc.

Conclusion

Based on the above, development of the proposed project would increase the volume of traffic along the study roadway segments. However, the project would not conflict with applicable County significance thresholds at the segment of PFE Road from Cook Riolo Road to Antelope Road or the segment of Antelope Road from PFE Road to Great Valley Drive. All other study roadway segments would continue to operate within accepted Placer County and Sacramento County minimum LOS thresholds. With required payment of applicable traffic impact fees to fund necessary roadway improvements included in the County's CIP, the proposed project's incremental contribution to cumulative impacts at the study roadway segments would be ***less than cumulatively considerable***. The potential inclusion of 12 on-site ADUs, in addition to the 119 single-family units, would not result in the generation of any significant cumulative roadway impacts.

Mitigation Measure(s)

None required.

15. Utilities and Service Systems

15. UTILITIES AND SERVICE SYSTEMS

15.1 INTRODUCTION

The Utilities and Service Systems chapter of the EIR summarizes the setting information and identifies potential new demands resulting from the proposed project's water supply, wastewater systems, and solid waste disposal, as well as electrical, natural gas, and telecommunications utilities required to serve the project. Information for the Utilities and Service Systems chapter was primarily drawn from the Placer County General Plan[1] and associated EIR,[2] the Dry Creek-West Placer Community Plan (DCWPCP),[3] the *California American Water Company's Northern Division Sacramento District 2015 Urban Water Management Plan* (UWMP),[4] and a technical memorandum prepared for the proposed project by Woodward & Curran (see Appendix L).[5]

15.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing utilities and service systems in the project area, including water supply, wastewater, solid waste, electrical, natural gas, and telecommunications infrastructure.

Water Supply and Delivery Infrastructure

Water supply for the project area is provided by the Northern Division Sacramento District of the California American Water Company (CAL-AM) through an agreement with the Placer County Water Agency (PCWA). The Sacramento District of CAL-AM's Northern Division is comprised of ten service areas, each of which contains a Public Water System (PWS). All of the PWS within CAL-AM's Northern Division are regulated by the State Water Resources Control Board's (SWRCB) Division of Drinking Water (DDW). As shown in Figure 15-1 and Figure 15-2, the proposed project site is located within the West Placer PWS. On May 14, 2018, CAL-AM provided a Conditional Will Serve Letter affirming that the project site is within CAL-AM's West Placer Service Area.[6]

CAL-AM's West Placer Service Area encompasses 11,154 acres within western Placer County, bounded by the City of Roseville limits to the east and the Sutter County line to the west. The Antelope Service Area bounds the West Placer Service Area to the south. Per the 2015 UWMP, approximately 4,940 people reside in the West Placer Service Area.[7]

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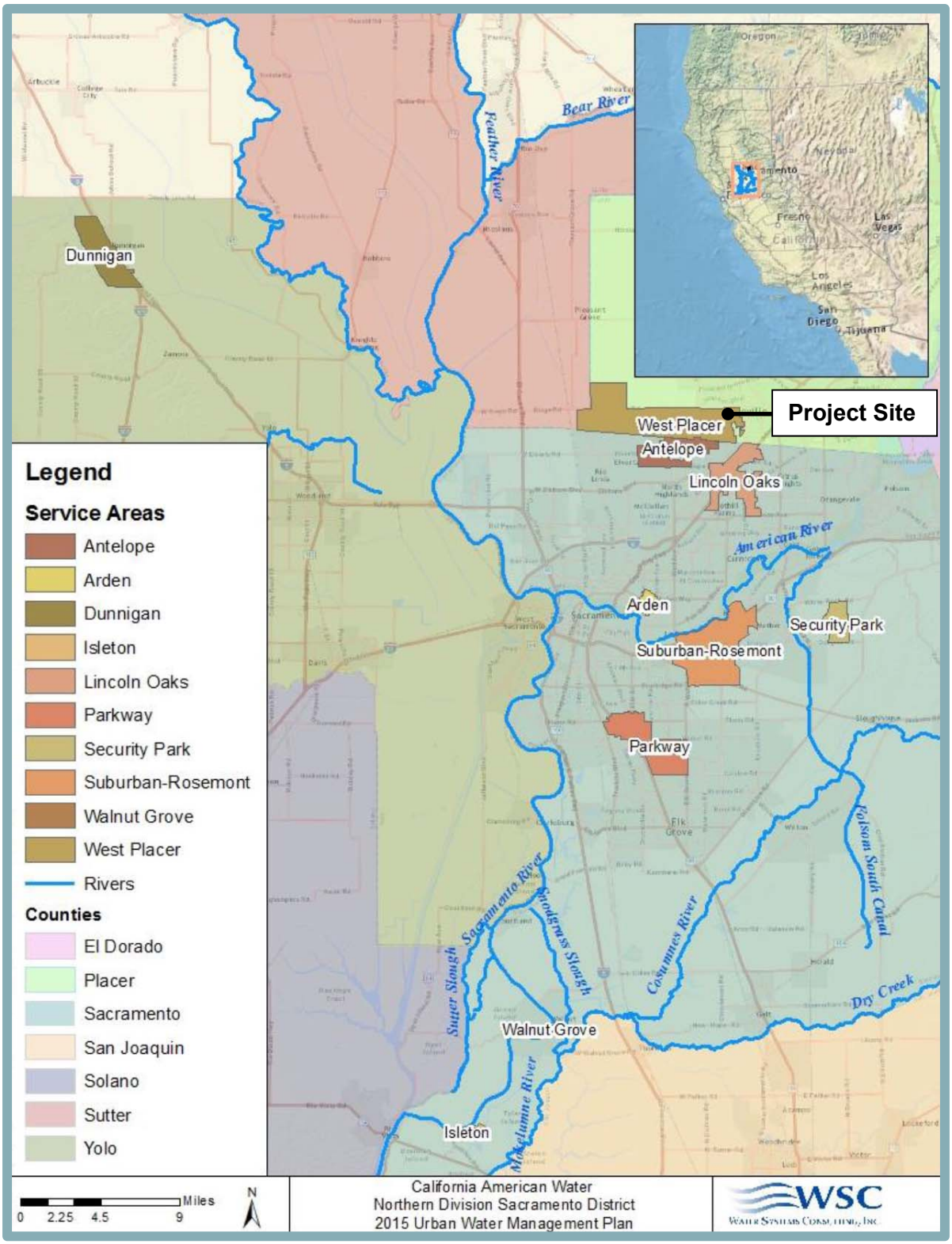
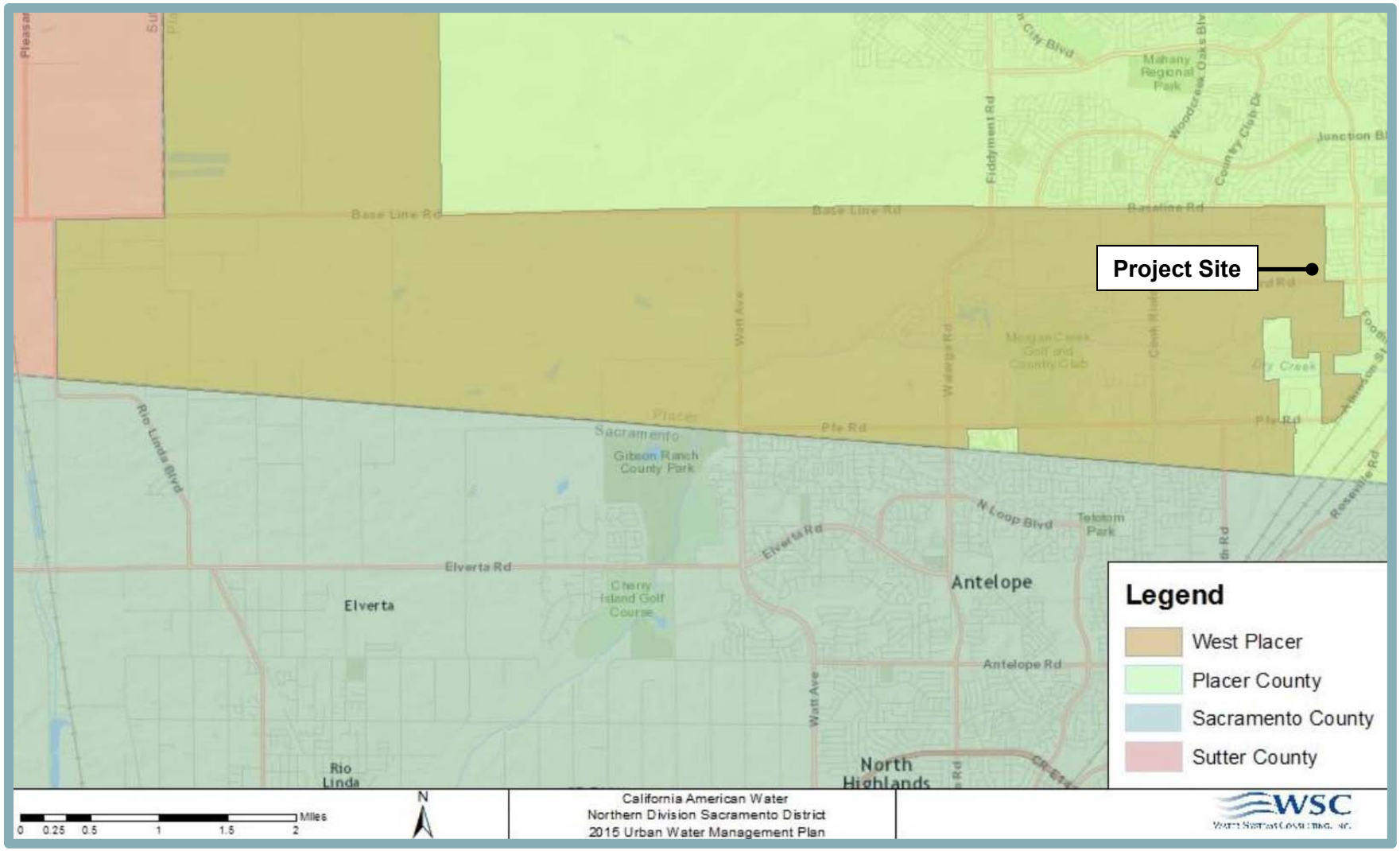
1 Placer County. *Countywide General Plan Policy Document*. August 1994 (updated May 2013).
2 Placer County. *Countywide General Plan EIR*. July 1994.
3 Placer County. Dry Creek-West Placer Community Plan. May 14, 1990.
4 California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan*. June 30, 2016.
5 Woodward & Curran. *Technical Memorandum, Collection System Flow Study for Brady-Vineyard Development.* May 8, 2019.
6 California American Water. *Request for Water Service – Conditional Will Serve Letter*. May 14, 2018.
7 California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan*. June 30, 2016.

Figure 15-1
CAL-AM Sacramento District Service Areas



Source: California American Water, 2016.

Figure 15-2
CAL-AM West Placer Service Area



Source: California American Water, 2016.

Water Supply

In 2016, CAL-AM and PCWA entered into a wholesale water supply agreement, which includes an agreement that PCWA will supply CAL-AM with surface water through December 2034.[8] The PCWA's estimated average year supply is presented in Table 15-1 below, in units of acre-feet per year (AFY). A portion of the total PCWA supply presented in Table 15-1 would be directed to CAL-AM for use in supplying the West Placer Service Area.

Table 15-1
PCWA Average Year Supply (AFY)

PCWA Supply Source	2020	2025	2030	2035
Middle Fork Project	120,000	120,000	120,000	120,000
Central Valley Project	0	32,000	32,000	32,000
Pacific Gas & Electric Co. (PG&E)	110,400	110,400	110,400	110,400
Pre-1914 Appropriations	3,400	3,400	3,400	3,400
Recycled Water	0	2,500	5,000	7,000
Total	**233,800**	**268,300**	**270,800**	**272,800**

Source: California American Water Company, 2015 UWMP [Table 5-5], 2016.

CAL-AM is required to use only surface water within the West Placer Service Area per the CAL-AM's franchise agreement with Placer County, with the exception of a specific part of the service area not inclusive of the project site. Thus, the project area does not rely on groundwater as a water supply source.

Water Demand

The Sacramento District of CAL-AM's Northern Division has estimated the demand for the West Placer Service Area, and the past and projected water demands are presented in Table 15-2. Demand estimates include projected growth for the West Placer Service Area.[9] In addition to demand estimates for the West Placer Service Area, Table 15-2 presents a comparison of the estimated water supply for the area.

Table 15-2
West Placer Service Area Supply and Demand Comparison (AFY)

	2015	2020	2025	2030	2035
West Placer Service Area Demand	753	2,559	3,548	4,918	6,819
West Placer Service Area Water Supply	766	2,656	3,682	5,105	7,078
Surplus	13	97	134	187	259

Source: California American Water Company, 2015 UWMP [Tables 4-2 and 4-12], 2016.

As shown in the table above, the Northern Division Sacramento District of CAL-AM has estimated that the PCWA water supplies to the West Placer Service Area will exceed the estimated demand from the Service Area through the year 2035.

8 Placer County Water Agency and California-American Water Company. *Agreement Between Placer County Water Agency and California American Water for Water Supply*. July 6, 2015.

9 California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan*. June 30, 2016.

As noted in the 2015 UWMP, PCWA will supply sufficient water to meet the entire demand within the West Placer service area, regardless of hydrologic condition.[10] CAL-AM expects that the contract between CAL-AM and PCWA will be renegotiated if CAL-AM requires additional water. The PCWA's 2015 UWMP states in Chapter 7 that "PCWA has sufficient water supplies through the projected build-out conditions during a series of multiple dry year conditions." Therefore, CAL-AM is anticipated to have sufficient water supplies to meet the demands of the West Placer Service Area until at least 2035.

It should be noted that although CAL-AM anticipates PCWA supplies to the West Placer Service Area will exceed supply through the year 2035, when the agreement between PCWA and CAL-AM was initiated, PCWA agreed to provide a maximum daily demand of 2,020,983 gallons per day and a maximum delivery rate of 1,684 gallons per minute. The agreement specified that at such time that water delivery to CAL-AM reaches 80 percent of the maximum delivery rate or daily demand, CAL-AM is required to purchase additional units of capacity. Furthermore, the agreement notes that maximum delivery rate and daily volumes may be exceeded for emergency and maintenance purposes.[11]

Water Supply Reliability

During previous single- and multiple-dry years, CAL-AM has maintained the ability to supply 100 percent of average/normal water year supply to the West Placer Service Area through distributions from the PCWA. Under existing agreements, CAL-AM anticipates that PCWA will continue to have sufficient water supplies through projected buildout conditions, including the West Placer Service Area, during a series of multiple-dry-year conditions.[12]

Although CAL-AM anticipates meeting all water demand under single- and multiple-dry years, CAL-AM maintains a Water Shortage Contingency Plan. Should water supplies be insufficient to meet average demand, CAL-AM has the authority to implement voluntary conservation measures following notification of the California Public Utilities Commission (CPUC) of the need for such measures. Should further water conservation measures be needed, CAL-AM would request authorization from the CPUC to implement mandatory conservation measures. The request for authorization to the CPUC from CAL-AM would include the percent reduction needed by CAL-AM and would specify the measures needed to achieve such reductions.[13]

Water Quality

The PCWA provides the West Placer Service Area with high quality surface water, which originates in Folsom Lake. Disinfection by-product formation and pressure variations have recently been reduced, which has improved water quality in the service area.[14]

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[10] California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan* [pg. 6-4]. June 30, 2016.

[11] Placer County Water Agency and California American Water Company. *Agreement Between Placer County Water Agency and California American Water for Water Supply*. July 6, 2015.

[12] California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan*. June 30, 2016.

[13] *Ibid.*

[14] *Ibid.*

Water Delivery Infrastructure

Water distribution in the West Placer Service Area is administered by CAL-AM.[15] Currently, two existing 12-inch water mains are located within Vineyard Road to the southeast of the project site. In addition, a 12-inch water main is located in Brady Lane to the east of the site.

Wastewater Conveyance and Treatment

The project site is located outside of existing Placer County Sewer service districts. However, the entitlements for the proposed project include a request for annexation into Placer County Service Area 28, Zone 173, for sanitary sewer service, subject to approval by the Placer County Board of Supervisors. Therefore, the sections below discuss the sewer services currently provided by the Placer County Sewer Service District within the project area.

Wastewater Conveyance

Sewer services in the project area are provided by the Placer County Department of Public Works, Environmental Engineering and Utilities Division. Placer County operates 44 sewer pump stations, approximately 300 miles of sewer piping, and more than 450 septic tank effluent pump systems. The existing sewer pipeline system within unincorporated areas of the County in the project vicinity are located within Placer County Service Area (CSA) 28, Zone 173, and are owned and maintained by Placer County. However, the project site is not currently included within CSA 28. Existing wastewater conveyance infrastructure in the project area includes a 15-inch City of Roseville gravity sewer main located in Foothills Boulevard to the east of the site, as well as a 20-inch sewer force main located in Brady Lane and Vineyard Road.

The DCWPCP noted that soil conditions and potential problems related to groundwater pollution in the Plan area would constrain the use of private sewer systems for some development areas within the DCWPCP. In particular, the DCWPCP noted that at the time that the DCWPCP was prepared, the Placer County Environmental Health Department required that all developments with lot sizes less than seven acres must be connected to public sewer systems. As such, the DCWPCP anticipated that developments in the eastern portion of the Plan area would be connected to a public sewer system, which would include conveyance infrastructure.

Per the Northeast Area Sewer Master Plan, the County has planned for installation of a lift station within the southwest portion of the project site, adjacent to Vineyard Road.[16]

Wastewater Treatment

Sewer treatment for the Placer CSA 28, Zone 173, is provided at the Dry Creek Wastewater Treatment Plant (WWTP), which is located within the southern edge of the City of Roseville. The Dry Creek WWTP is owned by the City of Roseville and treats wastewater from areas of the City of Roseville, the City of Rocklin, and the Town of Loomis, as well as nearby areas within unincorporated portions of Placer County.

Under the Dry Creek WWTP's National Pollutant Discharge Elimination System (NPDES) Permit, Number CA0079502, the Dry Creek WWTP has a permitted average dry weather flow (ADWF) of

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15 Placer County Water Agency and California American Water Company. *Agreement Between Placer County Water Agency and California American Water for Water Supply.* July 6, 2015.

16 Placer County. *Dry Creek Sewer System, Northeast Area Sewer Master Plan (Booth Rd, Bedell Ln, Eastern Vineyard Road).* November 2009.

18 million gallons per day (mgd) and a peak wet-weather flow (PWWF) of 45 mgd.[17] As of 2016, the Dry Creek WWTP was operating at approximately 50 percent of the WWTP's permitted flow, with an ADWF of 9 mgd, and a PWWF under 25 mgd.[18] Of the 9 mgd of ADWF currently being treated at the Dry Creek WWTP, approximately 40 percent, or 7.2 mgd, originates from unincorporated portions of Placer County.[19]

Tertiary-level treatment at the Dry Creek WWTP consists of screening, primary clarification, aeration, secondary clarification, filtering, and disinfection. Recycled water from the Dry Creek WWTP is used to irrigate four golf courses, several area parks, and some areas of public street landscaping.[20] Treated wastewater from the Dry Creek WWTP that is not used for irrigation purposes is discharged to Dry Creek. Residual solids from the treatment process are transported to the Western Placer Waste Management Authority (WPWMA) sanitary landfill or are transferred to a City-approved vendor for off-site land application.

The City of Roseville owns and operates the Dry Creek WWTP on-behalf of the City's Regional Partners, which consist of the City of Roseville, the South Placer Municipal Utility District, and portions of unincorporated Placer County. Per the Operations Agreement among the Regional Partners, upon reaching 75 percent capacity at the WWTP, capacity improvements must be initiated. As stated above, the Dry Creek WWTP currently operates at approximately 9 mgd ADWF out of a permitted capacity of 18 mgd for an available capacity of 50 percent. Although the Dry Creek WWTP currently operates below permitted capacity, buildout demand of the Dry Creek WWTP's service area is estimated to reach approximately 21 mgd. Thus, improvements to the Dry Creek WWTP are likely to be needed prior to buildout of the Dry Creek WWTP's service area. Demand from new development is currently accommodated at the WWTP on a first-come-first-served basis.[21]

Solid Waste

Solid waste collection services in the project area are provided by Recology Auburn Placer, under contract with Placer County. Recology provides curbside collection of mixed waste (garbage and recyclables), green waste, and some universal and household hazardous wastes by appointment. The mixed waste collected by Recology is delivered to the WPWMA Materials Recovery Facility (MRF), where waste is processed, recyclables are recovered, and residuals are disposed. The MRF is located near SR 65, between Roseville and Lincoln, at the corner of Athens Avenue and Fiddyment Road. Recovered materials from the MRF are sold throughout the world, helping to conserve natural resources. Non-recyclable materials are sent to the landfill for disposal. The current space available, together with recovery efforts by the MRF, will delay the WRSL from reaching capacity.[22]

The WPWMA is a regional agency established in 1978 through a Joint Exercise of Powers Agreement between the County of Placer and the cities of Roseville, Rocklin, and Lincoln to acquire, own, operate, and maintain a sanitary landfill site and all related improvements.

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17 City of Roseville. *City of Roseville General Plan 2035*. August 17, 2016.
18 City of Roseville. *City of Roseville General Plan 2035*. August 17, 2016.
19 *Ibid.*
20 City of Roseville. *2015 Urban Water Management Plan* [pg. 6-7]. May 2016.
21 *Ibid.*
22 Western Placer Waste Management Authority. *About WPWMA*. Available at: http://www.wpwma.com/about-wpwma/. Accessed June 2019.

The WPWMA designed and built the MRF to divert recyclable materials from being disposed at the landfill. The MRF also processes source separated wood waste and green waste and accepts separated recyclables, including electronics and other universal wastes (e.g. batteries and fluorescent lamps), at the recycling drop-off and buy-back center. The compost portion of the MRF has an annual processing capacity of 82,000 tons (averaged over the year and does not account for seasonal peaks). The MRF is permitted to have up to 75,000 cubic yards (approximately 37,500 tons) of compost material at the facility at any one time.

Residual waste from the MRF is transported to the Western Regional Sanitary Landfill (WRSL) co-located at the MRF site. The WPWMA owns and oversees all operations on-site – the WRSL, MRF, compost facility, and Permanent Household Hazardous Waste Collection Facility (PHHWCF). A private firm, under contract with WPWMA, manages the day-to-day operation of the facilities. The landfill is specified as a Class II/Class III non-hazardous site. Hazardous waste from households and Conditionally Exempt Small Quantity Generators is accepted at the PHHWCF.

Permit Limits and Site Constraints

The 291-acre WRSL is permitted to accept 1,900 tons per day and 624 vehicles per day; and receives an average of approximately 1,077 tons per weekday.[23] The WRSL has a permitted design capacity of 36,350,000 cubic yards and, as of December 2017, has a remaining capacity of 24,468,271 cubic yards. Under current land use and development conditions, the WRSL has a permitted lifespan extending to 2058.[24]

The MRF has a permitted processing limit of 1,750 tons per day.[25] According to the WPWMA, for the fiscal year 2016-2017, the average weekday tonnage received at the MRF was 1,191 tons.[26] The MRF expanded in 2007, increasing its processing capacity of municipal solid waste and construction and demolition debris to 2,200 tons per day.[27]

Gas and Electricity Infrastructure

Electricity and natural gas service in the project area are provided by Pacific Gas & Electric (PG&E).

PG&E is one of the largest providers of electricity and natural gas throughout Placer County. PG&E is a San Francisco based, private company, publicly regulated by the California Public Utilities Commission and provides electricity and natural gas to the majority of Northern California. PG&E has ample resources to meet a wide range of projected growth; however, when the time comes, additional improvements to the facilities may be required to meet future growth demands. It should be noted that on January 29, 2019, PG&E announced that the company would file for

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23 Western Placer Waste Management Authority. *Comment Letter: Lincoln Meadows Draft Environmental Impact Report*. December 11, 2017.

24 Placer County Department of Facility Services, Environmental Engineering Division (Solid Waste). *EIR Guidance Document*. November 2017.

25 California Department of Resources Recycling and Recovery (CalRecycle). *Western Placer Waste Mgmt Authority MRF (31-AA-0001)*. Available at: https://www2.calrecycle.ca.gov/swfacilities/Directory/31-AA-0001. Accessed June 2019.

26 Western Placer Waste Management Authority. *Comment Letter: Lincoln Meadows Draft Environmental Impact Report*. December 11, 2017.

27 Placer County Department of Facility Services, Environmental Engineering Division (Solid Waste). *EIR Guidance Document*. November 2017.

bankruptcy. The CPUC, in coordination with the Governor's office and other agencies, is currently monitoring developments regarding the bankruptcy filing to ensure that all customers continue to receive electric and natural gas service.[28] PG&E has not indicated that any disruptions to service will occur as a result of the bankruptcy filing.

Currently, an underground electrical distribution line is located within Brady Lane to the east of the site, extending from the existing Father's House church southward along the project site frontage. The line terminates near the location of the proposed site access at Brady Lane. Within the western portion of the project site, an overhead electrical line connects to the existing single-family residence on the two-acre parcel extending into the project site from Vineyard Road.

In addition, PG&E maintains an underground gas line along the west side of Brady Lane to the north of the project site, near the existing church. The gas line terminates near the northern boundary of the project site. A second gas line is located in Vineyard Road within the City of Roseville, terminating at the Brady Lane/Vineyard Road intersection to the southeast of the project site.

15.3 REGULATORY CONTEXT

The following sections provide a summary of the federal, State, and local regulations pertaining to utilities and service systems that are applicable to the proposed project.

Federal Regulations

The federal environmental laws and policies relevant to utilities and service systems are primarily related to water quality, which is addressed in Chapter 10, Hydrology and Water Quality, of this EIR.

State Regulations

The following are the State environmental laws and policies relevant to utilities and service systems.

California Green Building Code

The California Building Code (CBC) contains standards that regulate the method of use, properties, performance, or types of materials used in the construction, alteration, improvement, repair, or rehabilitation of a building or other improvement to real property. The CBC is adopted every three years by the Building Standards Commission (BSC). The 2016 California Green Building Standards Code, otherwise known as the CALGreen Code, is the most recent version of the Code. For residential structures, the CALGreen Code is administered by the California Department of Housing and Community Development (HCD).

In addition to the new State-wide mandates, CALGreen encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce air pollutant emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the tiers, the provisions become mandates for all new construction within that jurisdiction. The most significant features of the CALGreen Code related to public services and utilities include the following:

[28] California Public Utilities Commission. *PG&E Bankruptcy.* Available at: https://www.cpuc.ca.gov/pgechapter11/. Accessed October 2019.

- Mandatory reduction in indoor water use, through the use of high-efficiency toilets, faucet aerators and other fixtures; and
- Diversion of 65 percent of construction waste from landfills.

The 2019 CALGreen Code will take effect on January 1, 2020, and will provide more stringent energy efficiency requirements for new residential development, including improvements related to electric vehicle charging, water use efficiency, and building insulation requirements.

Assembly Bill 1327

Assembly Bill (AB) 1327, the Solid Waste Reuse and Recycling Access Act of 1991 requires jurisdictions to adopt ordinances requiring development projects to provide adequate storage area for collection and removal of recyclable materials. Placer County adopted such an ordinance (Municipal Code Section 8.16.080).

Assembly Bill 1881

AB 1881, the Water Conservation in Landscaping Act of 2006 required the Department of Water Resources (DWR) to update the Model Efficient Landscape Ordinance. Furthermore, AB 1881 required local agencies to adopt the updated model ordinance or an equivalent ordinance by January 1, 2010. If local jurisdictions failed to adopt the updated model ordinance or an equivalent by January 1, 2010, the DWR's updated model ordinance would automatically be adopted by statute. Placer County adopted its Water Efficient Landscape Ordinance (WELO) in October 2017.

Senate Bill 610 and Senate Bill 221

In 2001, the California Legislature enacted two pieces of legislation relevant to environmental review focused on the water consumption associated with large development projects. Senate Bill (SB) 610 (Chapter 643, Statutes of 2001; Section 21151.9 of the Public Resources Code (PRC) and Section 10910 et seq. of the Water Code) requires the preparation of water supply assessments (WSAs) for large developments. Government Code section 66473.7(a)(1) requires an affirmative written verification of sufficient water supply. SB 221 is designed as a "fail-safe" mechanism to ensure that collaboration on finding the needed water supplies to serve a new large subdivision occurs early in the planning process.

As stated in CEQA Guidelines Section 15155, which reflects SB 610 requirements, any residential development exceeding 500 dwelling units is considered a "water-demand project" and is required to prepare a WSA. The proposed project includes 119 dwelling units, which is below the threshold established by SB 610. Thus, a WSA is not required to be prepared for the proposed project.

Senate Bill 1016

Enacted in 2007, SB 1016 amended portions of the California Integrated Waste Management Act, allowing the California Integrated Waste Management Board (CIWMB) to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to CalRecycle.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (Water Code Sections 10610 – 10656). The Act requires that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet of water annually shall prepare and adopt an UWMP within a year of becoming an urban water supplier and update the

plan at least once every five years. The Act specifies the content that is to be included in an UWMP, and states that urban water suppliers should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The Act also states that the management of urban water demands and the efficient use of water shall be actively pursued to protect both the people of the State and their water resources. The Northern Division Sacramento District of CAL-AM prepared a UWMP in 2015.[29]

California Integrated Waste Management Act - Assembly Bill 939

AB 939, the California Integrated Waste Management Act of 1989 contains requirements affecting solid waste disposal in California. According to AB 939, all cities and counties are required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated within the respective county plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal. Cities and counties that do not meet this mandate are subject to $10,000-per-day fines.

Local Regulations

The following local goals and policies are applicable to the proposed project.

Placer County General Plan

The following applicable goals and policies related to utilities and service systems are from the Placer County General Plan.

General Public Facilities and Services

Goal 4.A To ensure the timely development of public facilities and the maintenance of specified service levels for these facilities.

Policy 4.A.1 Where new development requires the construction of new public facilities, the new development shall fund its fair share of the construction. The County shall require dedication of land within newly developing areas for public facilities, where necessary.

Policy 4.A.2 The County shall ensure through the development review process that adequate public facilities and services are available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the following conditions are met:

a. The applicant can demonstrate that all necessary public facilities will be installed or adequately financed (through fees or other means);
b. The facilities improvements are consistent with applicable facility plans approved by the County or with agency plans where the County is a participant; and,

[29] California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan*. June 30, 2016.

c. The facilities improvements are designed and built to the current standards of the agency providing service.

Policy 4.A.3 The County shall require that new urban development is planned and developed according to urban facility standards.

Water Supply and Delivery

Goal 4.C To ensure the availability of an adequate and safe water supply and the maintenance of high quality water in water bodies and aquifers used as sources of domestic supply.

Policy 4.C.1 The County shall require proponents of new development to demonstrate the availability of a long-term, reliable water supply. The County shall require written certification from the service provider that either existing services are available or needed improvements will be made prior to occupancy. Where the County will approve groundwater as the domestic water source, test wells, appropriate testing, and/or report(s) from qualified professionals will be required substantiating the long-term availability of suitable groundwater.

Policy 4.C.2 The County shall approve new development based on the following guidelines for water supply:

a. Urban and suburban development should rely on public water systems using surface supply.
b. Rural communities should rely on public water systems. In cases where parcels are larger than those defined as suburban and no public water system exists or can be extended to the property, individual wells may be permitted.
c. Agricultural areas should rely on public water systems where available, otherwise individual water wells are acceptable.

Policy 4.C.6 The County shall promote efficient water use and reduced water demand by:

a. Requiring water-conserving design and equipment in new construction;
b. Encouraging water-conserving landscaping and other conservation measures;
c. Encouraging retrofitting existing development with water-conserving devices; and,
d. Encouraging water-conserving agricultural irrigation practices.

Sewage Conveyance, Treatment, and Disposal

Goal 4.D The County shall require wastewater conveyance and treatment facilities that are sufficient to serve the Placer County General Plan proposed density of residential, commercial, and public/institutional uses in a way which protects the public and environment from adverse water quality or health impacts.

Policy 4.D.2 The County shall require developments outside of an existing sewer service area and needing new connections to public conveyance and treatment facilities to be annexed into the sewer service area providing service.

Policy 4.D.4 The County shall require developments needing new connections to construct wastewater conveyance facilities which are sized and located to provide sewer service based on permitted densities and applicable sewer shed area. Wastewater conveyance systems shall be designed for gravity flow. Where gravity conveyance systems are not feasible, the agency providing service may approve pumping service where a site specific engineering analysis demonstrates the long-term cost effectiveness of pumped facilities.

Policy 4.D.5 The County shall require developments needing new connections to pay their fair share of the cost for future public wastewater facilities which support development based on the Placer County General Plan. The fair share will be based on the demand for these facilities attributable to the new development.

Policy 4.D.6 The County shall promote efficient water use and reduced wastewater system demand by:

a. Requiring water-conserving design and equipment in new construction as required in California law (AB 1881);
b. Encouraging retrofitting with water-conserving devices; and
c. Designing wastewater systems to minimize inflow and infiltration.

Policy 4.D.9 The County shall promote functional consolidation of wastewater facilities.

Policy 4.D.10 The County shall require all public wastewater facilities to be designed and built to the current standards of the agency providing service.

Landfills, Transfer Stations, and Solid Waste Recycling

Goal 4.G To ensure the safe and efficient disposal or recycling of solid waste generated in Placer County.

Policy 4.G.1 The County shall require all new urban/suburban development, excluding rural development, to include provisions for solid waste collection.

Policy 4.G.2 The County shall promote maximum use of solid waste source reduction, recycling, composting, and environmentally-safe transformation of wastes.

Policy 4.G.6 The County shall ensure that landfills and transfer stations are buffered from incompatible development.

Policy 4.G.7 The County shall require that all new development complies with applicable provisions of the Placer County Integrated Waste Management Plan.

Dry Creek-West Placer Community Plan

The following are the applicable goals and policies related to utilities and service systems from the DCWPCP.

Public Services

Goal 3 Prevent the commitment of land use through premature public service facility construction.

Goal 4 Make urban services available only to those lands which, under the Land Use plan, will need them.

Goal 5 Insure that the rate of development shall not exceed the capacity of county, community, special districts (including school districts), and utility companies to provide all needed public services in a timely, orderly, and economically feasible manner.

Policy 1 Coordination of city, county, and district public works planning and land use planning are essential. A major problem is to design major water, sewer and road extensions, intended to serve urban areas, in such a way that they do not also serve intervening non-urban areas, and thereby encourage their urbanization.

Policy 3 Discourage over-development of facilities, services, and systems in advance of demand to ensure that no inequitable financial burden is imposed and to prevent the commitment of land use through premature public facility construction.

Policy 4 Ensure that adequate services will be available for proposed development before granting approvals.

Policy 5 The County or other public entity should be responsible to operate sewer, water and major drainage services, not a developer or private landholder.

Public Services: Sewage Disposal

Goal — To provide sewage disposal facilities which will serve the Dry Creek-West Placer Area's proposed density of residential, commercial, industrial, and public uses in a way which protects the public from adverse water quality or health impacts.

Policy 1 — Require all new commercial, industrial, institutional, and residential subdivisions to install and connect to a public sewer system.

Community Development: Community Design

Policy 18 — Utility lines shall be installed underground to ensure minimum disruption to the environment and as little disturbance as possible to vegetation, particularly in scenic corridors.

Placer County Water Efficient Landscape Ordinance

The Placer County Landscape Design Guidelines incorporate the County's WELO. The County's WELO established water efficiency requirements for developments throughout the County based on the amount of landscaped areas included in proposed development projects, and whether the project involves new development or renovation type activities. Water use efficiency in the WELO is to be achieved through the use of drought tolerant plantings, and proper landscaping, as well as specific requirements for irrigation systems. The specific requirements for water use efficiency in landscaping would be confirmed during design reviews for proposed projects. Specifically, the WELO requires applications to include Landscape Packages, which would present water budgets, soil management reports, grading plans, landscape design plans, irrigation plans and other information related to the overall design of landscaping within projects.

15.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to utilities and service systems. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, determination of significant impacts is based on whether the proposed project would result in the following:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Comply with federal, State, and local management and reduction statutes and regulations related to solid waste.

Impacts related to storm drainage facilities are addressed in Chapter 10, Hydrology and Water Quality, of this EIR.

Method of Analysis

Determinations of the significance of the proposed project's impacts were made based on the project's modifications to existing or planned utilities, and the ability of the existing utilities to accommodate the proposed project, using the above significance criteria.

Water Supply

The 2015 UWMP prepared for CAL-AM was used to determine the adequacy of existing water supplies for the proposed project. It should be noted that in addition to the 119 single-family residential units included in the proposed project, the Project Description chapter of this EIR recognizes the potential for up to 12 additional on-site residential units (Accessory Dwelling Units) to be included in the project in order to meet the County's affordable housing requirements. The 12 additional Accessory Dwelling Units (ADUs), if included, would include a smaller household size relative to standard market-rate single-family units. For example, as can been seen in the ADU discussion in the Transportation chapter of the EIR, the trip generation is based on the assumption that the multi-family trip rate is a good approximation of the trips generated by ADUs. Assuming this, the projected population increase from up to 12 ADUs at the project site would be an additional 23 persons.[30] Therefore, inclusion of the additional 12 Accessory Dwelling Units would not alter the conclusions presented herein.

Wastewater System

The ability of the existing wastewater conveyance infrastructure in the project vicinity to accommodate the project's wastewater was evaluated in the technical memorandum prepared for the proposed project by Woodward & Curran. The technical memorandum relied on the City of Roseville's recently updated sewer collection system model (2017 Sewer Model Update). An earlier version of the model was previously used to model the project area as part of the 2007 South Placer Wastewater Authority (SPWA) Systems Evaluation.

For the purposes of estimating project sewer flows, a unit flow factor of 190 gallons per day (gpd) per Equivalent Dwelling Unit (EDU) was used, consistent with the standard ADWF factor used in the 2017 Sewer Model Update. Estimated project sewer flows were then added to manhole SMH-B03-007 on Foothills Boulevard. Rainfall dependent inflow and infiltration (RDI/I) was added based on the rainfall response in the adjacent area. It should be noted that the technical memorandum evaluated development of the project site with a total of 124 EDUs, rather than the 119 single-family dwelling units included in the proposed project. Thus, the analysis provides a conservative estimate of project wastewater generation. While the project could potentially include the construction of up to 12 additional on-site ADUs in order to meet the County's affordable housing requirements, resulting in a total of 131 units, the additional wastewater generation associated with the ADUs would include a smaller household size relative to standard market-

[30] 12 ADUs * 1.91 persons per multi-family unit, based upon adjustment of single-family rate (e.g., 3.08 persons per SF household * 0.62, where 0.62 is the trip rate dwelling unit equivalent for multi-family uses).

rate single-family units. Thus, the additional units, if included, would not alter the conclusions of the technical sewer memorandum prepared for the project by Woodward & Curran.

In addition to sewer flows from the project and existing development in the sewer shed, Woodward & Curran evaluated sewer flows associated with other cumulative development within the unincorporated County that could drain into the project sewer shed. Based on buildout of the vacant parcels per the DCWPCP, a total of 201 dwelling units could be developed within the sewer shed, in addition to the proposed project.

In order to evaluate the effects of the project and other cumulative development on the downstream sewer conveyance infrastructure, Woodward & Curran remodeled sewer flows under the design storm scenario for the following three future conditions:

- Existing and planned development currently included in the 2017 Sewer Model Update, which includes buildout of the project site under the site's current DCWPCP land use designations;
- Existing and planned development currently included in the 2017 Sewer Model Update, with buildout of the project site updated to reflect development of 124 EDUs; and
- Existing and planned development currently included in the 2017 Sewer Model Update, updated to include buildout of the project site with 124 EDUS and development of an additional 201 EDUs within the unincorporated County.

For each of the three future conditions, all sewer flows were assumed to be routed through SMH-B03-007 within the City of Roseville. Woodward & Curran evaluated the capacity of each sewer line segment between SMH-B03-007 and the Dry Creek WWTP.

Solid Waste

Solid waste generation from the proposed project was estimated and considered with respect to the anticipated capacity at the solid waste facilities that would serve the proposed project. Sources of solid waste generation for the proposed project would include vegetation removed during site preparation, construction material waste, and operational waste from proposed residences and landscape maintenance. The solid waste analysis of this chapter is based on solid waste calculations performed using information from the U.S. Environmental Protection Agency's (U.S. EPA) report, *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*,[31] as well as CalRecycle operational solid waste generation rates.

Natural Gas and Electricity

The location and sizing of existing natural gas and electricity infrastructure within the project area was based technical information provided by PG&E specifically for the proposed project.

Project-Specific Impacts and Mitigation Measures

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

[31] U.S. Environmental Protection Agency. Estimating 2003 Building-Related Construction and Demolition Materials Amounts. 2009.

15-1 Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Based on the analysis below, the impact is *less than significant*.

The following sections describe the water, wastewater treatment, stormwater drainage, electric power, natural gas, and telecommunications facilities improvements that would be necessary to serve the proposed project.

Water Supply Infrastructure

Figure 15-3 and Figure 15-4 provide an overview of the proposed project utility improvements.

As shown in Figure 15-4, the proposed project would include a new connection to an existing 12-inch water main located in Vineyard Road to the southeast of the project site. From the connection point, the project would include extension of two new water lines: a new 12-inch water line extending northward within Brady Lane to the project site access; and a 16-inch water line extending westward within Vineyard Road to the proposed emergency vehicle access (EVA) at the southwestern site boundary. Both water lines would connect to the interior of the project site by way of a series of new eight-inch lines extending throughout the proposed on-site roadways.

The PCWA requires a minimum transmission line diameter of 12 inches and a minimum distribution system pipe diameter of six inches. The 12-inch and 16-inch water lines in Brady Lane and Vineyard Road, respectively, as well as the existing 12-inch line located in Vineyard Road, would be consistent with the PCWA's minimum sizing requirements for public water lines. In addition, as noted in the Will Serve letter prepared for the proposed project by CAL-AM, all water utility improvements would be required to comply with CAL-AM standards and specifications, as well as local and State codes. CAL-AM's Engineering and Operations staff would review the project and evaluate the adequacy of the proposed improvements.

CAL-AM has not identified any sizing deficiencies in the water supply infrastructure located upstream of the project site, including the existing 12-inch water main located in Vineyard Road. Thus, the existing water supply infrastructure is sufficiently sized to accommodate the increased demand from the proposed project, and the project would not require the construction of new or expanded water conveyance infrastructure beyond the improvements noted above. It should be noted that all required off-site water utility improvements within Vineyard Road and Brady Lane would occur within paved areas that have been subject to previous disturbance.

The proposed on-site water conveyance infrastructure would be designed to meet standard residential fire flow requirements. The water system throughout the site would include residential hook-ups and hydrant connections, and each unit connection would provide fire flows necessary for a residential fire sprinkler system in addition to the domestic water service. All necessary water conveyance infrastructure would be financed by the project applicant.

Figure 15-3
Preliminary Utility Plan (North)

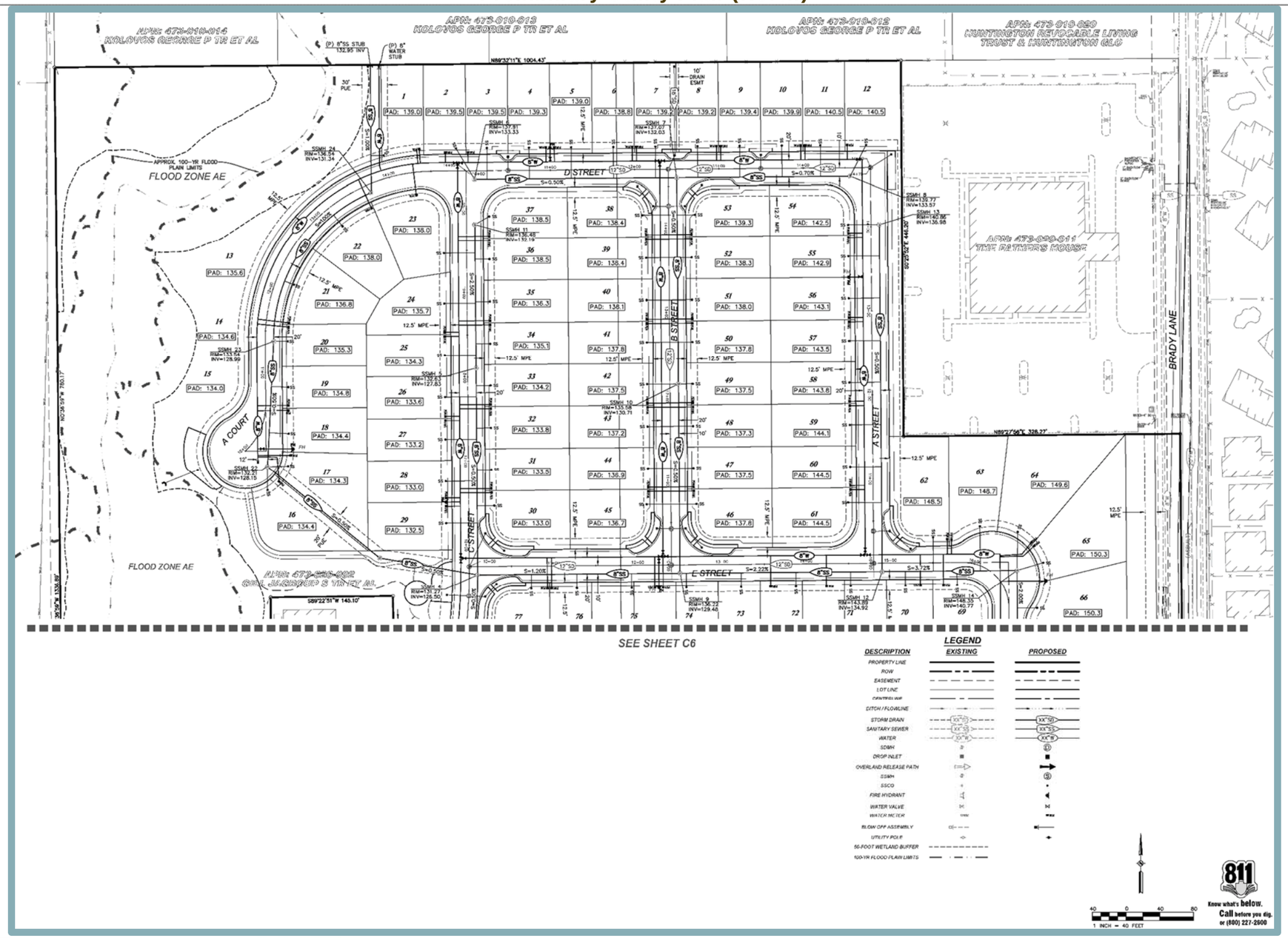
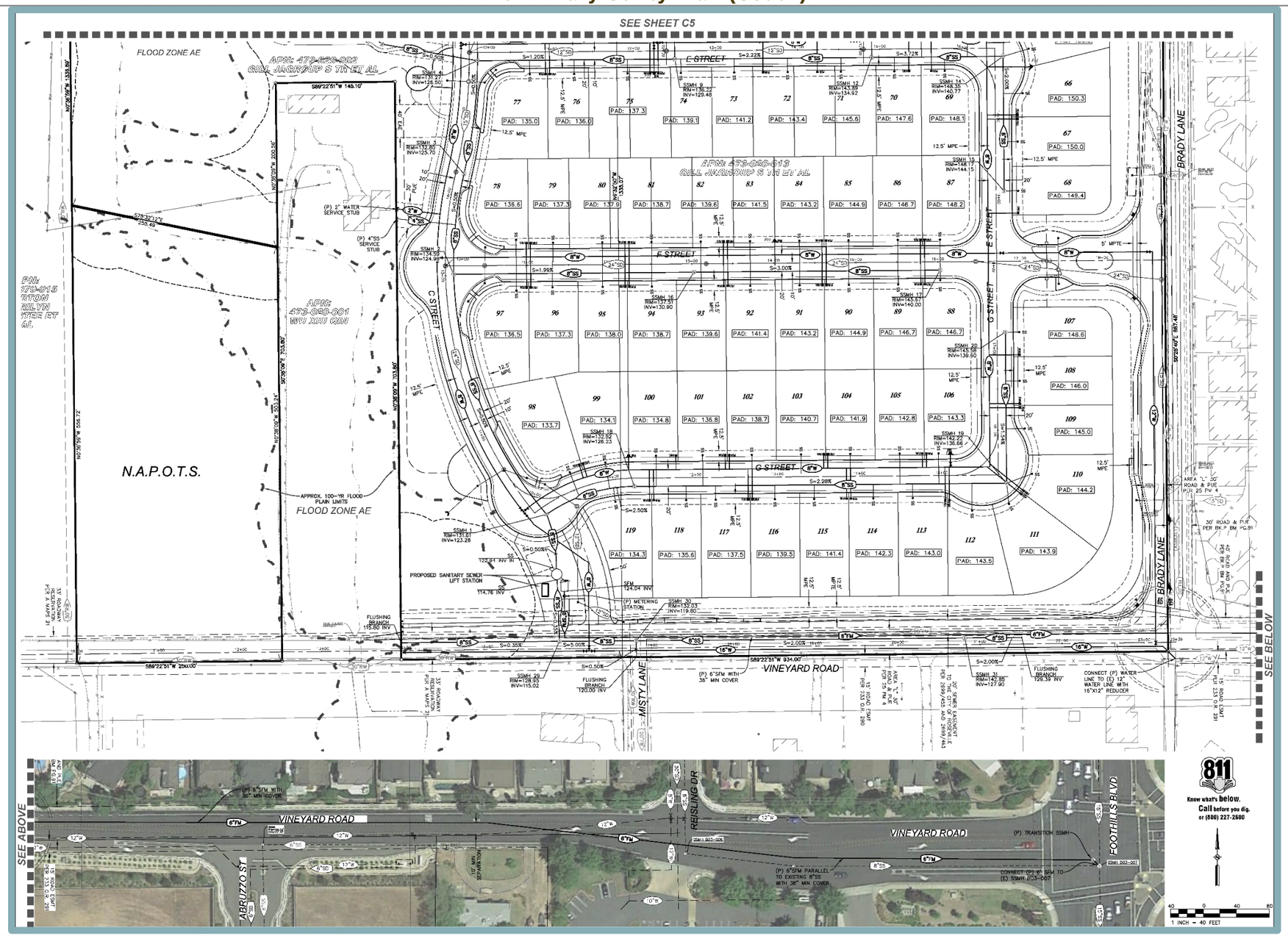


Figure 15-4
Preliminary Utility Plan (South)



In order to ensure that maintenance and upgrades to water conveyance infrastructure are properly financed, CAL-AM charges customers for capacity based on the required meter size and additional components described in PCWA Section 40700. The proposed project would be required to pay all relevant CAL-AM fees, which would help to ensure that CAL-AM would maintain sufficient capacity and infrastructure to serve the proposed project.[32]

CAL-AM has provided a Conditional Will-Serve Letter for the proposed project that indicates CAL-AM is capable of providing service to the project, given compliance with all applicable rules and regulations, including payment of necessary fees.

Wastewater Conveyance Infrastructure

The proposed project would include installation of an on-site gravity sewer collection system consisting of a series of eight-inch sewer lines (see Figure 15-3 and Figure 15-4). The sewer lines would be laid within the proposed internal roadways, with individual connections for each proposed lot. The on-site sewer lines would flow to a new lift station to be located on Lot A, on the north side of Vineyard Road, east of the on-site tributary and opposite Misty Lane. The lift station, which would be financed by the project applicant, had been previously planned by the County per the Northeast Area Sewer Master Plan and would serve the entire northeast portion of the DCWPCP area (see Figure 15-5). The sewer lift station would be designed pursuant to the requirements presented in Placer County's *Pump Station Design Manual* and would include a metering station.[33]

A new eight-inch gravity sewer line would be constructed off-site, along the project's Vineyard Road frontage, consistent with County requirements. From the on-site lift station, the project would include construction of dual six-inch sewer force mains in Vineyard Road to reduce the need for on-site emergency storage, which would connect to the existing 15-inch City of Roseville gravity sewer main in Foothills Boulevard. Sewage would gravity flow from the 15-inch sewer main south and then west to the Dry Creek WWTP, also within the City of Roseville. Potential environmental effects associated with the off-site sewer line improvements are analyzed throughout this EIR. As discussed in Chapter 4, Aesthetics, the sewer line improvements would occur within previously disturbed areas in or adjacent to existing roadways, and would not permanently degrade the visual character or quality of the project area. Potential impacts related to criteria pollutant and greenhouse gas (GHG) emissions associated with the sewer improvements are analyzed in Chapter 5, Air Quality and Greenhouse Gas Emissions. In addition, potential noise impacts associated with the sewer improvements are analyzed in Chapter 12, Noise.

As noted previously, the technical memorandum prepared for the proposed project by Woodward & Curran includes an evaluation of the estimated wastewater generation associated with the proposed project and the ability of existing downstream conveyance infrastructure within the City of Roseville to accommodate such wastewater. Per the technical memorandum, the estimated ADWF associated with the proposed project would be approximately 23,600 gpd. The PWWF associated with the project was estimated to be 75,000 gpd.

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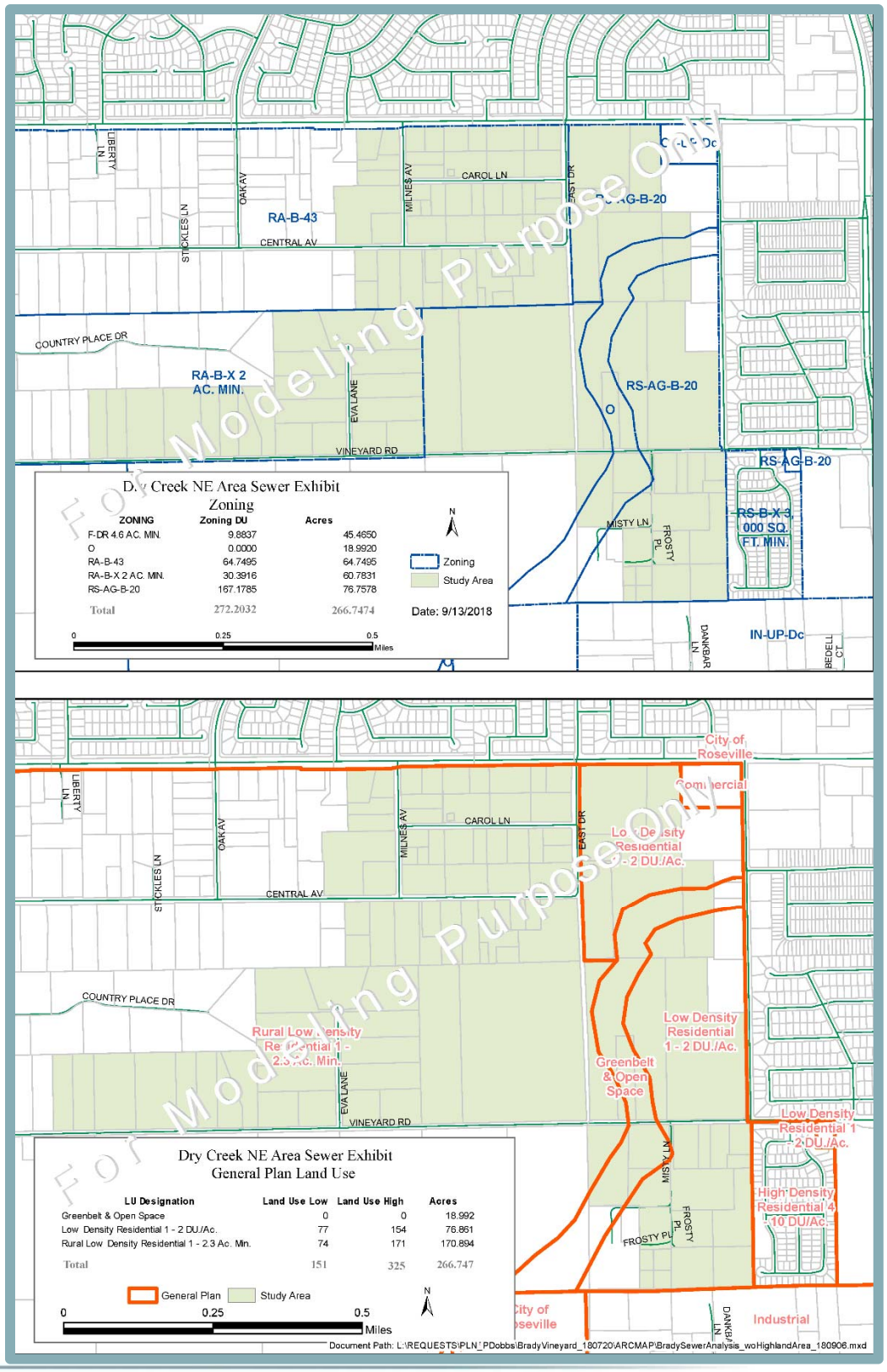
32 Placer County Water Agency and California American Water Company. *Agreement Between Placer County Water Agency and California American Water for Water Supply.* July 6, 2015.

33 Placer County Environmental Engineering. *Pump Station Design Manual*. June 30, 2016.

Figure 15-5
Northeast Area Sewer Shed Boundaries



Based on the modeling conducted by Woodward & Curran, surcharging would not occur downstream of the proposed project under peak design flow conditions. The City of Roseville design standard for pipes 15 inches in diameter and smaller is that the maximum depth of flow to diameter of pipe ratio (d/D) must be 1.0 or less. All sewer pipe segments downstream of SMH B03-007 are 15 inches or larger. With development of the project, the maximum d/D would be 0.41 and, thus, the project would not result in conflicts with the City's design criteria. Per the technical memorandum, wastewater flows associated with the proposed project would not create any capacity issues within the downstream wastewater conveyance system, and upsizing of existing sewer lines would not be required. It should be noted that because surplus capacity is available within the downstream conveyance infrastructure, additional wastewater generation associated with the potential inclusion of an additional 12 on-site ADUs would not alter the conclusions presented above.

Although adequate transmission capacity would exist, the project site is not currently located within an area that receives sewer service from the County. In order for Placer County to obtain ownership of the proposed sewer system and provide maintenance of the proposed infrastructure, the project site and off-site improvement areas must be annexed into CSA 28, Zone 173. Such an annexation would require approval by the Placer County Board of Supervisors. Upon approval of the annexation, the proposed project would be subject to the County's sewer connection fees. Per Section 13.12.350 of the Placer County Code, the current sewer connection fees for the project area are currently approximately $9,322 per EDU. A portion of each connection fee would be distributed to the City of Roseville for ongoing and future upgrades to the Dry Creek WWTP. The remainder of each fee is used by the County for system upgrades and ongoing maintenance. In addition, future residents of the proposed project would be subject to payment of a monthly sewer fee to the County to fund ongoing provision of sewer services. The current monthly sewer fee is $41.26 per EDU.[34]

Electricity, Natural Gas, and Telecommunications Infrastructure

The proposed project would include new connections to existing electrical, natural gas, and telecommunications infrastructure located in the project vicinity. As noted previously, PG&E maintains existing electrical lines within Brady Lane to the east of the site. In addition, within the western portion of the project site, an overhead electrical line connects to the existing single-family residence on the two-acre parcel extending into the project site from Vineyard Road. An existing underground gas line is located along the west side of Brady Lane to the north of the project site, near the existing church. A second gas line is located in Vineyard Road within the City of Roseville, terminating at the Brady Lane/Vineyard Road intersection to the southeast of the project site. Given the proximity of existing electricity and natural gas lines to the project site, substantial extension of new infrastructure would not be required. All required electricity, natural gas, and telecommunications infrastructure improvements would occur within the disturbed rights-of-way of roadways fronting the project site.

Given that the project site is currently anticipated for development with residential uses per the DCWPCP, such utilities have been designed to accommodate additional demand associated with buildout of the site. While the proposed project would result in

[34] Placer County. *Notice of Public Hearing to Consider Sewer User Fee Increases, Placer County Services Area 28, Zone 173 – Dry Creek Sewer.* February 22, 2019.

development of the site at an increased density relative to what has been anticipated per the site's land use and zoning designations, upsizing or upgrading of the existing dry utilities is not anticipated in order to serve the project.

Conclusion

Based on the above, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-2 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Based on the analysis below, the impact is *less than significant*.

The proposed project would include development of a total of 119 single-family homes on the project site, as well as associated landscaping improvements. Thus, the project would result in increased demand for water supplies relative to existing conditions. As discussed in Chapter 11, Land Use and Planning /Population and Housing/Agricultural Resources, of this EIR, the proposed project would house an estimated 367 residents. CAL-AM has established a per capita per day water usage target of 173 gallons per capita per day (gcpd).[35] Based on the year 2020 per capita per day water usage target for CAL-AM customers of 173 gcpd and the project's estimated population of 367 residents, the project would be anticipated to result in a total daily water demand of approximately 63,491 gpd, which equates to approximately 23.17 million gallons per year or 71.11 afy.[36] As shown in Table 15-2, demand in the West Placer Service Area is anticipated to change from 753 afy to 2,559 afy between 2015 and 2020, resulting in an increase of 1,806 afy. Table 15-2 demonstrates that the anticipated growth in demand associated with growth within the West Placer Service Area could be accommodated by available supplies, with an annual surplus of at least 97 afy.[37]

Demand estimates for future development within the West Placer Service Area are based on growth estimates for the region and service area, including buildout estimates from the DCWPCP. The site is currently zoned for residential uses and, thus, increased water demand associated with buildout of the site has been accounted for in regional planning efforts. Table 15-3 presents the water demand that could be generated from buildout of the project site under the site's current zoning designations compared to water demand associated with buildout of the proposed project.

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35 California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan*. June 30, 2016.

36 California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan*. June 30, 2016.

37 *Ibid.*

Table 15-3
Project Site Buildout Water Demand

Scenario	Size (units)[1]	Population[2]	Demand Rate (gcpd)	Total Water Demand (gpd)
Buildout Per Existing Zoning Designations	52	160	173	25,950
Buildout of Proposed Project	119	367	173	63,491
Net Change	**+71**	**+207**	**--**	**+37,541**

1 Unit number estimated based on buildout of the 24.1-acre RS-AG-B-20 zoned land within the eastern portion of the site with minimum lot sizes of 20,000 square feet (sf), consistent with Section 17.52.040 of the Placer County Code (24.1 acres / 0.4591 acres [20,000 sf] = 52.49 units).

2 Based on average DCWPCP household size of 3.08 persons/household (see Chapter 11, Land Use and Planning/Population and Housing/Agricultural and Forest Resources, of this EIR).

Source: California American Water Company, 2015 UWMP, 2016.

As shown in the table, the proposed project would increase total water demand by 37,541 gpd, or 42.02 afy, compared to buildout of the site per the existing zoning designations. The anticipated increase in water demand of 42.02 afy that would result from implementation of the proposed project could be accommodated by the 97 afy surplus anticipated for the West Placer Service Area. By the year 2035, the surplus is anticipated to increase to approximately 259 afy.

In addition to the water consumption associated with occupation of the residential units within the proposed project, the proposed landscaped areas and three proposed park areas would require irrigation water. The Placer County Landscape Design Guidelines provide recommendations and requirements for new landscaping within the County,[38] which are compliant with the State's Water Conservation in Landscaping Act, and the County's WELO.[39] New developments with landscaped areas equal to or greater than 500 sf must comply with the County's water efficient landscaping requirements; the proposed project would include 117,176 sf of linear parks and landscaped lots and, thus, is subject to the County's water efficient landscaping requirements.

Requirements for establishing water efficient landscaping include the use of compost and mulch, installation of climate adapted plants, restrictions on turf areas, and requirements for irrigation systems. Compliance with the County's WELO would be ensured during the design review process through submission of a landscape package to the County for review and approval. The landscape package would include water budget calculations, a soil management report, landscape design plan, irrigation design plan, and other documents related to the proposed landscaping, irrigation, and grading plans. Compliance with the County's WELO would ensure that irrigation water consumption is minimized and occurs in compliance with the County's standards.

With respect to the preliminary landscape plans provided at this time, the proposed project would include landscaping along internal roadways, within proposed linear parks, and along the project frontages. Preliminary landscaping designs for roadway and park areas have been drafted in compliance with the County's WELO. The proposed parks have been

38 Placer County Planning Services Division. *Placer County Landscaping Design Guidelines*. Adopted May 7, 2013.
39 Placer County. *Water Efficient Landscape Ordinance*. Available at: https://www.placer.ca.gov/3394/Water-Efficient-Landscape-Ordinance. Accessed June 2019.

designed with integrated turf, hardscapes, and other landscaping. The use of hardscapes and other landscaping allows for the reduction of turf throughout the proposed park areas, which would limit the amount of irrigation water needed for turf within the project site.

Conclusion

Based on the above, sufficient water supplies would be available to available to serve the proposed project and reasonably foreseeable future development during normal, dry, and multiple dry years. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-3 Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Based on the analysis below, the impact is *less than significant*.

As discussed above, wastewater from the project site would be treated at the Dry Creek WWTP, which is operated by the City of Roseville.

Per the technical memorandum prepared for the proposed project by Woodward & Curran, buildout of the project site per the site's current zoning designations would result in a ADWF of approximately 13,300 gpd. As noted above, the estimated ADWF associated with the proposed project would be approximately 23,600 gpd (0.0236 mgd), or an increase of approximately 10,300 gpd (0.0103 mgd) beyond what has been anticipated for the site by the County and the City of Roseville. As of 2016, the Dry Creek WWTP was operating at 50 percent capacity, with a remaining capacity of 9 mgd ADWF.[40] The 0.236 mgd of ADWF anticipated during operation of the proposed project would be within the available capacity at the Dry Creek WWTP; therefore, the Dry Creek WWTP currently has adequate capacity to serve the project's anticipated demand in addition to the WWTP's existing commitments.

The Dry Creek WWTP discharges tertiary treated effluent to Dry Creek under an existing NPDES permit. The NPDES permit includes Waste Discharge Requirements, which include stringent effluent limitations for ammonia, aluminum, cadmium, carbon tetrachloride, cyanide, dibromochloromethane, dichlorobromomethane, iron, manganese, mercury, total chlorine residual, and zinc. Dry Creek WWTP is currently in compliance with all existing permitting, and, thus, effluent meets the RWQCB requirements within the NPDES permit. By permitting the Dry Creek WWTP for a maximum ADWF of 18 mgd and a PWWF of 45 mgd, the RWQCB has determined that the Dry Creek WWTP can treat the foregoing volume of wastewater without exceeding the NPDES discharge requirements. Considering that the Dry Creek WWTP has adequate capacity to serve the ADWF and the PWWF of the proposed project, in addition to the provider's existing commitments, the proposed project would not result in the Dry Creek WWTP exceeding permitted capacity or the RWQCB's treatment requirements.

[40] City of Roseville. *City of Roseville General Plan 2035*. August 17, 2016.

Based on the above, the proposed project would not require upsizing or other improvements to existing wastewater conveyance infrastructure downstream of the proposed project. In addition, with annexation of the project site into CSA 28, Zone 173, and payment of applicable sewer connection fees and monthly sewer service fees, the project would help to provide for ongoing maintenance of such infrastructure. Thus, adequate wastewater conveyance capacity would be available to serve the project's anticipated demand in addition to existing commitments. Furthermore, the proposed project would not require or result in the relocation or construction of new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects, or result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate wastewater treatment capacity to serve the project's projected demand in addition to the provider's existing commitments. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

15-4 Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, State, and local management and reduction statutes and regulations related to solid waste. Based on the analysis below, the impact is *less than significant*.

Most solid waste collected in unincorporated Placer County is delivered to the WPWMA MRF where waste is processed, recyclables are recovered, and residuals are disposed. The proposed project would generate solid waste associated with construction activities as well as from future residents of the proposed developments. Construction debris would be disposed of in accordance with applicable federal, State, and local regulations and standards. Solid waste collection services would be provided by Recology Auburn Placer and the WRSL and MRF.

As described above, the 320-acre WRSL has a remaining capacity of 24,468,271 cubic yards,[41] a maximum daily throughput of 1,900 tons, and a permitted lifespan extending to 2058.[42] The MRF has a permitted processing limit of 2,200 tons per day and 1,014 vehicles per day. The average weekday tonnage received at the MRF for 2016/2017 was 1,191 tons, which is 1,009 tons per day less than the permitted amount.[43] Considering the remaining daily capacity at the MRF is 1,009 tons, the MRF has a remaining annual capacity of at least 368,285 tons.

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41 Western Placer Waste Management Authority. *Comment Letter: Lincoln Meadows Draft Environmental Impact Report*. December 11, 2017.

42 Western Placer Waste Management Authority. *About WPWMA*. Available at: http://www.wpwma.com/about-wpwma/. Accessed June 2019.

43 Placer County Department of Facility Services, Environmental Engineering Division (Solid Waste). *EIR Guidance Document*. July 2014.

Per the U.S. EPA's report, *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*, residential construction activities generate an average of 4.39 lbs/sf of waste.[44] The proposed project would include construction of 119 residential units; however, the total building square footage of the future units is currently unknown. Therefore, for analysis purposes, each unit was conservatively estimated to include 2,500 sf of building space. Assuming a buildout of 119 units with 2,500 sf of building space, the proposed project would result in a total buildout square footage of 297,500 sf, construction of which would produce 1,306,025 lbs (653 tons) of construction waste (4.39 lbs/sf X 297,500 sf). In addition, off-site utility improvements associated with the project would generate approximately 286.7 cubic yards of asphalt waste (approximately 198 tons).

The construction waste estimate presented above represents a conservative analysis of the maximum potential waste production from the construction and demolition process. The CALGreen Code requires at least 65 percent diversion of construction waste for projects permitted after January 1, 2017. As such, a minimum of 553 tons of waste would be diverted away from landfill disposal during construction. Considering the applicable CALGreen Code requirements, buildout of the proposed project would be anticipated to produce 298 tons of waste. Construction waste generation represents a short-term increase in waste generation. The WRSL is permitted to accept 693,500 tons per year. Therefore, construction waste associated with the proposed project would represent approximately 0.04 percent of the WRSL's total annual permitted capacity. A contribution of a maximum of 0.04 percent of the WRSL's total annual permitted capacity would not be considered a substantial amount of waste, and the WRSL has adequate capacity to accept such waste.

During operation of the project, the future residents would produce solid waste that would be collected by the Recology and transferred to the WRSL. Operational solid waste generation from the proposed project has been estimated based on an average waste generation rate for single-family residential development of 10.2 pounds per unit per day.[45] As such, the proposed 119 single-family units would produce approximately 1,213.8 pounds of waste per day, or approximately 0.18 percent of the WRSL's daily permitted capacity. A total of 1,213.8 pounds of waste per day would equate to approximately 221.5 tons per year, or 0.03 percent of the WRSL's annual permitted capacity. Therefore, the project would not be considered to contribute significant amounts of waste to the WRSL, and the WRSL has sufficient capacity to handle the increase in waste anticipated to be generated by implementation of the proposed project.

As discussed previously, the proposed project could potentially include the construction of up to 12 additional on-site ADUs in order to meet the County's affordable housing requirements, resulting in a total of 131 units. However, each ADU would be substantially smaller than the primary residence on the lot; thus, construction waste associated with the 12 additional units would be relatively minor. In addition, each unit would house a fewer number of residents relative to standard market-rate single-family units, thereby resulting in reduced operational solid waste generation. Therefore, in the event that an additional

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44 U.S. Environmental Protection Agency. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts.* 2009.

45 California Department of Resources Recycling and Recovery. *Estimated Solid Waste Generation Rates*. Available at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates. Accessed June 2019.

12 ADUs are constructed as part of the project, the conclusions presented herein related to solid waste would not change.

Based on the above, construction and operation of 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. In addition, the project would not conflict with applicable federal, State, and local management and reduction statutes and regulations related to solid waste. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

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

For further detail related to the cumulative setting of the proposed project, refer to Chapter 17, Statutorily Required Sections of this EIR.

15-5 Increase in demand for utilities and service systems associated with the proposed project, in combination with future buildout in the DCWPCP area. Based on the analysis below and with implementation of mitigation, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Water Supply

CAL-AM anticipates that cumulative development within CAL-AM's West Placer Service Area, which encompasses the DCWPCP area, including the project site, would result in increased water demand from the West Placer Service Area, as shown in Table 15-2 above. As shown in the table, demand in the West Placer Service Area is anticipated to change from 753 afy to 2,559 afy between 2015 and 2020, resulting in an increase of 1,806 afy. By the year 2035, cumulative demand is anticipated to increase to 6,819 afy. Table 15-2 demonstrates that the anticipated growth in demand could be accommodated by available supplies, with an annual surplus of at least 97 afy in 2020. By the year 2035, the surplus is anticipated to increase to approximately 259 afy.[46] As discussed previously, because CAL-AM anticipates supply surpluses for the West Placer Service area of at least 97 afy, the proposed project's anticipated demand increase of an estimated 42.02 afy could be accommodated by CAL-AM supplies.

[46] California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan*. June 30, 2016.

It should be noted that cumulative development within the West Placer Service Area may include future projects that were not previously accounted for within the CAL-AM 2015 UWMP, thereby resulting in exceedances of the anticipated water surpluses for the planning area. However, as discussed previously, CAL-AM expects that the contract between CAL-AM and PCWA will be renegotiated if CAL-AM requires additional water.[47] Per the PCWA 2015 UWMP, PCWA anticipated surpluses of at least 18,740 afy through the year 2045 for average year conditions.[48] Therefore, adequate water supplies exist to accommodate cumulative growth of the West Placer Service Area, including growth within the DCWPCP and increased demand due to operation of the proposed project.

Wastewater Conveyance and Treatment

As noted previously, as part of the technical memorandum prepared for the proposed project by Woodward & Curran, the City of Roseville's 2017 Sewer Model Update was used to estimate flows associated with the proposed project and other cumulative development within the project sewer shed. Vacant parcels within the northeastern portion of the project sewer shed were assumed to develop at the maximum allowable density per the DCWPCP, resulting in up to 325 total dwelling units, including buildout of the project site. Based on a flow factor of 190 gpd/EDU, such cumulative development within the project sewer shed would result in an estimated ADWF of approximately 61,750 gpd, including 23,560 gpd from the proposed project and 38,190 from the remainder of the northeastern portion of the sewer shed. Based on the results of the analysis, Woodward & Curran determined that buildout of the project and other cumulative development, in addition to demands associated with existing development, would result in a minimum d/D of 0.58 for the downstream sewer collection system.

As noted previously, the City of Roseville design standard for pipes 15 inches in diameter or greater is that the maximum d/D must be 1.0 or less. All sewer pipe segments downstream of the modeled connection point (SMH B03-007) are 15 inches or larger. Given that the project, combined with cumulative development within the sewer shed, would result in a d/D of 0.58, conflicts with the City's design criteria would not occur. Therefore, per the technical memorandum, wastewater flows associated with the proposed project and other cumulative development would not create any capacity issues within the downstream wastewater conveyance system, and upsizing of existing sewer lines would not be required. It should be noted that because substantial surplus capacity is available within the downstream conveyance infrastructure, additional wastewater generation associated with the potential inclusion of an additional 12 on-site ADUs would not alter the conclusions presented above.[49]

Wastewater from the project site and other cumulative development within the project area would be treated at the Dry Creek WWTP. As discussed previously, the WWTP's permitted average dry weather capacity of 18 million gallons per day (mgd) would not be sufficient to accommodate the wastewater anticipated to be generated due to buildout of the WWTP service area, which is estimated to reach approximately 21 mgd. Thus,

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47 California American Water Company, Northern Division – Sacramento District. *2015 Urban Water Management Plan* [pg. 6-4]. June 30, 2016.

48 Placer County Water Agency. *2015 Urban Water Management Plan* [Table 7-1]. June 2, 2016.

49 As noted above, the Woodward & Curran sewer report actually evaluated 124 single-family units for the project site; thus, the net increase attributable to the potential ADUs is even less than that which could be expected to be generated by 12 ADUs.

improvements to the Dry Creek WWTP are likely to be needed prior to buildout of the Dry Creek WWTP's service area, and the combined impact of cumulative development within the service area would be significant.

Utility providers employ various programs and mechanisms to support provision of services to new development; for example, Placer County has adopted development fees consistent with State law to facilitate the provision of public services for projects consistent with the buildout of the General Plan, and various utility providers charge connection fees and recoup costs of new infrastructure, including wastewater treatment infrastructure, through standard billings for services.

As noted under Impact 15-3 above, therefore, the Dry Creek WWTP currently has adequate capacity to serve the project's anticipated demand in addition to the WWTP's existing commitments. In addition, the proposed project would be subject to payment of the County's sewer connection fees. The County's sewer connection fees are currently approximately $9,322 per EDU, a portion of which would be distributed to the City of Roseville for ongoing and future upgrades to the Dry Creek WWTP. Payment of sewer connection fees would allow for capacity expansion of the Dry Creek WWTP as necessary to serve cumulative buildout of the WWTP's service area, including the project site. According to CEQA Section 15130(a)(3), paying a "fair share fee" is permissible as effective mitigation for cumulative impacts if the fees are part of a reasonable plan of actual mitigation that the relevant agency commits itself to implementing. Therefore, the proposed project's contribution to the significant cumulative impact related to wastewater treatment facilities would be less than cumulatively considerable.

Electricity, Natural Gas, and Telecommunications Facilities

Environmental effects associated with the construction of new or expanded electricity, natural gas, and telecommunications facilities would primarily be project-specific, rather than cumulative. As noted under Impact 15-3 above, while the project would include new connections to existing electrical, natural gas, and telecommunications infrastructure located in the project vicinity, substantial extension of existing off-site infrastructure would not be required. Therefore, the proposed project would result in a less-than-significant cumulative impact related to construction of new or expanded electricity, natural gas, and telecommunications facilities.

Solid Waste

As noted previously, solid waste collection services for the proposed project would be provided by Recology Auburn Placer, as well as the WRSL and MRF. With the current space available and the recovery efforts by the MRF, the WRSL is anticipated to operate through 2058.[50] Development of the project site with residential uses was anticipated by the DCWPCP.

Although the proposed project includes redesignation and rezoning of the project site, the project would not be anticipated to result in significantly more intense waste generation than was previously anticipated for the project site in the DCWPCP and, thus, regional solid waste planning efforts. As such, the incremental increase in demand for solid waste collection and disposal services that would result from implementation of the proposed

[50] Western Placer Waste Management Authority. *About WPWMA*. Available at http://www.wpwma.com/about-wpwma/. Accessed June 2019.

project has generally been anticipated by regional solid waste providers, the DCWPCP, and the Placer County General Plan. Therefore, the proposed project's incremental contribution to the cumulatively considerable impact to solid waste would be considered less than cumulatively considerable.

Conclusion

Based on the above, adequate water supplies exist to accommodate cumulative growth of the West Placer Service Area, including growth within the DCWPCP and increased demand due to operation of the proposed project. In addition, the project would not be anticipated to result in significantly more intense waste generation than was previously anticipated for the project site in the DCWPCP. The project would not result in any significant cumulative impacts related to electrical, natural gas, and telecommunications infrastructure.

Given that improvements to the Dry Creek WWTP are likely to be needed prior to buildout of the Dry Creek WWTP's service area, the combined impact of cumulative development related to wastewater treatment would be significant. However, the proposed project would be subject to applicable utility fees used to fund upgrades to the Dry Creek WWTP and would not result in substantially increased demand for wastewater treatment services relative to buildout of the project site per the current DCWPCP land use designations. Thus, the project's impact would be minimized to the maximum extent feasible such that the project's incremental contribution to the significant cumulative impact would be ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

16. Effects Not Found to be Significant

16. EFFECTS NOT FOUND TO BE SIGNIFICANT

16.1 INTRODUCTION

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires that an EIR briefly describe why various environmental effects were determined not to be significant and therefore were not discussed in detail in the EIR. The Effects Not Found to be Significant chapter of this EIR summarizes environmental issues that were determined not to be significant with implementation of the proposed project. The reasons for the conclusion of non-significance are provided for each issue area, as applicable, below.

16.2 AESTHETICS

Consistent with Appendix G of the CEQA Guidelines, the proposed project was determined to have no impact with regard to the following issue areas:

- Have a substantial adverse effect on a scenic vista; or
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway.

A scenic vista, as defined in this EIR, is an area that is designated, signed, and accessible to the public for the express purposes of viewing and sightseeing. A scenic vista includes any such areas designated by a federal, State, or local agency. Federal and State agencies have not designated any such locations within Placer County for viewing and sightseeing. Similarly, Placer County, according to the Placer County General Plan, has determined that the Planning Area of the General Plan does not contain officially designated scenic highways, corridors, vistas, or viewing areas. Given that established scenic vistas are not located on or adjacent to the project site, the proposed project would not have a substantial adverse effect on a scenic vista. Furthermore, officially designated State Scenic Highways are not located in Placer County. Therefore, the proposed project would not substantially damage any scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a State Scenic Highway.

16.3 HAZARDS AND HAZARDOUS MATERIALS

Consistent with Appendix G of the CEQA Guidelines, the proposed project was determined to have no impact with regard to the following issue areas:

- Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Based on the analysis below, no impact would occur;
- 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 create a significant hazard to the public or the environment.; or
- 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, public use airport, or private airstrip, would the project result in a safety hazard for people residing or working in the project area.

The proposed project site is not located within one-quarter mile of an existing or proposed school. The nearest school, Roseville Montessori Academy, is located 0.47-mile north of the site. Furthermore, the project consists of a residential subdivision, and, thus, would not involve the routine use or transport of substantial quantities of hazardous materials during operation. As such, 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.

The site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and impacts related to such would not occur. The Phase I Environmental Site Assessment (ESA) conducted for the proposed project site did not identify any recognized environmental conditions (RECs) associated with the project site. Therefore, the proposed project would not create a significant hazard to the public or the environment associated with a hazardous materials site.

The proposed project is not located within an airport land use plan or within two miles of a public airport, public use airport, or private airstrip. The nearest airport relative to the project site is the McClellan Airport, which is located approximately 7.25 miles to the southwest of the site. Therefore, the proposed project would not result in a safety hazard for people residing or working in the project area associated with an airport or airstrip.

16.4 LAND USE AND PLANNING/POPULATION AND HOUSING/AGRICULTURAL RESOURCES

Consistent with Appendix G of the CEQA Guidelines, the proposed project was determined to have no impact with regard to the following issue areas:

- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)); or
- Result in the loss of forest land or conversion of forest land to non-forest use or involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.

The project site does not contain any existing development. Given that the proposed subdivision would not require demolition of any existing homes, the proposed project would not displace any existing people or housing and would not necessitate the construction of replacement housing elsewhere.

In addition, the project site is not considered forest land (as defined in Public Resources Code section 12220[g]) or timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, forest land or timberland, the loss of forest land or conversion of forest land to non-forest use, or involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.

16.5 NOISE

Consistent with Appendix G of the CEQA Guidelines, the proposed project was determined to have no impact with regard to the following issue area:

- 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.

The proposed project is not located within the vicinity of a private airstrip, an airport land use plan, or two miles of a public airport or public use airport. The nearest airport relative to the project site is the McClellan Airport, which is located approximately 7.25 miles to the southwest of the site. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels associated with airports.

17. Statutorily Required Sections

17. STATUTORILY REQUIRED SECTIONS

17.1 INTRODUCTION

The Statutorily Required Sections chapter of the Draft EIR includes discussions regarding those topics that are required to be included in an EIR, pursuant to CEQA Guidelines, Section 15126.2. The chapter includes a discussion of the proposed project's potential to result in growth-inducing impacts; the cumulative setting analyzed in this EIR; energy conservation; significant irreversible environmental changes; and significant and unavoidable impacts caused by the proposed project.

17.2 GROWTH-INDUCING IMPACTS

State CEQA Guidelines section 15126.2(d) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that could induce growth. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, it should not be assumed that induced growth is necessarily significant or adverse. This analysis examines the following potential growth-inducing impacts related to implementation of the proposed project and assesses whether these effects are significant and adverse (see *CEQA Guidelines*, Section 15126.2[d]):

1. Foster population and economic growth and construction of housing.
2. Eliminate obstacles to population growth.
3. Affect service levels, facility capacity, or infrastructure demand.
4. Encourage or facilitate other activities that could significantly affect the environment.

Foster Population and Economic Growth and Construction of Housing

As discussed in Chapter 11, Land Use and Planning/Population and Housing/Agricultural Resources, of this EIR, the proposed 119-unit single-family development would increase the available housing within the DCWPCP area, which would be expected to increase population in the area. Using the 3.08 persons/household average household size for the DCWPCP area, the project would house an estimated 367 residents. In addition, the potential construction of up to 12 ADUs would result in 23 additional residents within the project site, for a total of 390 residents. Under the current RS-AG-B-20 zoning for the 24.1-acre portion of the site east of the on-site tributary, up to 52 units could be built, resulting in a population of approximately 160 residents.[1] If ADUs are incorporated on-site similar to the proposed project, five (5) ADUs would be added,

[1] As noted in Chapter 18, Alternatives, of this EIR, 52 units is the theoretical capacity for development of the eastern portion of project site under the current zoning designations; however, development would likely occur at a lower intensity due to on-site requirements, including streets, landscape, EVA, lift station, etc.

resulting in a total population of 169 residents. Thus, the proposed project could result in an increase of approximately 67 single family units and seven ADUs, or 221 residents beyond what is currently anticipated for the site, if the ADUs are included. This new residential population would likely patronize local businesses and services in the area, fostering economic growth. However, population growth resulting from the proposed project would be within the DCWPCP, SACOG, and Placer County growth estimates for the project area. Furthermore, the infrastructure included in the proposed project, including the proposed sewer lift station, would be sized to accommodate only the development that had been previously planned for the project area.

While construction of the proposed project would result in increased construction employment opportunities, which could potentially result in increased permanent population and demand for housing in the vicinity of the project site, employment patterns of construction workers is such that construction workers would not likely, to any significant degree, relocate their households as a result of the construction-related employment opportunities associated with the proposed project.

Although the project would provide short-term employment opportunities, which would likely be filled from the local employee base, with the possible exception of a few household and landscape maintenance jobs, no permanent jobs would be created by the proposed project. Therefore, the project would not result in long-term employment growth in the area.

Appendix G of CEQA Guidelines has been recently amended to clarify that unplanned population growth would be considered a potentially significant impact. However, growth that is planned, and the environmental effects of which have been analyzed in connection with a land use plan or a regional plan, should not by itself be considered an impact. Consequently, the proposed project would result in population growth of the DCWPCP Area, but such growth would be within the buildout projections for the DCWPCP Area, and within growth projections for unincorporated areas within Placer County. Thus, while the project would foster population and economic growth, such growth would be similar to what has been previously anticipated for the project region, and a less-than-significant impact related to population and economic growth would occur.

Eliminate Obstacles to Population Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services, would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

As discussed in Chapter 15, Utilities and Service Systems, of this EIR, the County's existing water main infrastructure is anticipated to be sufficiently sized to accommodate the increased demand from the proposed project, and the project would not require the construction of new or expanded water conveyance infrastructure. Water conveyance infrastructure needed for the proposed project would be constructed on-site, and would be financed by the project applicant. Consequently, the construction of on-site water infrastructure would not be anticipated to result in elimination of obstacles to population growth.

The proposed on-site sanitary sewer system would include construction of a new lift station to be located on Lot A, on the north side of Vineyard Road, east of the on-site tributary and opposite Misty Lane. In addition, as part of the proposed project, a new eight-inch sewer line would be

constructed off-site within Vineyard Road, between the lift station and the existing City of Roseville manhole located within Foothills Boulevard. While the proposed project includes construction of a sewer lift station and off-site sewer conveyance infrastructure, per CEQA Guidelines Section 15130, the discussion of cumulative impacts in an EIR can rely on discussions of regional or areawide conditions from a general plan and general plan EIR. This growth-inducement discussion, therefore, relies upon the DCWPCP EIR and the Placer County General Plan EIR, which anticipate build-out of the sewer shed encompassing the project site.

As required by Placer County General Plan Policy 4.D.4, new developments are required to construct wastewater conveyance facilities that are adequately sized to provide sewer services based on permitted densities and applicable sewer shed area. As discussed in Chapter 15, of this EIR, and the technical memorandum prepared for the proposed project by Woodward & Curran, the lift station and sewer conveyance infrastructure would be designed specifically to accommodate development of the project's shed area, which includes areas designated in the DCWPCP for future development. The lift station, which would be financed by the project applicant, has been previously planned by the County per the Northeast Area Sewer Master Plan. In compliance with Placer County General Plan Policy 4.D.4, the capacity of the sewer lift station and conveyance infrastructure is intended to provide enough capacity to accommodate only the permitted densities within the project area, which would ensure that future growth occurs in compliance with the land use designations within the DCWPCP for the shed area. Therefore, the proposed project would not eliminate obstacles to growth that was not previously anticipated for the area.

In addition, the proposed project would include off-site improvements to Brady Lane and Vineyard Road. As discussed in Chapter 3, Project Description, of this EIR, the proposed off-site improvements to Brady Lane would consist of the widening of Brady Lane along the project frontage and provision for curb, gutter, and sidewalk improvements southward to the Brady Lane/Vineyard Road intersection. A school bus turnout along the west side of Brady Lane, south of the project site access, would also be included as part of the proposed improvements. The proposed improvements to Vineyard Road would include the widening of Vineyard Road by approximately 12 to 14 feet to accommodate one-half of a future 14-foot, two-way, left-turn lane, one 12-foot through lane, and a new six-foot bike lane. The widened section of Vineyard Road would include an asphalt dike to direct drainage to a bio-retention planter. It should be noted that the project would only construct interim roadway improvements. The interim improvements would not provide more volume capacity within the local roadway network.

The roadway and sewer lift station improvements represent county-planned improvements that have been previously anticipated to occur regardless of implementation of the proposed project. Although implementation of the aforementioned improvements may be considered to eliminate obstacles to growth, the improvements and potential resulting growth have been previously anticipated by the County for the area. As such, the proposed project would not eliminate obstacles to growth in a manner that would encourage previously unplanned growth.

Affect Service Levels, Facility Capacity, or Infrastructure Demand

Increases in population that would occur as a result of a proposed project may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. As discussed in Chapter 13, Public Services and Recreation, of this EIR, increased demands for fire and police protection services attributable to the proposed project would not necessitate the construction of new or expanded facilities that could cause significant

environmental impacts. In addition, as discussed in Chapter 15, Utilities and Service Systems, of this EIR, wastewater generated by the proposed project could be accommodated by existing wastewater treatment facilities and infrastructure, and existing water supply infrastructure exists to accommodate the domestic and fire flow demands associated with the proposed project.

The landfill that would serve the proposed project has adequate capacity to manage the solid waste generated as result of the project. Furthermore, mitigation measures set forth in Chapter 10, Hydrology and Water Quality, of this EIR would ensure that the proposed project would not create or contribute runoff water that would exceed the capacity of the County's stormwater drainage systems. Therefore, the proposed project would not increase population such that service levels, facility capacity, or infrastructure demand would require construction of new facilities that could cause significant environmental impacts.

Encourage or Facilitate other Activities That Could Significantly Affect the Environment

This EIR provides a comprehensive assessment of the potential for environmental impact associated with implementation of the proposed project. Please refer to Chapters 4 through 15 of this EIR, which comprehensively address the potential for impacts from urban development on the project site.

17.3 CUMULATIVE IMPACTS

CEQA Guidelines, Section 15130 requires that an EIR discuss the cumulative and long-term effects of the proposed project that would adversely affect the environment. "Cumulative impacts" are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts" (CEQA Guidelines, Section 15355). "[I]ndividual effects may be changes resulting from a single project or a number of separate projects" (CEQA Guidelines, Section 15355, subd. [a]). "The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time" (CEQA Guidelines, Section 15355, subd. [b]).

The need for cumulative impact assessment reflects the fact that, although a project may cause an "individually limited" or "individually minor" incremental impact that, by itself, is not significant, the increment may be "cumulatively considerable," and, thus, significant, when viewed together with environmental changes anticipated from past, present, and probable future projects (CEQA Guidelines, Section 15064, subd. [h(1)], Section 15065, subd. [c], and Section 15355, subd. [b]). Accordingly, particular impacts may be less than significant on a project-specific basis but significant on a cumulative basis if their small incremental contribution, viewed against the larger backdrop, is cumulatively considerable. However, it should be noted that CEQA Guidelines, Section 15064, Subdivision (h)(5) states, "[…]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable." Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

Section 15130(b) of CEQA Guidelines indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, but that analysis should reflect the severity of the impacts and their likelihood of occurrence, and that the analysis should be focused,

practical, and reasonable. To be adequate, a discussion of cumulative effects must include the following elements:

> (1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency's control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provide that such documents are reference and made available for public inspection at a specified location;
>
> (2) A summary of the individual projects' environmental effects, with specific reference to additional information and stating where such information is available; and
>
> (3) A reasonable analysis of all of the relevant projects' cumulative impacts, with an examination of reasonable, feasible options for mitigating or avoiding the project's contribution to such effects (Section 15130[b]).

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130[c]). Section 15130(a)(3) states that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund the project's fair share of a mitigation measure or measures designed to alleviate the cumulative impact.

A discussion of cumulative impacts is provided within each of the technical chapters of this EIR pursuant to CEQA Guidelines Section 15130.

Cumulative Setting

The lead agency should define the relevant geographic area of inquiry for each impact category (id., Section 15130, subd. [b][3]), and should then identify the universe of "past, present, and probable future projects producing related or cumulative impacts" relevant to the various categories, either through the preparation of a "list" of such projects or through the use of "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact" (id., subd. [b][1]).

The majority of the cumulative analysis in this section is based upon a summary of projections contained in the Dry Creek-West Placer Community Plan Buildout as well as other reasonably foreseeable projects within the project region. Such projects include, but are not limited to, the Placer Vineyards Specific Plan, the Riolo Vineyards Specific Plan, and the Double S Ranch project. Limited situations exist where geographic setting differs between project chapter analysis within a particular region. Examples include air quality, for which the cumulative geographic setting is the Sacramento Valley Air Basin (SVAB). Global climate change is, by nature, a cumulative impact. Emissions of GHG contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change

is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate change applicable to the proposed project, the geographical context for global climate change in this EIR is limited to the State of California.

In addition, as discussed in Chapter 14, Transportation and Circulation, of this EIR, the cumulative traffic analysis relied on the County's regional traffic model, which was last updated for the Placer Vineyards Specific Plan EIR and was selected as the most valid source of future background traffic volumes in the study area. According to County staff, the regional traffic model reflects current land use assumptions for development in the DCWPCP area.

17.4 ENERGY CONSERVATION

In order to ensure energy implications are considered in project decisions, Appendix G of CEQA Guidelines requires a discussion of the potential energy impacts of projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The goal of conserving energy implies the wise and efficient use of energy. Per Appendix G, a project would result in a significant impact related to energy conservation if the project would:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction operation; or
b. Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code, with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to each form of energy supply during construction and operations is provided below.

California Green Building Standards Code

The 2019 California Green Building Standards Code, otherwise known as the CALGreen Code (CCR Title 24, Part 11), is a portion of the California Building Standards Code (CBSC), which will become effective with the rest of the CBSC on January 1, 2020. The purpose of the CALGreen Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The provisions of the code apply to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout California.

The CALGreen Code encourages local governments to adopt more stringent voluntary provisions, known as Tier 1 and Tier 2 provisions, to further reduce emissions, improve energy efficiency, and conserve natural resources. If a local government adopts one of the tiers, the provisions become mandates for all new construction within that jurisdiction.

Building Energy Efficiency Standards

The 2019 Building Energy Efficiency Standards is a portion of the CBSC, which expands upon energy efficiency measures from the 2016 Building Energy Efficiency Standards resulting in a seven percent reduction in energy consumption from the 2016 standards for residential structures. Energy reductions relative to previous Building Energy Efficiency Standards would be achieved through various regulations including requirements for the use of high efficacy lighting, improved water heating system efficiency, and high-performance attics and walls.

One of the improvements included within the 2019 Building Energy Efficiency Standards will be the requirement that certain residential developments, including some single-family and low-rise residential developments, include on-site solar energy systems capable of producing 100 percent of the electricity demanded by the residences. Certain residential developments, including developments that are subject to substantial shading, rendering the use of on-site solar photovoltaic systems infeasible, are exempted from the foregoing requirement; however, such developments would continue to be subject to all other applicable portions of the 2019 Building Energy Efficiency Standards.

Construction Energy Use

Appendix F of the CEQA Guidelines identifies several potential sources of energy conservation impacts, including the project's construction energy requirements and energy use efficiencies by amount and fuel type. Construction of the proposed project would result in a temporary increase in energy consumption in the area.

As discussed in Chapter 5, Air Quality and Greenhouse Gas Emissions, of this EIR, construction of the proposed project is conservatively assumed to commence in 2021 and would occur over approximately three years. It should be noted that per State legislation, emissions standards for construction fleets become more stringent each year. As such, should project construction occur at a later date than is currently anticipated, associated emissions and energy use would be reduced relative to the estimates presented within this EIR.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, building construction, etc.), only portions of the site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, all construction equipment and operation thereof would be regulated per the California Air Resources Board (CARB) In-Use Off-Road Diesel Vehicle Regulation, which includes measures to reduce emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements and imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. Project construction would also be required to comply with all applicable PCAPCD rules and regulations, such as Rule 218 related to architectural coatings and Rule 228 related to fugitive dust. As a result, construction equipment operating at the project site would occur over a relatively short duration in comparison to the operational lifetime of the proposed project, and would operate intermittently over the construction period for the project.

The CARB has prepared the *2017 Climate Change Scoping Plan Update* (2017 Scoping Plan),[2] which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The regulations described above, with which the proposed project must comply, as well as the required mitigation measures set forth in this EIR, would be consistent with the

[2] California Air Resources Board. *The 2017 Climate Change Scoping Plan Update.* January 20, 2017.

intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Nonetheless, construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid. Project construction would not involve the use of natural gas appliances or equipment. Consistent with Section 9.36.030 of the Placer County Noise Ordinance, construction activities would be limited to the following hours: a) Monday through Friday, 6:00 AM to 8:00 PM during daylight savings; b) Monday through Friday, 7:00 AM to 8:00 PM during standard time; and c) Saturdays, 8:00 AM to 6:00 PM. Construction activities are not permitted on Sundays and federal holidays.

Electricity Demand During Construction

Typically, at construction sites, electricity from the existing grid is used to power portable and temporary lights or office trailers. Because grid electricity would be used primarily for steady sources such as lighting, not sudden, intermittent sources such as welding or other hand-held tools, the increase in electricity usage at the site during construction would not be expected to cause any substantial peaks in demand. However, the base demand for electricity in the area would increase. Overall, construction of the project would be over a relatively short duration in comparison to the operational lifetime of the proposed project and electricity demand from the site would occur intermittently throughout the buildout period of the project. As the site develops, operational electricity demand would become the dominant demand source. Operational electricity demand would be much greater than construction, and is discussed further below. It should be noted that standards or regulations specific to construction-related electricity usage do not currently exist.

The Pacific Gas and Electric Company (PG&E) supplies electricity to unincorporated Placer County within the project area and would serve the site following construction of the proposed project. Electricity is provided from PG&E-owned sources, and additional electricity supplies are purchased by PG&E from other energy providers. Thus, PG&E relies on a variety of electricity sources including hydropower, natural gas-fired generators, nuclear, and renewable energy sources.[3] Construction of the proposed project, which would result in temporary increases in electricity demand, would not cause a permanent or substantial increase in demand that would exceed PG&E's demand projections or exceed the ability of PG&E's existing infrastructure to handle such an increase. Therefore, project construction would not result in any significant impacts on local or regional electricity supplies, the need for additional capacity, or on peak or base period electricity demands. In addition, standards or regulations specific to construction-related electricity usage do not currently exist. As such, the temporary increase in electricity due to project construction activities would not be considered an inefficient, wasteful, and unnecessary consumption of energy, and significant adverse impacts on electricity resources would not occur.

[3] Pacific Gas & Electric Company. *Company Profile*. Available at: https://www.pge.com/en_US/about-pge/company-information/profile/profile.page. Accessed June 2019.

Oil Demand During Construction

Construction of the proposed project would involve vehicle trips to and from the project site by workers, delivery vehicles, and hauling trucks. Worker vehicle trips are assumed to utilize gasoline, and delivery and hauling trucks are assumed to utilize diesel fuel. Diesel fuel would also be used to power the construction and off-road equipment necessary for construction activities, including rubber-tired dozers, tractors, excavators, cranes, and other types of equipment. In addition, diesel-fueled portable generators may be used where electricity from the grid cannot be provided or for where more immediate electricity is needed, such as for welding or other hand tools. Overall, operation of construction equipment at the project site would occur over a relatively short duration in comparison to the operational lifetime of the proposed project and would be intermittent over the period of construction for the project. Operational oil demand would be much greater than construction, and is discussed further below.

A number of federal, State, and local standards and regulations exist that require improvements in vehicle efficiency, fuel economy, cleaner-burning engines, and emissions reductions. For example, as noted above, CARB has adopted the In-Use Off-Road Diesel Vehicle Regulation, which is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. The In-Use Off-Road Diesel Vehicle Regulation would subsequently help to improve fuel efficiency and reduce GHG emissions. Any licensed contractor for the project and equipment would have to be in compliance with all applicable regulations, such as the in-use, off-road, heavy-duty vehicle regulation. Thus, the proposed project would comply with existing standards related to construction fuel efficiency. Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to reduce demand on oil and emissions associated with construction.

Therefore, the temporary increase in gasoline and diesel consumption due to project construction activities would not be an inefficient, wasteful, and unnecessary consumption of energy, and a significant adverse impact on oil resources would not occur.

Conclusion

Construction of the proposed project would result in a temporary increase in demand for energy resources. However, the temporary increase would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand. As such, the project would not result in an inefficient, wasteful, and unnecessary consumption of energy. Therefore, the proposed project would result in a less-than-significant impact on energy resources during construction.

Operational Energy Use

In order to ensure energy implications are considered in project decisions, Appendix F of the CEQA Guidelines requires a discussion of the potential energy impacts of a project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. Appendix F identifies several potential methods of evaluating a project's energy use, which are listed as follows and discussed in further detail below, with the exception of the project's

construction-related energy requirements and energy use efficiencies, which are discussed above:

- The project's energy requirements and energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal.
- The effects of the project on local and regional energy supplies and on requirements for additional capacity.
- The effects of the project on peak and base period demands for electricity and other forms of energy.
- The degree to which the project complies with existing energy standards.
- The effects of the project on energy resources.
- The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

Building Energy

The project site is currently vacant and undeveloped. Following implementation of the proposed project, PG&E would provide electricity and natural gas to the project site. Energy use associated with operation of the proposed project would be typical of residential uses, requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. The proposed project's operational emissions were estimated using CalEEMod. The modeling performed for the proposed project included compliance with PCAPCD rules and regulations (i.e., low-VOC [volatile organic compounds] paints and low-VOC cleaning supplies), as well as with the 2019 California Building Energy Efficiency Standards Code, which is part of the CBSC. In compliance with the 2019 CBSC, 100 percent of the electricity required for project operations would be provided by on-site renewable energy systems. In addition, maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment.

The proposed project would increase the intensity of development within the project site, and result in energy demands for natural gas of approximately 3,074,330 kBTU/yr. Such demands for natural gas would be higher than what currently exists for the project site; however, increased energy and natural gas demand does not necessarily mean that a project would have an impact related to energy resources. Based on Appendix F of the CEQA Guidelines, a proposed project would result in an impact related to energy resources if a project would result in the inefficient use or waste of energy.

As stated above, structures included in the proposed project would be subject to all relevant provisions of the 2019 update of the CBSC, including the 2019 Building Energy Efficiency Standards. Adherence to the most recent CALGreen and the 2019 Building Energy Efficiency Standards would require that 100 percent of the electricity required for operation of the proposed structures would be provided by on-site renewable resources as well as ensure the efficient use of natural gas through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting.

Transportation Energy

The annual VMT at full buildout of the proposed project is anticipated to be approximately 2,510,835 under Existing Plus Project conditions and 2,423,600 under Cumulative Plus Project

conditions based on the Traffic Impact Analysis prepared for the project.[4] Based on a projected project population of 367 residents, the daily per capita VMT for the project would be approximately 18.7 under Existing plus Project Conditions and 18.1 under Cumulative Plus Project Conditions.

The average fuel economy for the U.S. passenger vehicle fleet was 23.9 miles per gallon (mpg) in 2015, the most recent year such data is available.[5] An average of 23.9 mpg, and an annual VMT of 2,510,835 would result in the consumption of 2,501.33 barrels of gasoline a year. California is estimated to consume approximately 558 million barrels of petroleum per year.[6] Based on the annual consumption within the State, the proposed project would result in a 0.0004 percent increase in the State's current consumption of gasoline under Existing Plus Project conditions; under Cumulative Plus Project conditions, the project's fuel consumption would be slightly reduced. It should be noted that a portion of the trips associated with the proposed project would not necessarily be new trips. Rather, some trips would be redistributed as residents from other areas relocate to the project site. As such, energy consumption associated with project VMT would not be unique to the project.

California leads the nation in registered alternatively-fueled and hybrid vehicles. In addition, State-specific regulations encourage fuel efficiency and reduction of dependence on oil. Improvements in vehicle efficiency and fuel economy standards help to reduce consumption of gasoline and reduce the State's dependence on petroleum products. The 2019 CBSC also requires new developments to include the necessary electrical infrastructure for electric vehicle charging stations. The proposed project would be required to comply with all applicable regulations associated with vehicle efficiency and fuel economy. In addition, bicycle and pedestrian facilities are provided along portions of Brady Lane and Vineyard Road while a new school bus turnout would be included along the west side of Brady Lane. The proposed project would also include trails, consisting of a decomposed granite trail/sidewalk system that would extend from the northern property line and connect to the three separate linear park areas. Proposed project improvements would include meandering paths along project frontages connecting to existing pedestrian facilities in the project area. The aforementioned sidewalks and paths would provide pedestrian connectivity within the project site and to existing off-site pedestrian facilities, thereby helping to discourage driving and reduce vehicle trips.

Conclusion

As discussed above, the proposed project operations would involve an increase in energy consumption. However, the proposed project would comply with all applicable standards and regulations regarding energy conservation and fuel efficiency, which would ensure that the future uses would be designed to be energy efficient to the maximum extent practicable. Accordingly, the proposed project would not be considered to result in a wasteful, inefficient, or unnecessary usage of energy, and impacts related to operational energy would be considered less than significant.

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4 KD Anderson & Associates, Inc. *Traffic Impact Analysis for Brady Vineyard Subdivision, Placer County, California.* August 5, 2019.

5 U.S. Energy Information Administration. *Total Energy, Table 1.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy*. Accessible at: https://www.eia.gov/totalenergy/data/browser/?tbl=T01.08#/?f=A&start=200001. Accessed on August 2019.

6 U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Accessible at: https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_use_pa.html&sid=US&sid=CA. Accessed January 2019.

17.5 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Per CEQA Guidelines Section 15126.2(c), this EIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed project, should the project be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in, or contribute to, the following significant irreversible environmental changes:

- Conversion of vacant land to a fully built-out residential community, thus precluding alternative land uses in the future; and
- Irreversible consumption of goods and services, such as fire, police, and school services, associated with the future population; and
- Irreversible consumption of energy and natural resources, such as water, electricity, and natural gas, associated with the future residents.

17.6 SIGNIFICANT AND UNAVOIDABLE IMPACTS

According to CEQA Guidelines, an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented (CEQA Guidelines §15126.2[b]). Such impacts would be considered unavoidable when the determination is made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less-than-significant. This section identifies significant impacts that could not be eliminated or reduced to a less-than-significant level by mitigations imposed by the County. The final determination of the significance of impacts and the feasibility of mitigation measures would be made by the County as part of the County's certification action. The significant and unavoidable impacts of the proposed project are summarized below.

Existing Plus Project Conditions impact to Baseline Road/Brady Lane Intersection. (Impact 14-2)

Implementation of the proposed project would result in a significant impact related to the Baseline Road/Brady Lane intersection. Mitigation Measure 14-7 requires either installation of a new traffic signal at the intersection or restriction of left-turn movements at the intersection. However, given that the intersection is located within the City of Roseville, outside of the County's jurisdiction, completion of the required improvements cannot be guaranteed. Furthermore, the City Engineer has indicated that the City of Roseville would not require a signal as a result of the proposed project, and restricting left turns at the intersection is not currently recommended by the City. Thus, the impact would remain significant and unavoidable.

Cumulative Impact at Baseline Road/Brady Lane, Cook Riolo Road/Vineyard Road, and Vineyard Road/Brady Lane intersections. (Impact 14-7)

Implementation of the proposed project would result in a significant impact at Baseline Road/Brady Lane, Cook Riolo Road/Vineyard Road, and Vineyard Road/Brady Lane under Cumulative Plus Project Conditions. The Baseline Road/Brady Lane intersection is located outside of the County's jurisdiction, and completion of the required improvements is not currently recommended by the City of Roseville. For the Cook Riolo Road/Vineyard Road and Vineyard Road/Brady Lane intersections, the required improvements are not included in the County's CIP and, thus, completion of the improvements cannot be guaranteed. Therefore, even with payment of applicable traffic impact fees, the project's incremental contribution to the cumulative impacts at the affected intersections would remain cumulatively considerable and significant and unavoidable.

18. Alternatives Analysis

18. ALTERNATIVES ANALYSIS

18.1 INTRODUCTION

The Alternatives Analysis chapter of the EIR includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required per CEQA Guidelines Section 15126.6. Generally, the chapter includes discussions of the following: the purpose of an alternatives analysis; alternatives considered but dismissed; a reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts; and the environmentally superior alternative.

18.2 PURPOSE OF ALTERNATIVES

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126.6(a) of the CEQA Guidelines, is to "[…] describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Section 15126.6(f) of CEQA Guidelines states, "The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Section 15126.6(f) of CEQA Guidelines further states:

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

In addition, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

The CEQA Guidelines provide the following guidance for discussing alternatives to a proposed project:

- An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6[a]).
- Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable

of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6[b]).

- The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination […] Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison (CEQA Guidelines Section 15126.6[d]).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6[d]).
- The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (CEQA Guidelines Section 15126.6[e][1]).
- If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

Project Objectives

Based on the above, reasonable alternatives to the project must be capable of feasibly attaining most of the basic objectives of the project. The proposed project is being pursued with the following objectives:

1. Implement the County's General Plan and DCWPCP, which designate the proposed project area for residential development;
2. Provide a well-designed residential community with neighborhood identity in close proximity to jobs and services in Placer and Sacramento counties;
3. Provide for medium residential densities in areas planned for residential uses and development with accessible infrastructure, maximizing new housing opportunities while being consistent with current area-wide infrastructure plans and growth policies;
4. Add to the diversity of housing choices that can support a wider range of lifestyles in the DCWPCP Area;
5. Reduce growth pressures on outlying areas of Placer County by efficiently utilizing the project site to accommodate residential growth and development;
6. Create a high-quality neighborhood environment containing a mix of residential, open-space, and recreational land uses;
7. Provide for variable lot sizes and increased lot coverage to promote the efficient use of land, energy and water resources within a residential community;

8. Design a project that minimizes encroachment into the existing 100-year floodplain on the site while balancing the housing needs and densities and the character of the local community;
9. Provide a comprehensively planned project that protects sensitive environmental habitat and resources, including existing riparian and oak woodland habitat on the project site, within a permanent greenbelt area providing a significant public benefit;
10. Provide a planned infrastructure system with all public facilities and services necessary to meet the needs of development of the project site; and
11. Provide a number of residential units within the project site sufficient to support necessary improvements to local and regional public service facilities.

Impacts Identified in the EIR

In addition to attaining the majority of project objectives, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. The significance level of impacts identified in the EIR are presented below.

Less Than Significant or No Impact

As discussed in each respective section of this EIR, the proposed project would result in no impact or a less-than-significant impact related to the following topics associated with the resource area indicated, and mitigation would not be required:

- ***Aesthetics.*** The EIR determined that no impact would occur related to scenic vistas, scenic resources within State scenic highways, and degradation of the existing visual character or quality of the project site and/or the site's surroundings. In addition, all cumulative impacts were determined to be either less than significant or less than cumulatively considerable.

- ***Air Quality and Greenhouse Gas Emissions.*** The EIR determined that cumulative impacts related to the generation of greenhouse gas (GHG) emissions during construction and operation of the proposed project would be less than cumulatively considerable.

- ***Biological Resources.*** The EIR determined that impacts related to special-status vernal pool branchiopods and amphibian species, as well as impacts to wildlife movement corridors, would be less than significant.

- ***Cultural Resources.*** The EIR determined that impacts related to historical resources would be less than significant.

- ***Geology and Soils/Mineral Resources.*** The EIR determined that impacts related to earthquake fault rupture, strong seismic ground shaking, and seismic-related ground failure, including liquefaction, and landslides, would be less than significant. In addition, impacts to mineral resources and cumulative increases in the potential for geological related impacts and hazards would be less than significant.

- ***Hazards and Hazardous Materials.*** The EIR determined that the proposed project would result in no impact or less-than-significant impacts for all issues related to hazards and hazardous materials.

- ***Hydrology and Water Quality.*** The EIR determined that impacts related to groundwater, as well as cumulative impacts related to water quality and drainage, would be less-than-significant. Furthermore, the project would result in a less-than-significant impact related to the risk of release of pollutants due to project inundation in a flood hazard zone.

- ***Land Use and Planning/Population and Housing/Agricultural Resources.*** The EIR determined that the proposed project would result in no impact or less-than-significant impacts for all issues related to land use and planning, population and housing, and agricultural resources.

- ***Noise.*** The EIR determined that impacts related to generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies, including cumulative impacts, would be less than significant. In addition, a less than significant impact would occur related to groundborne vibration. No impact would occur related to aircraft noise.

- ***Public Services.*** The EIR determined that all impacts related to public services, including cumulative impacts, would be less than significant.

- ***Transportation and Circulation.*** The EIR determined that impacts related to study roadway segments, transit, bicycle, and pedestrian facilities under Existing Plus Project Conditions would be less-than-significant. In addition, a less-than-significant impact would occur with regard to emergency access and access to nearby uses, hazardous design features, and incompatible uses. Under Cumulative Plus Project conditions, a less-than-cumulatively considerable impact would occur related to study roadway segments.

- ***Utilities and Service Systems.*** The EIR determined that all impacts related to utilities and service systems would be less than significant.

As stated above, reasonable alternatives to the project must be capable of reducing the magnitude of, or avoiding, identified significant environmental impacts of the proposed project. Because the proposed project would not result in significant impacts related to the resource areas listed above, a comparison of potential impacts associated with the aforementioned resource areas as a result of project alternatives versus the proposed project is not provided in this chapter. Rather, this chapter focuses on those resource areas and specific impacts listed below that have been identified for the proposed project as requiring mitigation to reduce significant impacts to less than significant, or have been found to remain significant and unavoidable.

Less Than Significant with Mitigation

Environmental impacts (including cumulative impacts) of the proposed project that have been identified as requiring mitigation measures to ensure that the level of significance is ultimately less than significant include the following:

- ***Aesthetics.*** The EIR determined that because the types of lighting and the specific locations have not yet been determined, implementation of the proposed project could increase the amount of light and glare generated on-site, which could be visible from the surrounding residential development and roadways in the project vicinity. However, the

EIR requires mitigation in order to ensure that the aforementioned impact is reduced to a less-than-significant level.

- ***Air Quality and Greenhouse Gas Emissions.*** The EIR determined that implementation of the proposed project could conflict with or obstruct implementation of the applicable air quality plan during project construction and operation. Due to construction of the proposed sewer lift station, the project could result in impacts related to emissions (such as those leading to odors) adversely affecting a substantial number of people. In addition, the project could result in a cumulative impact related to operational emissions of reactive organic gasses (ROG). However, the EIR requires mitigation in order to ensure that the aforementioned impacts are reduced to less-than-significant levels.

- ***Biological Resources.*** The EIR determined that implementation of the proposed project could result in potential adverse effects to special-status plants, burrowing owl, Swainson's hawk, other special-status birds and birds protected under the Migratory Bird Treaty Act (MBTA), and special-status bats. Given that the proposed project would involve the removal of trees protected by the County's Tree Preservation Ordinance, the project could conflict with local policies and/or ordinances that protect biological resources, including tree resources. Furthermore, the project could result in a substantial adverse effect on riparian habitat and/or other sensitive natural communities and/or have a substantial adverse effect on federal or State protected aquatic resources. Based on the project-level conclusions, the proposed project's incremental contribution to the cumulative loss of habitat for special-status species could be considered considerable. However, the EIR requires mitigation in order to ensure that impacts related to the aforementioned biological resources would be reduced to less-than-significant levels.

- ***Cultural Resources.*** The EIR determined that implementation of the proposed project could result in disturbance or destruction of unique archaeological resources, human remains, and Tribal Cultural Resources, as defined in Public Resources Code, Section 21074, or have the potential to cause a physical change which would affect unique cultural values, restrict existing religious or sacred uses within the potential impact area. Combined with buildout of the DCWPCP, such disturbance/destruction could result in a cumulatively considerable contribution to a significant cumulative impact related to cultural resources. However, the EIR requires mitigation in order to ensure that impacts, including cumulative impacts, related to cultural resources would be less than significant.

- ***Geology and Soils/Mineral Resources.*** The EIR determined that implementation of the proposed project could result in potentially significant impacts related to soil erosion and/or loss of topsoil, unstable geologic units/soils, destruction of unique paleontological resources, disruptions, displacements, compaction, or overcrowding of the on-site soils, and substantial changes to topography or ground surface relief features. However, the EIR requires mitigation in order to ensure that the aforementioned impacts are reduced to less-than-significant levels.

- ***Hydrology and Water Quality.*** The EIR determined that implementation of the proposed project could result in potential construction and operational impacts related to water quality, changes in drainage patterns, placement of housing or improvements in a flood hazard area, and increases in stormwater runoff rates during operation of the proposed

project. However, the EIR requires mitigation in order to ensure that impacts related to hydrology and water quality are reduced to less-than-significant levels.

- ***Noise.*** The EIR determined that during construction activities, the project could result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. However, the EIR requires mitigation in order to ensure that the aforementioned impact is reduced to a less-than-significant level.

- ***Transportation and Circulation.*** The EIR determined that implementation of the proposed project would result in a significant impact related to construction traffic. However, the EIR requires mitigation in order to ensure that the aforementioned impact is reduced to a less-than-significant level.

Significant and Unavoidable

The EIR has determined that the following project impacts would remain significant and unavoidable, even after implementation of the feasible mitigation measures set forth in this EIR:

- ***Transportation and Circulation.*** The EIR determined that the proposed project could result in a significant and unavoidable impact to the Baseline Road/Brady Lane intersection under Existing Plus Project conditions. In addition, significant and unavoidable impacts were identified for the following study intersections under Cumulative Plus Project conditions:

    - Baseline Road/Brady Lane (City of Roseville);
    - Cook Riolo Road/Vineyard Road; and
    - Vineyard Road/Brady Lane.

18.3 SELECTION OF ALTERNATIVES

The requirement that an EIR evaluate alternatives to the proposed project or alternatives to the location of the proposed project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained, while reducing the magnitude of, or avoiding, one or more of the significant environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the CEQA Guidelines require the EIR to “set forth only those alternatives necessary to permit a reasoned choice.” As stated in Section 15126.6(a), an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The CEQA Guidelines provide a definition for “a range of reasonable alternatives” and thus limit the number and type of alternatives that may need to be evaluated in a given EIR. According to the CEQA Guidelines Section 15126.6(f):

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

First and foremost, alternatives in an EIR must be feasible. In the context of CEQA Guidelines Section 21061.1, “feasible” is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Finally, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

Alternatives Considered But Dismissed From Further Analysis

Consistent with CEQA, primary consideration was given to alternatives that could reduce significant impacts, while still meeting most of the basic project objectives.

As stated in Guidelines Section 15126.6(c), among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are:

(i) failure to meet most of the basic project objectives,
(ii) infeasibility, or
(iii) inability to avoid significant environmental impacts.

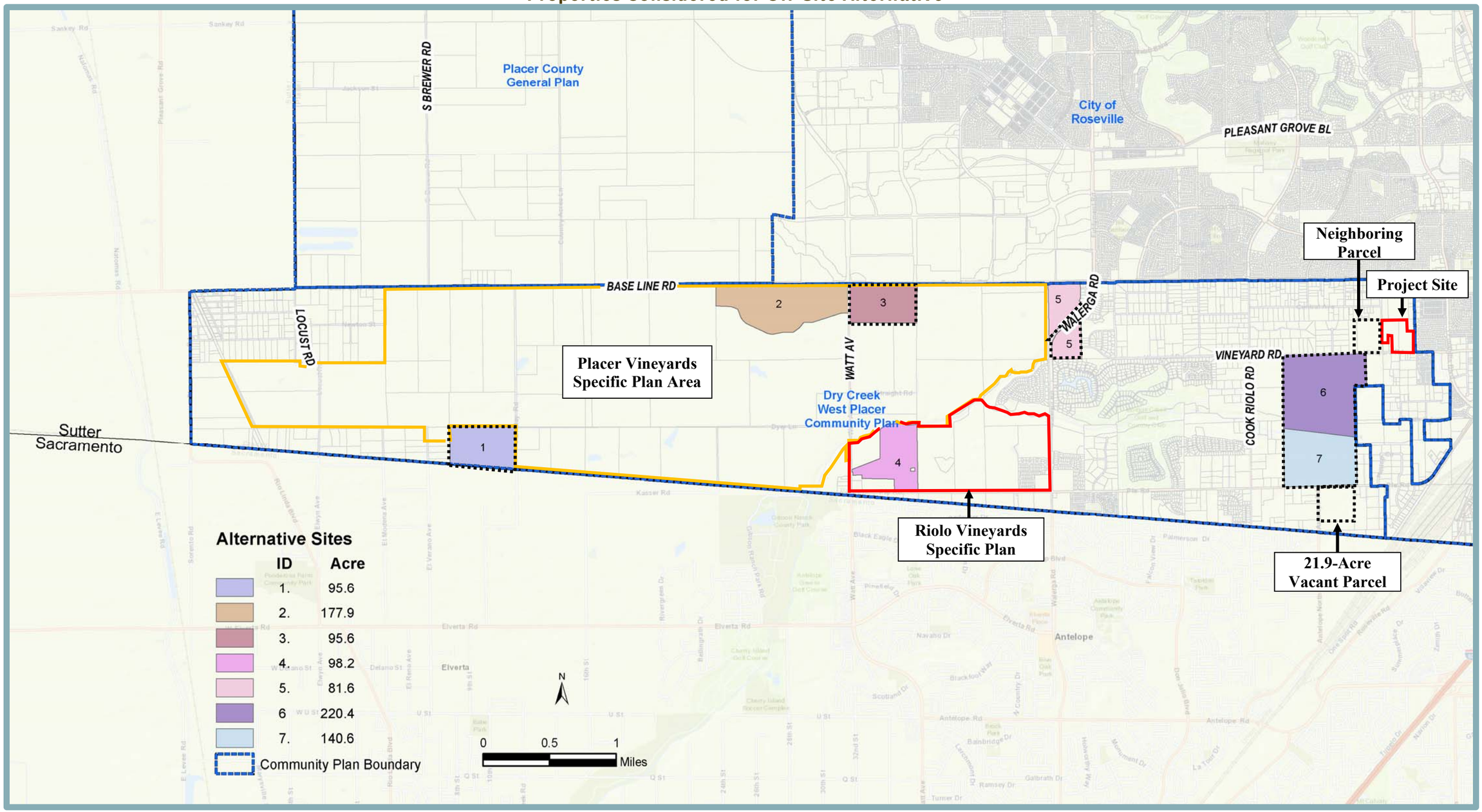
Regarding item (ii), infeasibility, among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives.

The off-site alternative was considered but dismissed from detailed analysis in this EIR. The reason(s) for dismissal, within the context of the three above-outlined permissible reasons, are provided below.

Off-Site Alternative

The possibility of an off-site location was considered as an alternative to the project. The County's Geographic Information System (GIS) database was consulted to provide information regarding vacant properties in the DCWPCP of sufficient size to accommodate the proposed project. The locations of such properties are illustrated in Figure 18-1 below; of the seven properties shown, the County has chosen to focus on Parcels 1, 3, 5, 6, and 7, as well as a 21.9-acre vacant property located southeast of the intersection of PFE Road and Antelope Road (portion of the formerly proposed Mill Creek Project) and the vacant parcel immediately west of the project site. In considering sites potentially available for future development, the objectives of the proposed project were used to assess the suitability of available sites. It should be noted that Parcel 2 has been dismissed from further analysis, as a Small Lot Vesting Tentative Subdivision Map has been approved by the County for the parcel. Parcel 4 was dismissed from further analysis due to environmental site constraints related to agricultural and biological resources. Furthermore, approximately 20.3 acres of Parcel 4 are designated for agricultural uses per the Riolo Vineyards Specific Plan.

Figure 18-1
Properties Considered for Off-Site Alternative



Parcel 1 (95.6 acres) is located outside of a Specific Plan area and includes sufficient acreage to accommodate a density of single-family units similar to the proposed project. However, access to the property is limited, as compared to the proposed project. The primary access road, Palladay Road, is a very narrow roadway that transitions to an unmaintained dirt road along the parcel's eastern boundary. In addition, Parcel 1 is made up of land used for agricultural purposes interspersed with sensitive drainage features. Given that development of an off-site alternative on the parcel would require development of land that is currently used for agriculture, unlike the proposed project, as well as potential disturbance of riparian habitat, biological and agricultural resources impacts would be expected to increase. Similar to the proposed project site, Parcel 1 is also located in close proximity to existing rural single-family residential development.

A small lot map has not yet been approved for Parcel 3; however, a conceptual lot plan including a mix of medium- and high-density residential units has been prepared for the site. Per the Placer Vineyards Specific Plan EIR, Parcel 3 contains extensive seasonal wetland features.[1] As such, impacts related to biological resources associated with construction of a residential subdivision on Parcel 3 would likely be greater compared to the proposed project. Furthermore, development of an off-site alternative within Parcel 3 would require payment of fees through the Placer Vineyards Specific Plan Fee Program, as well as various other fees imposed on development within the planning area. Such fees could reduce the economic feasibility of the proposed project.

Parcel 5 (81.6 acres) consists of two undeveloped properties located north and south of Walerga Road. The southern property (33.6 acres) is of a sufficient size to accommodate the proposed project. However, the property is covered in annual grassland and various sensitive aquatic habitats. As such, development of the proposed project on this off-site property would not be expected to reduce impacts to biological resources. In addition, the property owner is currently under contract with a representative to process entitlements through the County for potential non-residential uses (private high school) and residential uses on the parcel.

Parcels 6 (220.4 acres) and 7 (140.6 acres) are both transected by riparian drainages, which would limit the developable area of the sites. In addition, Dry Creek forms the approximate border between both properties, which would further limit the developable area of the two parcels. Impacts related to biological resources would likely be greater with buildout of the proposed project on Parcel 6 or Parcel 7 than what is anticipated for the proposed project. Furthermore, Parcels 6 is bordered by existing industrial uses to the east and rural residential development to the west. Parcel 7 is currently under a Williamson Act contract and contains extensive agricultural uses. Accordingly, impacts related to incompatible uses would be greater with buildout of the project on Parcel 6 or 7 compared to the project site. The Dry Creek Wastewater Treatment Plant is located directly adjacent to the eastern boundary of Parcel 7, which could result in potential impacts related to exposure of future residents to odors, though this would not be considered an impact of the project on the environment and, thus, would not be considered a CEQA issue.

The 21.9-acre vacant property located southeast of the intersection of PFE Road and Antelope Road contains a riparian corridor along two unnamed tributaries to Dry Creek. In addition, the property is bordered by industrial uses to the south. Per the County General Plan, a buffer area would be required along the southern boundary of the property in order to allow for the development of residential units. The existing riparian drainage and adjacent industrial uses substantially limit the developable area on the property. Thus, development of a project with

[1] Placer County. *Revised Draft Environmental Impact Report, Volume I, for Placer Vineyards Specific Plan, Placer County, California* [Figure 4.4-1]. March 2006.

similar lot sizes and a similar number of lots as the proposed project on the property would be infeasible. In addition, similar to the proposed project, development of the 21.9-acre property would require construction of a sewer lift station and construction of off-site sewer infrastructure. Therefore, development of the parcel would likely result in similar or greater impacts related to air quality and GHG emissions compared to the proposed project. Development of the parcel would not be anticipated to reduce any of the impacts identified for proposed project in this EIR.

The parcel immediately to the west of the project site, along Vineyard Road, is currently vacant and undeveloped. However, as noted in Chapter 11 of this EIR, the property is currently zoned Farm-Development Reserve (F-DR) and is designated as Agricultural Land per the DCWPCP Environmental Resources Element. Thus, the parcel has been previously anticipated for agricultural uses. Development of the parcel would result in greater impacts related to agricultural resources compared to the proposed project. In addition, given that the parcel is not located adjacent to the City of Roseville city limits, as is the case for the project site, development of the parcel with a residential subdivision would not be considered as definitive of an extension of existing growth patterns.

It is also important to consider that the project site is located in an area served by existing regional infrastructure and arterial roadways, and is located adjacent to existing urban development in the City of Roseville, as well as existing and planned urban areas within Placer County. Development of the proposed project at an alternative location within Placer County would be anticipated to require the extension of additional infrastructure and public services compared to the project site, and would not likely represent an efficient use of existing public investments. In addition, an off-site alternative would require an expansion of urban uses into areas within Placer County that are designated under the General Plan for agricultural use or to areas less suitable for development compared to the project site due to environmental or habitat constraints.

Overall, off-site alternatives that could accomplish the project objectives or accommodate a similar type and intensity of development as the proposed project are not considered feasible. As a result, the Off-Site Alternative is dismissed from detailed evaluation.

Alternatives Considered in this EIR

The following alternatives are considered and evaluated in this section:

- No Project (No Build) Alternative;
- Buildout Pursuant to Existing Zoning Alternative; and
- Reduced Density Alternative.

See Table 18-7 for a comparison of the environmental impacts resulting from the considered alternatives and the proposed project.

It should be noted that the proposed project could potentially include the construction of up to 12 additional on-site ADUs in order to meet the County's affordable housing requirements, resulting in a total of 131 units. Similarly, both the Buildout Pursuant to Existing Zoning Alternative and the Reduced Intensity Alternative analyzed herein could potentially require construction of additional on-site affordable housing if the County's affordable housing requirements and policies change. However, the total number of lots would remain unchanged, as would the overall disturbance area associated with the project. Given that the exact affordable housing requirements for the proposed

project and the project alternatives cannot be determined at this time, inclusion of additional affordable housing units on-site is not evaluated within this alternatives analysis.

No Project (No Build) Alternative

CEQA requires the evaluation of the comparative impacts of the "No Project" alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative shall:

> "… discuss […] existing conditions […] as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services." (*Id.*, subd. [e][2]) "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the 'no project' alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the property's existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this 'no project' consequence should be discussed. In certain instances, the no project alternative means 'no build,' wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (*Id.*, subd. [e][3][B]).

The County has decided to evaluate a No Project (No Build) Alternative, which assumes that the proposed project site would remain in its current condition and would not be developed. As described in this EIR, the project site consists primarily of ruderal grasses and is absent of structures. The No Project (No Build) Alternative would not meet any of the project objectives and would not meet the overall intent of the DCWPCP's land use designation for this site.

Aesthetics

The EIR determined that the proposed project could have a significant impact to nearby sensitive receptors as a result of the introduction of new sources of light and glare. The No Project (No Build) Alternative would consist of the continuation of the existing conditions of the project site. Because the No Project (No Build) Alternative would not introduce any new structures or buildings on the site, creation of new sources of light or glare would not occur. Thus, impacts related to aesthetics would not occur under the No Project (No Build) Alternative.

Air Quality and Greenhouse Gas Emissions

Because the No Project (No Build) Alternative would not involve construction activities, the Alternative would not result in construction emissions and would not generate NO_x emissions in exceedance of the PCAPCDs significance threshold of 82 pounds per day. In addition, the Alternative would not result in the generation of ROG in excess of the PCAPCD's operational significance threshold of 55 pounds per day. The Alternative would not include installation of a sewer lift station on the project site and, thus, associated odor impacts could not occur. Thus, the impacts identified for the proposed project related to air quality would not occur under the No Project (No Build) Alternative, and Mitigation Measures 5-1(a), 5-1(b), 5-2, and 5-3 would not be required. Overall, no impacts related to Air Quality and GHG emissions would occur under the No Project (No Build) Alternative.

Biological Resources

Under the No Project (No Build) Alternative, construction activities, including ground disturbance, would not occur on the project site. As such, the Alternative would not have the potential to impact special-status plants, burrowing owl, Swainson's hawk, other special-status birds and birds protected under the MBTA, or special-status bats. The Alternative would not include removal of trees and, thus, would not conflict with the County's Tree Preservation Ordinance. In addition, the Alternative would not result in any substantial adverse effects on riparian habitat and/or other sensitive natural communities and/or have a substantial adverse effect on federal or State protected aquatic resources. Mitigation Measures 6-1, 6-4, 6-5(a) and 6-5(b), 6-6, 6-7, 6-8(a) through 6-8(c), 6-10(a) and (b), and 6-11 would not be required. Overall, the impacts identified for the proposed project related to biological resources would not occur under the No Project (No Build) Alternative.

Cultural Resources

Because land disturbance would not occur under the No Project (No Build) Alternative, the Alternative would not have the potential to result in impacts to cultural resources. Mitigation Measures 7-2, 7-4(a) through 7-4(c), and 7-5 would not be required.

Geology and Soils/Mineral Resources

Because the No Project (No Build) Alternative would not include grading or other ground-disturbing activities, substantial soil erosion or loss of topsoil would not occur. In addition, the Alternative would not have the potential to destroy a unique paleontological resource or site or unique geologic feature. Thus, Mitigation Measures 8-2(a) through 8-2(d) and 8-4 would not be required. Because development would not occur, Mitigation Measure 8-3 requiring preparation of a final geotechnical engineering report would not be necessary. Overall, no impacts related to Geology and Soils/Mineral Resources would occur under the No Project (No Build) Alternative.

Hydrology and Water Quality

The No Project (No Build) Alternative would not include any ground disturbance or otherwise alter existing site conditions and, thus, would not have the potential to result in construction or operational impacts related to water quality, changes in drainage patterns, placement of housing or improvements in a flood hazard area, or increases in stormwater runoff rates. Thus, Mitigation Measures 10-1, 10-2(a) through 10-2(d), 10-4(a) through 10-4(e), and 10-5 would not be required. Overall, no impacts related to Hydrology and Water Quality would occur under the No Project (No Build) Alternative.

Noise

Given that the No Project (No Build) Alternative would not include any construction activities, associated temporary noise-level increases would not occur. Thus, Mitigation Measure 12-1 related to construction noise would not be required. Overall, no impacts related to Noise would occur under the No Project (No Build) Alternative.

Transportation and Circulation

The No Project (No Build) Alternative would not generate construction traffic or operational vehicle traffic on local roadways and, thus, Mitigation Measure 14-1 related to preparation of a Construction Traffic Management Plan (CTMP) would not be required. In addition, the Alternative would not result in significant impacts to study intersections or roadway segments. Therefore, Mitigation Measures 14-2, 14-7(a), and 14-7(b) would not be required. Overall, impacts related to transportation and circulation would not occur under the No Project (No Build) Alternative.

Buildout Pursuant to Existing Zoning Alternative

The Buildout Pursuant to Existing Zoning Alternative would consist of buildout of the project site per the current Placer County zoning designations at the maximum allowable density (see Figure 18-2). The current zoning designations for the site include: Residential Single-Family, combining Agriculture, minimum Building Site of 20,000 square feet (RS-AG-B-20) (eastern 24.1 acres); Open Space (O) (central-western 6.1 acres); and 1.8 acres of Farm-Development Reserve (F-DR) (western portion of site).

Under the Buildout Pursuant to Existing Zoning Alternative, 8.60 acres of the project site would be retained as open space, an increase of 2.26 acres compared to the proposed project. A total of 23.44 acres would be developed with residential lots, streets, a sewer lift station, an emergency vehicle access (EVA), and landscaping improvements. In total, the Alternative would allow for development of 30 single-family homes.

Off-site improvements required under the Buildout Pursuant to Existing Zoning Alternative, including widening portions of Brady Lane and Vineyard Road and sewer system improvements, would be identical to the proposed project.

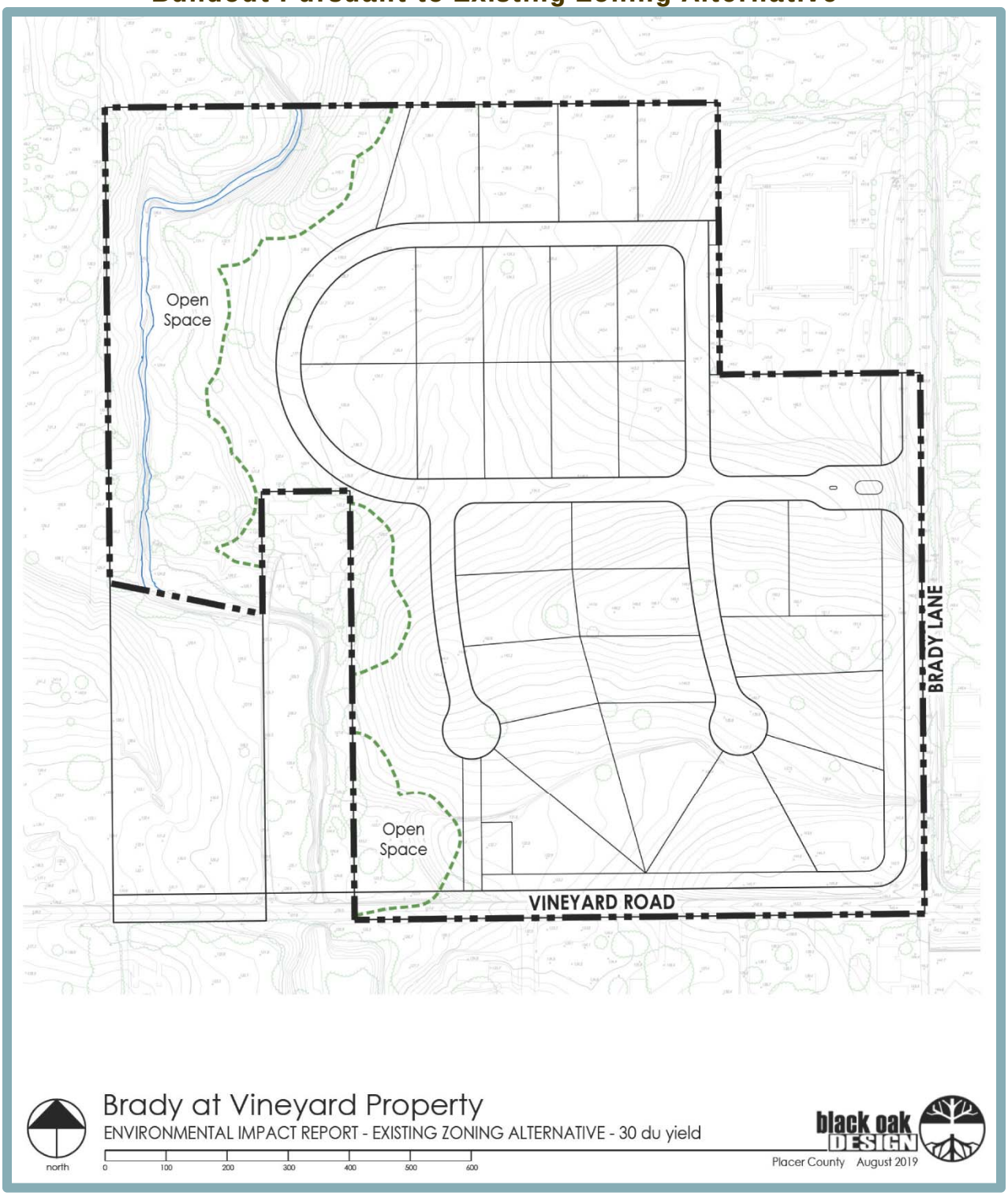
Because the Buildout Pursuant to Existing Zoning Alternative would include development of the project site with residential uses, consistent with the County's General Plan and DCWPCP, Objective #1 would be met. Most of the remaining project objectives would be fully or partially met, as the Alternative would provide for a range of single-family residential lot sizes and would minimize encroachment into the 100-year flood plain and the sensitive environmental habitat associated with the Dry Creek tributary on the western portion of the site. However, because average lot sizes would be substantially increased relative to the proposed project, the Buildout Pursuant to Existing Zoning Alternative would result in a less efficient use of land and would require a greater amount of energy and water resources per capita.

Aesthetics

Similar to the proposed project, the Buildout Pursuant to Existing Zoning Alternative would introduce new sources of light and glare to the project site where none currently exist, including along the project site frontages at Vineyard Road and Brady Lane. Such sources would include, but would not be limited to, streetlights within internal street systems, vehicle headlights, exterior lighting fixtures, interior light spilling through windows, and light reflected off of windows.

All on-site lighting would be required to comply with Section 17.54.070(i) of the Placer County Code. In addition, the Buildout Pursuant to Existing Zoning Alternative would be subject to compliance with the applicable sections of the *Placer County Design Guidelines* related to light pollution, including, but not limited to, shielding of fixtures such that direct rays do not pass onto residential property lines. However, because the types of lighting and the specific locations have not yet been determined for the Buildout Pursuant to Existing Zoning Alternative, Mitigation Measure 4-2 would still be required. Considering that the Buildout Pursuant to Existing Zoning Alternative would involve development of fewer units on-site, the project site would be anticipated to produce slightly less light and glare as compared to the proposed project. Although slightly less light and glare would be produced within the project site, because Mitigation Measure 4-2 would continue to be required, overall impacts related to aesthetics would be similar under the Buildout Pursuant to Existing Zoning Alternative compared to the proposed project.

Figure 18-2
Buildout Pursuant to Existing Zoning Alternative



Air Quality and Greenhouse Gas Emissions

Under the Buildout Pursuant to Existing Zoning Alternative, a total of 23.44 acres of the project site would be developed with residential uses and associated improvements, not including park areas. Given that the proposed project would develop approximately 25.70 acres of the site with residential uses, the disturbance area associated with the Alternative would represent a decrease of approximately 2.26 acres compared to the proposed project. As such, construction emissions of criteria pollutants would be slightly decreased compared to the proposed project. However, construction emissions of NO_X would still exceed PCAPCD's 82.0 pounds per day (lbs/day) threshold. Thus, Mitigation Measures 5-1(a) and 5-1(b) would still be required. It should be noted that the park areas associated with both the proposed project and the Alternative would be subject to minor grading, but would not be developed with habitable structures.

With regard to operational emissions, CalEEMod, version 2016.3.2, software was used to estimate the Buildout Pursuant to Existing Zoning Alternative's criteria air pollutant emissions. As shown in Table 18-1, the unmitigated operational emissions of criteria air pollutants associated with the Buildout Pursuant to Existing Zoning Alternative would be slightly less than the proposed project for ROG, NO_X, and PM_{10}. In particular, emissions of ROG related to operations of the Buildout Pursuant to Existing Zoning Alternative would be below the PCACPD's threshold of significance. Consequently, Mitigation Measure 5-2 would not be required for the alternative. Although Mitigation Measure 5-2 would not be required and operational emissions of ROG under the Alternative would be less-than-significant, it should be noted that with implementation of Mitigation Measure 5-2, the operational emissions of the proposed project would be reduced to approximately 7.67 lbs/day. Emissions of 7.67 lbs/day would be far less than the estimated ROG emissions resulting from unmitigated operations of the Buildout Pursuant to Existing Zoning Alternative, despite the inclusion of 88 more units in the project.

Table 18-1
Maximum Unmitigated Operational Emissions (lbs/day)

Pollutant	Proposed Project	Buildout Pursuant to Existing Zoning Alternative	PCAPCD Significance Threshold
ROG	189.58	47.80	55
NO_X	14.24	3.60	55
PM_{10}	36.86	9.29	82

Source: CalEEMod, July 2019.

Overall, because the Buildout Pursuant to Existing Zoning Alternative would result in ROG emissions below the PCAPCD's threshold of significance without the need for mitigation, impacts related to Air Quality would be fewer under the Buildout Pursuant to Existing Zoning Alternative compared to the proposed project.

Biological Resources

Similar to the proposed project, the Buildout Pursuant to Existing Zoning Alternative would include ground-disturbing activities on the project site and, thus, would have the potential to impact special-status plants, burrowing owl, Swainson's hawk, other special-status birds and birds protected under the MBTA, or special-status bats. The Alternative would include removal of a similar number of trees as the proposed project and, thus, would have the potential to conflict with the County's Tree Preservation Ordinance. Thus, Mitigation Measures 6-1, 6-4, 6-5(a) and 6-5(b), 6-6, 6-7, 6-10(a) and (b), and 6-11 would still be required. In addition, the Alternative would have

the potential to directly impact seasonal wetlands, a seasonal wetland swale, and a non-jurisdictional wetland ditch within the project site. The locations of such features are shown in Figure 6-8 of this EIR. Therefore, Mitigation Measure 6-8(a) through 6-8(c) would still be required. The overall riparian impact area would be similar to the proposed project. However, the 3.40 acres of Valley oak riparian woodland located within the western portion of the site would be entirely avoided under the Alternative. In addition, the Buildout Pursuant to Existing Zoning Alternative would preserve a larger portion of the site as open space compared to the proposed project (an increase of approximately 2.26 acres). Overall impacts to biological resources would be fewer under the Alternative compared to the proposed project.

Cultural Resources

Similar to the proposed project, the Buildout Pursuant to Existing Zoning Alternative would result in off-site disturbance as a result of roadway and sewer improvements necessary to accommodate new development. However, as noted above, the Buildout Pursuant to Existing Zoning Alternative would result in a slightly reduced overall disturbance area within the project site relative to the proposed project. Consequently, while Mitigation Measures 7-2, 7-4(a) through 7-4(c), and 7-5 would still be required, the potential for the Buildout Pursuant to Existing Zoning Alternative to result in disturbance or destruction of archaeological resources, human remains, and Tribal Cultural Resources would be decreased. Overall, potential impacts related to cultural resources would be fewer under the Buildout Pursuant to Existing Zoning Alternative compared to the proposed project.

Geology and Soils/Mineral Resources

As noted above, the Buildout Pursuant to Existing Zoning Alternative would include a smaller overall area of disturbance compared to the proposed project. Consequently, the potential for grading and other ground-disturbing activities to result in substantial soil erosion or loss of topsoil would be reduced. Similarly, the Alternative would have a reduced potential to encounter and destroy a unique paleontological resource or site or unique geologic feature. Nonetheless, Mitigation Measures 8-2(a) through 8-2(d) and 8-4 would still be required. In addition, Mitigation Measure 8-3 requiring preparation of a final geotechnical engineering report to ensure adequate structural support of the proposed improvements would still be required. Overall, impacts related to Geology and Soils/Mineral Resources would be fewer under the Buildout Pursuant to Existing Zoning Alternative compared to the proposed project.

Hydrology and Water Quality

Given that the Buildout Pursuant to Existing Zoning Alternative would include a slightly smaller overall area of disturbance compared to the proposed project, the potential for the Alternative to result in construction or operational impacts related to water quality would be reduced. In addition, because a smaller portion of the site would be developed with impervious surfaces, the potential for changes in drainage patterns and increases in stormwater runoff rates would be reduced compared to the proposed project. Nonetheless, the alternative would include placement of improvements within a flood hazard zone, and Mitigation Measures 10-1, 10-2(a) through 10-2(d), 10-4(a) through 10-4(e), and 10-5 would still be required. Overall, impacts related to Hydrology and Water Quality under the Buildout Pursuant to Existing Zoning Alternative could be fewer compared to the proposed project.

Noise

The Buildout Pursuant to Existing Zoning Alternative would include site preparation, grading, paving, and building construction activities and, thus, would generate short-term construction

noise. Thus, Mitigation Measure 12-1 would still be required. However, the Alternative would involve development of a smaller number of single-family residences relative to the proposed project, and would include a slightly smaller overall disturbance area. As such, impacts related to the creation of a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project would be fewer. Overall, noise impacts would be fewer under the Buildout Pursuant to Existing Zoning Alternative compared to the proposed project.

Transportation and Circulation

Similar to the proposed project, the Buildout Pursuant to Existing Zoning Alternative would add construction vehicle traffic to area roadways, thereby potentially conflicting with existing traffic patterns. As such, Mitigation Measure 14-1 related to preparation of a CTMP would still be required. However, because the Alternative would involve construction of 30 residential units, as compared to 119 units under the proposed project, the overall intensity of construction traffic, and associated impacts, would be reduced.

Based on vehicle trip generation rates provided in the Traffic Impact Analysis prepared for the proposed project by KD Anderson & Associates, Inc. (see Appendix K),[2] the Buildout Pursuant to Existing Zoning Alternative would result in approximately 283 average daily trips (ADT) during operations, as compared to 1,123 ADT occurring with development of the proposed project (see Table 18-2 and Table 18-3).

Table 18-2
Buildout Pursuant to Existing Zoning Alternative Trip Generation

Land Use	Unit / Quantity	Trip Generation						
			AM Peak Hour			PM Peak Hour		
		Daily	In	Out	Total	In	Out	Total
Single Family Residential	*Dwelling unit*	*9.44*	*25%*	*75%*	*0.74*	*63%*	*37%*	*0.99*
Alternative	30 units	283	6	17	22	19	11	30

Source: KD Anderson & Associates, Inc., 2019.

Table 18-3
Proposed Project vs. Buildout Pursuant to Existing Zoning Alternative Average Weekday Trip Generation

Duration	Proposed Project	Buildout Pursuant to Existing Zoning Alternative
Daily	1,123	283
AM Peak Hour	88	26
PM Peak Hour	118	35

Source: KD Anderson & Associates, Inc., 2019.

Because fewer vehicle trips would be generated by the Buildout Pursuant to Existing Zoning Alternative, the intensity of traffic-related impacts, including impacts to study intersections, would be reduced compared to the proposed project. However, the Alternative would add traffic to study intersections for which improvements have not been identified in the County's Capital Improvement Program (CIP), or which are located outside of the County's jurisdiction. In order to

[2] KD Anderson & Associates, Inc. *Traffic Impact Analysis for Brady Vineyard Subdivision, Placer County, California.* August 5, 2019.

determine whether the additional traffic occurring as a result of the Alternative would exceed the applicable significance thresholds for impacted intersections, a detailed traffic impact study would be required. While a conclusive determination cannot be reached without a quantitative analysis, the impacts to study intersections under Existing Plus Project and Cumulative Plus Project conditions would be anticipated to remain significant and unavoidable. Mitigation Measures 14-2, 14-7(a), and 14-7(b) would likely still be required.

Overall, development of the Buildout Pursuant to Existing Zoning Alternative would result in fewer impacts related to Transportation and Circulation compared to the proposed project.

Reduced Density Alternative

Under the Reduced Density Alternative, 10.88 acres of the project site would be retained as open space, an increase of 4.54 acres compared to the proposed project (see Figure 18-3). A total of 21.16 acres would be developed with residential lots, streets, a sewer lift station, an emergency vehicle access (EVA), and landscaping improvements. In total, the Alternative would allow for development of 83 single-family homes. At a density of 2.37 units/acre, the Alternative would involve a slightly reduced lot density compared to the 3.4 units/acre included in the proposed project. Off-site improvements required under the Reduced Density Alternative, including widening portions of Brady Lane and Vineyard Road and sewer system improvements, would be identical to the proposed project.

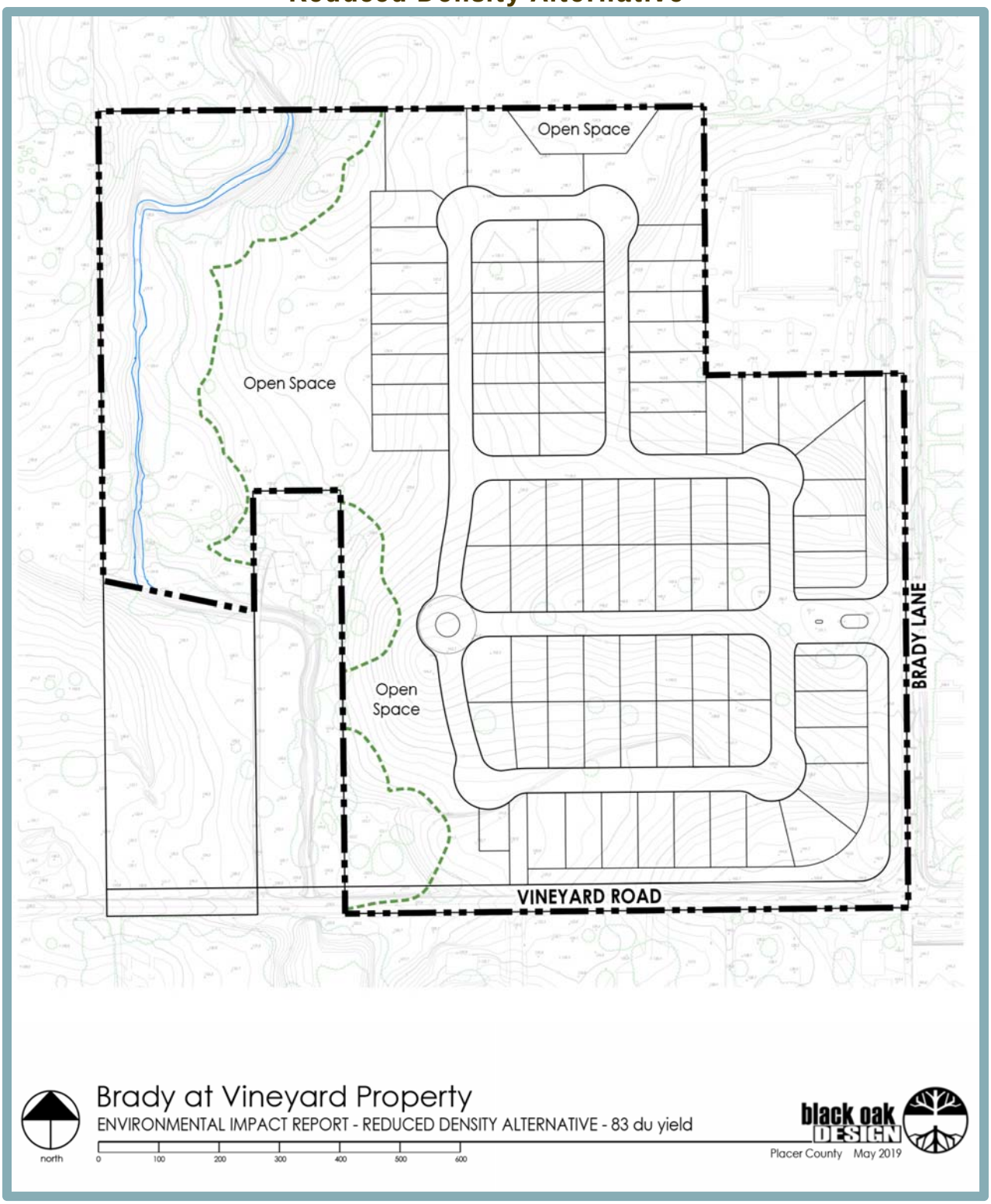
Because the Reduced Density Alternative would include development of the project site with residential uses, consistent with the type of development anticipated in the County's General Plan and the DCWPCP, Objective #1 would be met. Most of the remaining project objectives would be fully or partially met, as the Alternative would provide for a range of single-family residential lot sizes and would minimize encroachment into the 100-year flood plain and the sensitive environmental habitat associated with the Dry Creek tributary on the western portion of the site.

Aesthetics

Similar to the proposed project, the Reduced Density Alternative would introduce new sources of light and glare to the project site where none currently exist, including along the project site frontages at Vineyard Road and Brady Lane. Such sources would include, but would not be limited to, streetlights within internal street systems, vehicle headlights, exterior lighting fixtures, interior light spilling through windows, and light reflected off of windows.

All on-site lighting would be required to comply with Section 17.54.070(i) of the Placer County Code. In addition, the Reduced Density Alternative would be subject to compliance with the applicable sections of the *Placer County Design Guidelines* related to light pollution, including, but not limited to, shielding of fixtures such that direct rays do not pass onto residential property lines. However, because the types of lighting and the specific locations have not yet been determined for the Reduced Density Alternative, Mitigation Measure 4-2 would still be required. Overall, impacts related to aesthetics would be similar under the Reduced Density Alternative compared to the proposed project.

Figure 18-3
Reduced Density Alternative



Air Quality and Greenhouse Gas Emissions

Under the Buildout Pursuant to Existing Zoning Alternative, a total of 21.16 acres of the project site would be developed with residential uses and associated improvements. Given that the proposed project would develop approximately 25.70 acres of the site with residential uses and associated improvements, the disturbance area associated with the Alternative would represent a decrease of approximately 4.54 acres compared to the proposed project. As such, construction emissions of criteria pollutants would be slightly decreased compared to the proposed project. Although construction emissions would be slightly decreased, construction of the Alternative would be anticipated to result in significant emissions, and mitigation would continue to be required. It should be noted that the park areas associated with both the proposed project and the Alternative would be subject to minor grading, but would not be developed with habitable structures.

With regard to operational emissions, CalEEMod was used to estimate the Reduced Density Alternative's criteria air pollutant emissions. As shown in Table 18-4, the unmitigated operational emissions of criteria air pollutants associated with the Reduced Density Alternative would be slightly less than the proposed project for ROG, NO_X, and PM_{10}. However, similar to the proposed project, operational ROG emissions under the Alternative would exceed the PCAPCD's 55 lbs/day threshold of significance. Thus, Mitigation Measure 5-2 would still be required.

Table 18-4
Maximum Unmitigated Operational Emissions (lbs/day)

Pollutant	Proposed Project	Reduced Density Alternative	PCAPCD Significance Threshold
ROG	189.58	132.23	55
NO_X	14.24	9.74	55
PM_{10}	36.86	25.71	82

Source: CalEEMod, July 2019.

Overall, impacts related to Air Quality would be fewer under the Reduced Density Alternative compared to the proposed project.

Biological Resources

Similar to the proposed project, the Reduced Density Alternative would include ground-disturbing activities on the project site and, thus, would have the potential to impact special-status plants, burrowing owl, Swainson's hawk, other special-status birds and birds protected under the MBTA, or special-status bats. The Alternative would include removal of a similar number of trees as the proposed project and, thus, would have the potential to conflict with the County's Tree Preservation Ordinance. Thus, Mitigation Measures 6-1, 6-4, 6-5(a) and 6-5(b), 6-6, 6-7, 6-10(a) and (b), and 6-11 would still be required. In addition, the Alternative would have the potential to directly impact a seasonal wetland swale and a non-jurisdictional wetland ditch. The locations of such features are shown in Figure 6-8 of this EIR. Therefore, Mitigation Measures 6-8(a) through 6-8(c) would still be required. However, the seasonal wetlands located along the northern site boundary would be avoided as part of the Reduced Density Alternative. Thus, the overall wetland impact area for the Alternative would be reduced compared to the proposed project. The 3.40 acres of Valley oak riparian woodland, located within the western portion of the site, would be entirely avoided under the Reduced Density Alternative and the Alternative would preserve a

larger portion of the site as open space compared to the proposed project (an increase of approximately 4.54 acres).

Overall impacts to biological resources would be fewer under the Alternative compared to the proposed project.

Cultural Resources

Similar to the proposed project, the Reduced Density Alternative would result in off-site disturbance as a result of roadway and sewer improvements necessary to accommodate new development. However, as noted above, the Reduced Density Alternative would result in a slightly reduced overall disturbance area within the project site relative to the proposed project. Consequently, while Mitigation Measures 7-2, 7-4(a) through 7-4(c), and 7-5 would still be required, the potential for the Reduced Density Alternative to result in disturbance or destruction of archaeological resources, human remains, and Tribal Cultural Resources would be decreased. Overall, potential impacts related to cultural resources could be fewer under the Reduced Density Alternative compared to the proposed project.

Geology and Soils/Mineral Resources

As noted above, the Reduced Density Alternative would include a smaller overall area of disturbance compared to the proposed project. Consequently, the potential for grading and other ground-disturbing activities to result in substantial soil erosion or loss of topsoil would be reduced. For similar reasons, the Alternative would have a reduced potential to destroy a unique paleontological resource or site or unique geologic feature. Nonetheless, Mitigation Measures 8-2(a) through 8-2(d) and 8-4 would still be required. In addition, Mitigation Measure 8-3 requiring preparation of a final geotechnical engineering report to ensure adequate structural support of the proposed improvements would still be required. Overall, impacts related to Geology and Soils/Mineral Resources could be fewer under the Reduced Density Alternative compared to the proposed project.

Hydrology and Water Quality

Given that the Reduced Density Alternative would include a slightly smaller overall area of disturbance compared to the proposed project, the potential for the Alternative to result in construction or operational impacts related to water quality would be reduced. In addition, because a smaller portion of the site would be developed with impervious surfaces, the potential for changes in drainage patterns and increases in stormwater runoff rates would be reduced compared to the proposed project. However, the alternative would include placement of improvements within a flood hazard zone, and Mitigation Measures 10-1, 10-2(a) through 10-2(d), 10-4(a) through 10-4(e), and 10-5 would still be required. Overall, impacts related to Hydrology and Water Quality under the Reduced Density Alternative would be fewer compared to the proposed project.

Noise

The Reduced Density Alternative would include site preparation, grading, paving, and building construction activities and, thus, would generate short-term construction noise. However, the Alternative would involve development of a smaller number of single-family residences relative to the proposed project and would include a slightly smaller overall disturbance area. As such, impacts related to the creation of a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project would be fewer. Overall, noise impacts would be fewer under the Reduced Density Alternative compared to the proposed project.

Transportation and Circulation

Similar to the proposed project, the Reduced Density Alternative would add construction vehicle traffic to area roadways, thereby potentially conflicting with existing traffic patterns. As such, Mitigation Measure 14-1 related to preparation of a CTMP would still be required. However, because the Alternative would involve construction of 83 residential units, as compared to 119 units under the proposed project, the overall intensity of construction traffic associated impacts would be reduced.

Based on vehicle trip generation rates provided in the Traffic Impact Analysis prepared for the proposed project by KD Anderson & Associates, Inc. (see Appendix K),[3] the Reduced Density Alternative would result in approximately 784 ADT during operations, as compared to 1,123 ADT occurring with development of the proposed project (see Table 18-5 and Table 18-6).

Table 18-5
Reduced Density Alternative Trip Generation

Land Use	Unit / Quantity	Trip Generation						
			AM Peak Hour			PM Peak Hour		
		Daily	In	Out	Total	In	Out	Total
Single Family Residential	*Dwelling unit*	*9.44*	*25%*	*75%*	*0.74*	*63%*	*37%*	*0.99*
Alternative	83 units	784	15	46	61	52	30	82

Source: KD Anderson & Associates, Inc., 2019.

Table 18-6
Proposed Project vs. Reduced Density Alternative Average Weekday Trip Generation

Duration	Proposed Project	Reduced Density Alternative
Daily	1,123	784
AM Peak Hour	88	61
PM Peak Hour	118	82

Source: KD Anderson & Associates, Inc., 2019.

Because fewer vehicle trips would be generated by the Reduced Density Alternative, the intensity of traffic-related impacts, including impacts to study intersections, would be reduced compared to the proposed project. However, the Alternative would add traffic to study intersections for which improvements have not been identified in the County's Capital Improvement Program, or which are located outside of the County's jurisdiction. In order to determine whether the additional traffic occurring as a result of the Alternative would exceed the applicable significance thresholds for impacted intersections, a detailed traffic impact study would be required. While a conclusive determination cannot be reached without a quantitative analysis, the impacts to study intersections under Existing Plus Project and Cumulative Plus Project conditions would still be anticipated to remain significant and unavoidable. Mitigation Measures 14-2, 14-7(a), and 14-7(b) would likely still be required.

Overall, development of the Reduced Density Alternative would result in fewer impacts related to Transportation and Circulation compared to the proposed project.

[3] KD Anderson & Associates, Inc. *Traffic Impact Analysis for Brady Vineyard Subdivision, Placer County, California.* August 5, 2019.

18.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. The environmentally superior alternative is generally the alternative that would be expected to generate the least amount of significant impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the County. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." In this case, the No Project (No Build) Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, many of the impacts resulting from the proposed project would not occur under the Alternative, as shown in Table 18-7 below.

Table 18-8 below provides a summary of how each of the alternatives considered in this chapter would or would not meet the project objectives. As noted in the table, the No Project (No Build) Alternative would not meet any of the project objectives and would not be consistent with the intent of the DCWPCP and would not meet the overall intent of the RS zoning designation. The Buildout Pursuant to Existing Zoning Alternative would fully meet seven of the project objectives and partially meet three of the objectives. The Reduced Density Alternative would fully meet eight of the project objectives and partially meet two of the objectives.

As discussed throughout this chapter and shown in Table 18-7, both the Buildout Pursuant to Existing Zoning Alternative and the Reduced Density Alternative would result in fewer impacts than the proposed project related to seven of the eight issue areas for which project impacts were identified. However, the Buildout Pursuant to Existing Zoning Alternative would result in substantially fewer vehicle trips during operations. In addition, as shown in Table 18-1, operational ROG emissions would be substantially reduced.

Thus, impacts related to Air Quality and Greenhouse Gas Emissions and Transportation and Circulation would be fewer under the Buildout Pursuant to Existing Zoning Alternative compared to the Reduced Density Alternative. It should be noted that despite the above, the Reduced Density Alternative would include a smaller overall disturbance area and a greater number of residential units; thus, the Reduced Density Alternative would be more economically feasible than the Buildout Pursuant to Existing Zoning Alternative.

The development of the Buildout Pursuant to Existing Zoning Alternative would partially satisfy the project objectives and would result in similar or reduced impacts compared to the proposed project in eight resource areas. Because fewer vehicle trips would be generated by the Buildout Pursuant to Existing Zoning Alternative, the intensity of traffic-related impacts, including impacts to study intersections, would be reduced compared to the proposed project. However, the Alternative would add traffic to study intersections for which improvements have not been identified in the County's Capital Improvement Program (CIP), or which are located outside of the County's jurisdiction. In order to determine whether the additional traffic occurring as a result of the Alternative would exceed the applicable significance thresholds for impacted intersections, a detailed traffic impact study would be required. While a conclusive determination cannot be reached without a quantitative analysis, the impacts to study intersections under Existing Plus Project and Cumulative Plus Project conditions would be anticipated to remain significant and unavoidable.

While the Buildout Pursuant to Existing Zoning Alternative would predominantly result in fewer impacts than the Reduced Density Alternative, the Buildout Pursuant to Existing Zoning Alternative technically qualifies as a 'no project' alternative and cannot be considered the environmentally superior alternative. Therefore, the Reduced Density Alternative would be considered the environmentally superior alternative to the proposed project.

Table 18-7
Comparison of Environmental Impacts for Project Alternatives

Resource Area	Proposed Project	No Project (No Build) Alternative	Buildout Pursuant to Existing Zoning Alternative	Reduced Density Alternative
Aesthetics	Less-Than-Significant with Mitigation	None	Similar	Similar
Air Quality and Greenhouse Gas Emissions	Less-Than-Significant with Mitigation	None	Fewer	Fewer
Biological Resources	Less-Than-Significant with Mitigation	None	Fewer	Fewer
Cultural Resources	Less-Than-Significant with Mitigation	None	Fewer	Fewer
Geology and Soils/Mineral Resources	Less-Than-Significant with Mitigation	None	Fewer	Fewer
Hydrology and Water Quality	Less-Than-Significant with Mitigation	None	Fewer	Fewer
Noise	Less-Than-Significant with Mitigation	None	Fewer	Fewer
Transportation and Circulation	Less-Than-Significant with Mitigation and Significant and Unavoidable (cumulative)	None	Fewer*	Fewer*
	Total Fewer:	**8**	**7**	**7**
	Total Similar:	**0**	**1**	**1**

Note: No Impact = "None;" Less than Proposed Project = "Fewer;" and Similar to Proposed Project = "Similar"

* Significant and Unavoidable impact(s) determined for the proposed project would still be expected to occur under the Alternative.

Table 18-8
Project Objective Alternatives Analysis

Project Objective	No Project (No Build) Alternative	Buildout Pursuant to Existing Zoning Alternative	Reduced Density Alternative
1. Implement the County's General Plan and DCWPCP, which designate the proposed project area for residential development.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Meets.** The Alternative would consist of buildout of the project site per the current zoning designations at the maximum allowable density.	**Meets.** The Alternative would develop the project site with single-family residential uses.
2. Provide a well-designed residential community with neighborhood identity in close proximity to jobs and services in Placer and Sacramento Counties.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Meets.** The Alternatives would provide for single-family residential uses with convenient access to jobs and services within the surrounding region.	
3. Provide for medium residential densities in areas presently planned for urban growth and development with accessible infrastructure, consistent with current area-wide infrastructure plans and growth policies.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Partially meets.** The Alternative would provide for residential development and recreational land uses in the form of private parks; however, the Alternative would include low density residential uses, rather than medium density. Due to the reduced number of residential units, adequate funding may not be available to fund necessary infrastructure improvements.	**Meets.** Similar to the proposed project, the Alternative would provide for medium density residential development and recreational land uses in the form of private parks. In addition, utility infrastructure would be available to serve the Alternative.
4. Add to the diversity of housing choices that can support a wider range of lifestyles in the DCWPCP Area.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Partially meets.** The Alternative would include construction of residential housing; however, due to the reduced number of lots and the substantial increase in lot size relative to the proposed project, the Alternative would limit housing choices.	**Meets.** The Alternative would provide for medium-density residential development with a variety of different lot sizes.

(Continued on next page)

Table 18-8
Project Objective Alternatives Analysis

Project Objective	No Project (No Build) Alternative	Buildout Pursuant to Existing Zoning Alternative	Reduced Density Alternative
5. Reduce growth pressures on outlying areas of Placer County by efficiently utilizing the project site to accommodate residential growth and development.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Meets.** The Alternatives would provide for single-family residential development adjacent to existing residential development within the City of Roseville.	
6. Create a high-quality neighborhood environment containing a mix of residential, open-space, and recreational land uses.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Meets.** The Alternatives would both preserve the existing on-site riparian corridor as open space, while allowing for development of residential uses and parks on the remainder of the site.	
7. Provide for variable lot sizes and increased lot coverage to promote the efficient use of land, energy and water resources within a residential community.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Partially meets.** Because average lot sizes would be substantially increased relative to the proposed project, both Alternatives would result in a less efficient use of land and would require a greater amount of energy and water resources per capita.	
8. Design a project that minimizes encroachment into the existing 100-year floodplain on the site while balancing the housing needs and densities and the character of the local community.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Partially meets.** Both Alternatives would retain the western portion of the project site as open space, thereby limiting encroachment into the 100-year floodplain associated with the Dry Creek tributary. However, the reduced development density means the Alternatives would do less to meet housing needs within the DCWPCP area and the surrounding region.	
9. Provide a comprehensively planned project that protects sensitive environmental habitat and resources, including existing riparian and oak woodland habitat on the project site, within a permanent greenbelt area.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Meets.** Both Alternatives would preserve the riparian habitat associated with the existing on-site drainage as open space.	
10. Provide a planned infrastructure system with all public facilities and services necessary to meet the needs of development of the project site.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Meets.** Both Alternatives are anticipated to include concomitant development of necessary public facilities and services to meet the needs of the alternative.	

(Continued on next page)

Table 18-8
Project Objective Alternatives Analysis

Project Objective	No Project (No Build) Alternative	Buildout Pursuant to Existing Zoning Alternative	Reduced Density Alternative
11. Provide a sufficient number of residential units within the project site to support necessary improvements to local and regional public service facilities.	**Does not meet.** The Alternative does not meet the objective, as development would not occur.	**Does not meet.** Both Alternatives would include fewer residential units compared to the proposed project. Thus, funding for public services and facilities generated by development impact fees would be reduced.	

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19. REFERENCES

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APPENDIX A

COMMUNITY DEVELOPMENT/RESOURCE AGENCY
Environmental Coordination Services
County of Placer

DATE: January 30, 2019

TO: California State Clearinghouse
Responsible and Trustee Agencies
Interested Parties and Organizations

SUBJECT: **Notice of Preparation of an Environmental Impact Report for the Proposed Brady Vineyard Subdivision Project**

REVIEW PERIOD: **January 30, 2019 to February 28, 2019**

Placer County is the lead agency for the preparation of an Environmental Impact Report (EIR) for the proposed Brady Vineyard Subdivision Project (proposed project) in accordance with the California Environmental Quality Act (CEQA), Section 15082. The purpose of the Notice of Preparation (NOP) is to provide responsible agencies and interested persons with sufficient information in order to enable them to make meaningful comments regarding the scope and content of the EIR. Your timely comments will ensure an appropriate level of environmental review for the project.

Project Location: The project site consists of approximately 35 acres located at the northwest corner of Vineyard Road and Brady Lane in Placer County, California. The site is located adjacent to the City of Roseville limits, within the Dry Creek-West Placer Community Plan (DCWPCP) area. The site is identified by Assessor's Parcel Numbers (APNs) 473-020-002 and -013. The southwestern-most three acres of the project site are "not a part of this subdivision" (NAPOTS) and would become a separate parcel created by a boundary line adjustment.

Project Description: The proposed project would include subdivision of the project site to develop a total of 119 single-family lots and various associated improvements, including, but not limited to, parks, trails, landscaping, and utility installation. Circulation system improvements would include a new gated entry at Brady Lane, which would connect to an internal system of private roadways. In addition, the project would include widening of Brady Lane and Vineyard Road along the project frontages. The proposed project would require approval from the County for a General Plan/DCWPCP amendment, a rezone, a Vesting Tentative Map, a Design Exception Request, annexation into the Dry Creek Fire Zone of Benefit (County Service Area 28, Zone of Benefit 165) for provision of fire protection services, and annexation into the Placer County Service Area 28, Zone 173, for sanitary sewer service. A Section 404 Nationwide Permit (or Letter of Permission) from the United States Army Corps of Engineers (USACE) and a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB) – Central Valley Region – would also be required.

Contact Information: For more information regarding the proposed project, please refer to the following detailed project description or contact Patrick Dobbs, Senior Planner, at (530) 745-3060. A copy of the NOP is available for review at the Rocklin and Roseville Public Libraries, the Placer County Community Development Resource Agency (Auburn), and on the Placer County website:

http://www.placer.ca.gov/departments/communitydevelopment/envcoordsvcs/eir

NOP Comment Period: Written comments should be submitted at the earliest possible date, but not later than 5:00 pm on February 28, 2019 to Shirlee Herrington, Environmental Coordination Services, Placer County Community Development Resource Agency, 3091 County Center Drive, Suite 190, Auburn, CA 95603, (530) 745-3132, fax (530) 745-3080, or cdraecs@placer.ca.gov.

NOP Scoping Meeting: In addition to the opportunity to submit written comments, a NOP scoping meeting will be held to inform interested parties about the proposed project, and to provide agencies and the public with an opportunity to provide comments on the scope and content of the EIR. The meeting will be held on February 21, 2019 at 3:00 PM at the Planning Commission hearing room located at 3091 County Center Drive, Auburn, California.

1.0 PROJECT DESCRIPTION

1.1 Location and Setting

The project site consists of approximately 32 acres (excluding NAPOTS) located at the northwest corner of Vineyard Road and Brady Lane in Placer County, California (see Figure 1 and Figure 2). The site is located adjacent to the City of Roseville limits, within the DCWPCP area, and is identified by APNs 473-020-002 and -013. Currently, the project site consists primarily of ruderal grasses, and is absent of structures or other indications of prior development. The site appears to have supported row crops and other agricultural uses prior to the 1940's, as indicated in aerial photos dating back to 1947, but does not appear to have supported any active farming since that time. Per the U.S. Department of Agricultural Farmland Mapping and Monitoring Program (FMMP), the site is characterized as Farmland of Local Importance.

The western portion of the site contains an unnamed tributary that flows southward to Dry Creek. One seasonal swale and one drainage ditch within the site drain to the tributary. Approximately 3.26 acres of the site are located within the 100-year floodplain of the tributary. After accounting for this and the 1.57 acres of right-of-way dedication outside of the floodplain, the total net buildable acres equates to approximately 27.21 acres. Existing oak trees line both sides of the tributary, and scattered almond trees are located along the drainage ditch. The topography of the site is gently undulating, with elevations ranging from a low of approximately 122.5 feet at the western portion of the site adjacent to Vineyard Road to a high of approximately 151.4 feet at the eastern portion of the site adjacent to Brady Lane. A small knoll with an elevation of approximately 145.7 feet is located near the northwest portion of the site.

1.2 Surrounding Land Uses

The 30-acre parcel immediately west of the project site is vacant and zoned F-DR (Farm-Development Reserve), similar to the western portion of the project site. The nearest home to the west of the site is approximately 1,000 feet from the site boundary. Immediately north of the project site is a church fronting Brady Lane, located on a three-acre parcel which, prior to a boundary line adjustment with the project site, was a 10-acre parcel. Other properties immediately to the north of the project site are generally vacant, with the exception of one single-family home located approximately 360 feet north of the site on a parcel north of the church. Such properties have the same zoning designation, RS-AG-B-20, as the project site, as do the four properties located on the south side of Vineyard Road, east of the tributary, where the closest house is situated 80 feet from the southern boundary of the project site. Neighboring uses to the east of the site include a single-family residential subdivision located across Brady Lane, within the City of Roseville limits. The subdivision includes 5,000-square foot (sf) minimum lots with single-family homes that are typically located approximately 20 feet from the eastern edge of pavement along Brady Lane and are screened from the road with mature landscaping.

A two-acre rectangular-shaped parcel fronting Vineyard Road extends approximately 700 feet north (roughly halfway) into the project site. Currently, the parcel is developed with a house and associated outbuilding, located approximately 25 feet from the parcel's northern property line and 15 feet from its eastern property line. The existing on-site tributary flows through a culvert crossing under Vineyard Road near the south/center of the two-acre parcel.

1.3 Existing Land Use and Zoning Designations

The property has a current DCWPCP designation of Low Density Residential (LDR 1-2 du/ac) on the eastern 24.1 acres; Greenbelt and Open space (O) along the central-western 6.1 acres; and Rural Low Density Residential (RLDR 1-2.3 ac min) on the western 6.1 acres. The current zoning designations for the site are Residential Single-Family, combining Agriculture, minimum Building Site of 20,000 square feet (RS-AG-B-20) (eastern 24.1 acres); Open Space (O) (central-western 4.3 acres); and Farm-Development Reserve (F-DR) (western portion of site). The three-acre NAPOTS area in the southwestern portion of the site is currently designated RLDR 1-2.3 ac min per the DCWPCP and zoned F-DR.

Figure 1
Regional Location

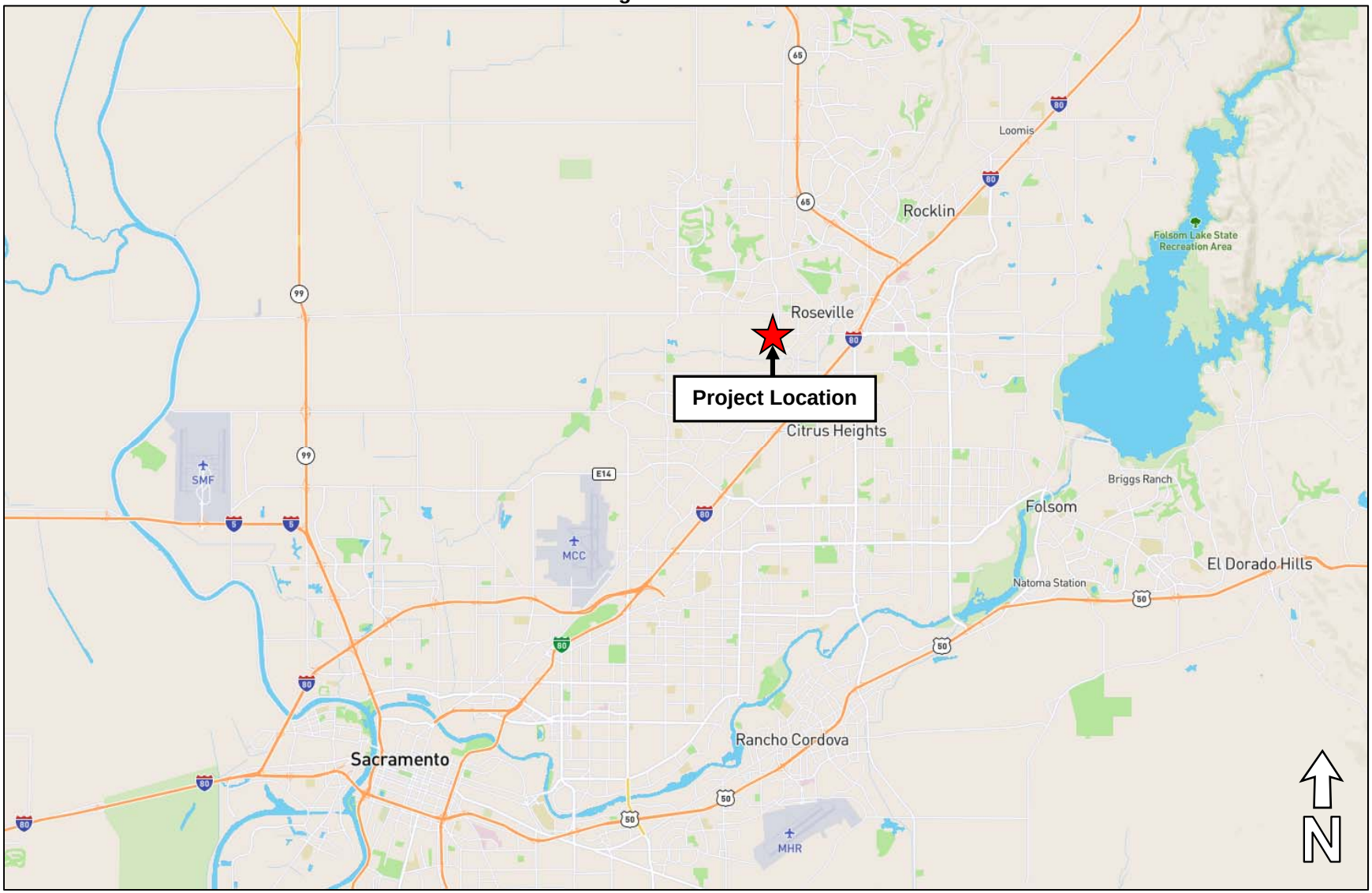
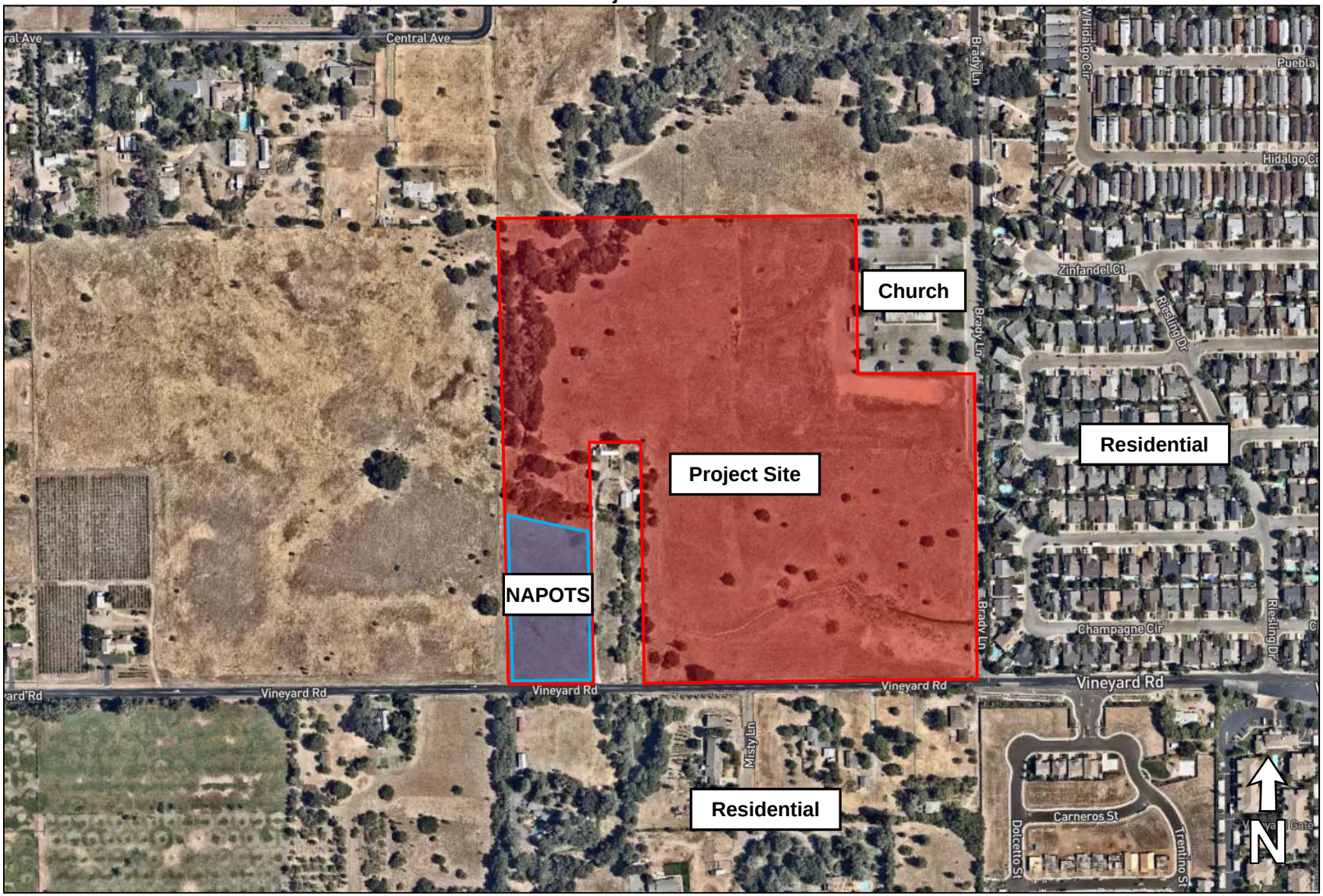


Figure 2
Project Location



1.4 Project Components

The proposed project would include subdivision of the project site to develop a total of 119 single-family lots and various associated improvements (see Figure 5). The proposed project would require County approval of the following:

- General Plan/Community Plan Amendment (DCWPCP) from LDR 1-2 du/ac (24.1 acres), O (6.1 acres), and RLDR 1-2.3 ac min (1.8 acres) to Medium Density Residential (MDR) (25.9 acres), O (4.3 acres), and RLDR 1-2.3 ac min (1.8 acres). The existing DCWPCP land use designation for the NAPOTS area would not be altered;
- Rezone from RS-AG-B-20 (24.1 acres), O (6.1 acres), and F-DR (1.8 acres) to Residential Single Family, Combining Building Site minimum of 5,000 square feet (RS-B-X-5,000) (25.9 acres), O (4.3 acres), and F-DR (1.8 acres). The existing zoning designation for the NAPOTS area would not be altered;
- Vesting Tentative Map;
- Variance to increase allowable building coverage on residential lots from the maximum 40 percent to 50 percent for one-story units;
- Minor Boundary Line Adjustment to create the NAPOTS parcel;
- Design Exception Request for internal roadways (Administrative Approval);
- Annexation into the Dry Creek Fire Zone of Benefit (County Service Area 28, Zone of Benefit 165) for provision of fire protection services (Placer County Board of Supervisors Approval); and
- Annexation into the Placer County Service Area 28, Zone 173, for sanitary sewer service (Placer County Board of Supervisors Approval).

In addition, the project would require the following approvals/permits from other responsible agencies:

- Section 404 Nationwide Permit (or Letter of Permission) (USACE); and
- Section 401 Water Quality Certification (RWQCB – Central Valley Region).

The project components, including the requested approvals, are discussed in detail below.

General Plan Amendment and Rezone

As noted previously, the project site is currently designated LDR 1-2 du/ac (24.1 acres), O (6.1 acres), and RLDR 1-2.3 ac min (1.8 acres). The project would include a General Plan/DCWPCP Amendment to change the site's land use designations to MDR (25.9 acres), O (4.3 acres), and RLDR 1-2.3 ac min (1.8 acres) (Figure 3). In addition, the project would include a rezone to change the site's zoning designations from RS-AG-B-20 (24.1 acres), O (6.1 acres), and F-DR (1.8 acres) to RS-B-X-5,000 (25.9 acres), O (4.3 acres), and F-DR (1.8 acres) (Figure 4). The existing DCWPCP land use and zoning designations for the three-acre NAPOTS area within the southwestern portion of the site would not be altered.

Vesting Tentative Map

The proposed project would include a Vesting Tentative Map to subdivide the project site into 119 single-family residential lots. Lots on the northern portion of the project site would generally be a minimum of 5,000 sf (50 feet x 100 feet), with larger lots at the corners of each block. Lots in the central and southern portion of the site would generally be a minimum of 6,500 sf (60 feet x 110 feet) with corner lots and others being larger. Overall, the proposed lots would average 6,416 sf, with a maximum of 11,538 sf. Building setbacks are proposed to be 20 feet in front, 7.5 feet on the sides for two-story homes, and five feet for single-story homes. Two-story homes are anticipated to have 20-foot rear yard setbacks, with 10-foot rear yard setbacks for single story homes. Approximately 50 percent of the homes backing onto Vineyard Road and Brady Lane would be limited to single-story elevations. As noted previously, the three-acre NAPOTS area at the southwestern portion of the project site would become a separate parcel created by a boundary line adjustment.

Figure 3
Existing and Proposed Land Use Designations

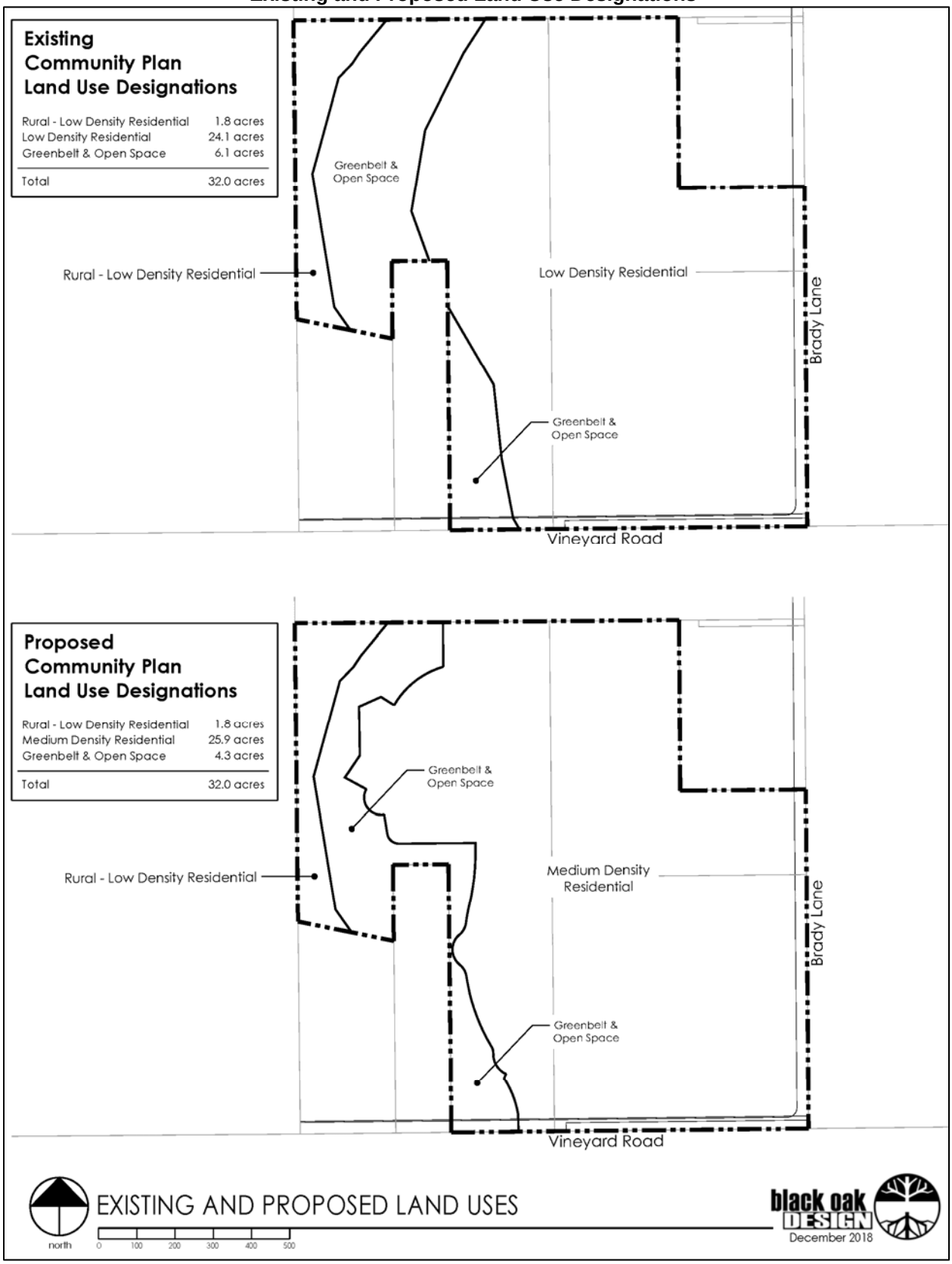


Figure 4
Existing and Proposed Zoning Designations

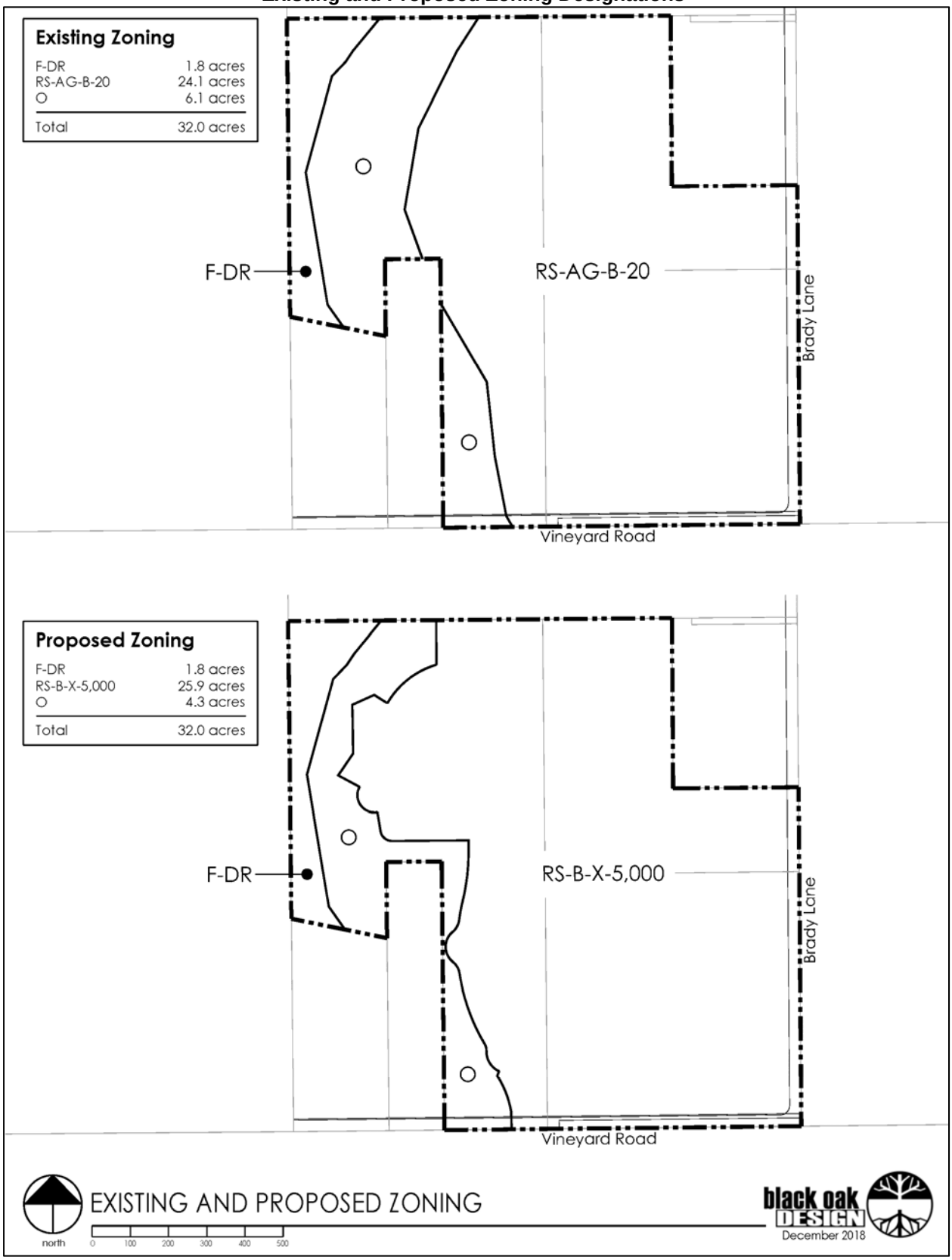
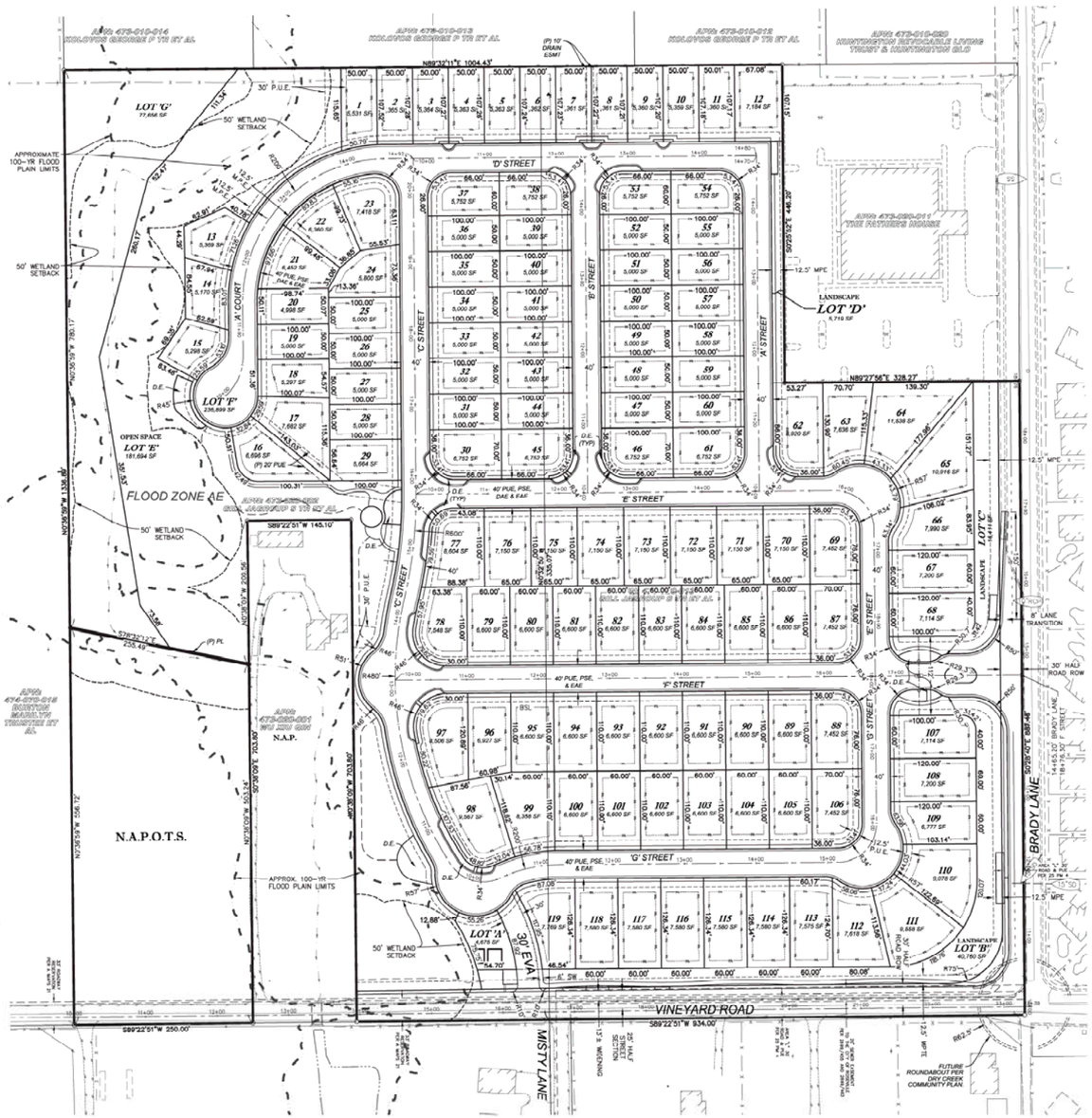


Figure 5
Vesting Tentative Map

VESTING TENTATIVE SUBDIVISION MAP

BRADY VINEYARD SUBDIVISION

BRADY LANE AND VINEYARD ROAD PLN18-00234
PLACER COUNTY, CA
(PORTION OF APN'S 473-020-002 AND 013)



VICINITY MAP
NOT TO SCALE

LEGEND:

- DIMENSION POINT - NOTHING FOUND OR SET
- CENTERLINE
- BOUNDARY
- PROPOSED LOT LINE
- ROW
- EASEMENT
- SET BACK LINE
- FENCE
- 100-YR FLOOD PLAIN LIMITS
- STORM DRAIN MANHOLE
- SEWER MANHOLE
- JOINT POLE
- STREET LIGHT
- SIGN
- TEMPORARY SITE BENCHMARK
- CONTROL POINT

ASSESSOR'S PARCEL NO.:

PLACER COUNTY APN'S: 473-020-002 AND 013

USE:

VACANT

ZONING:

CURRENT: RS-AG-B-20; O; F-DR
PROPOSED: RS-B-X-5,000; O; F-DR

SETBACKS:

FRONT: 20'
SIDE (EXTERIOR): 7.5'
REAR: 10'

JURISDICTION:

PLACER COUNTY

EXISTING EASEMENTS:

AS SHOWN ON MAP

PROPOSED EASEMENTS:

AS SHOWN ON MAP

OWNER'S :

JAGROOP S. GILL, ET AL AS TO APN NO. 473-020-002; AND SUKHBIR BRAR, ET AL AS TO APN NO. 473-020-013

CONTACT: SUKHBIR "STEVE" BRAR
2351 SUNSET BOULEVARD
ROCKLIN, CA 95764
PHONE: (916) 749-0967

ENGINEER:

SHAWN SOMERS, P.E.
RFE ENGINEERING, INC.
2260 DOUGLAS BLVD. SUITE 150
ROSEVILLE, CA 95661
PH: 916-772-7800

SURVEYOR:

WILLIAM F. McKINNEY, PLS
RFE ENGINEERING, INC.
2260 DOUGLAS BLVD. SUITE 100
ROSEVILLE, CA 95661
PH: 916-772-7800

FLOOD PLAIN:

ZONE AE
FEMA MAP NUMBER: 06061C1021H
EFFECTIVE DATE: DECEMBER 28, 2018
AREA OF FLOOD PLAIN WITHIN PROPERTY: 3.82 ACRES.

FLOOD PLAIN SHOWN HEREON IS A COMBINATION OF FEMA BASE FLOOD ELEVATIONS (BSES) - FROM THE FEMA STUDY TO BE RELEASED 11/2/2018 AND THE FLOOD ELEVATIONS FROM THIS PROJECT'S HEC-RAS MODEL (WHICHEVER IS HIGHER AT A GIVEN STREAM STATION)

SERVICE REPRESENTATIVES

SERVICE	COMPANY	PHONE
GAS	PG&E	800-468-4743
ELECTRIC	PG&E	800-468-4743
TELEPHONE	AT&T	888-944-0447
WATER	CAL AM WATER	916-568-4210
SEWER	PLACER COUNTY CSA 28, ZONE 173 (DRY CREEK)	530-886-4918
DRAINAGE	PLACER COUNTY	530-889-7528
U.S.A.	UNDERGROUND SERVICE ALERT	800-227-2600
FIRE	CAL FIRE	530-745-3575
CABLE	WAVE BROADBAND	866-928-3123
PLANNING	PLACER COUNTY	530-745-3084
ELEMENTARY SCHOOL	DRY CREEK ELEMENTARY	916.770.8800
HIGH SCHOOL	ROSEVILLE JOINT UNION HIGH SCHOOL	916-786-2051
POLICE	PLACER COUNTY SHERIFF'S DEPARTMENT	530-889-7800
SOLID WASTE	RECOLOGY	530-885-3735

NOTES:

1) THE BRADY SUBDIVISION HOMEOWNER'S ASSOCIATION IS RESPONSIBLE FOR PRIVATE DRAINAGE EASEMENT MAINTENANCE.

2) THE PROPOSED ROADSIDE BIO-RETENTION AREAS ARE TO BE OWNED AND MAINTAINED BY BRADY SUBDIVISION HOMEOWNER'S ASSOCIATION.

3) RESIDENTIAL DRIVEWAY LENGTHS SHALL BE A MINIMUM OF 20 FEET IN LENGTH AS MEASURED FROM THE EDGE OF PAVEMENT OF THE ROAD TO THE FACE OF THE GARAGE DOOR.

4) LETTERED LOTS 'B', 'C', & 'D' ARE LOTS FOR LANDSCAPE PURPOSES. LOT 'E' IS AN OPEN SPACE LOT. LOT 'G' WILL REMAIN F-DR ZONING, AS PER PLACER COUNTY ZONING MAP.

5) LETTERED LOT 'F' IS A DESIGNATED PRIVATE ROAD EASEMENT APPURTENANT TO LOTS 1-119 AND A PUBLIC UTILITY EASEMENT. PUBLIC SUPPORT EASEMENT, EMERGENCY ACCESS EASEMENT AND PRIVATE DRAINAGE ACCESS EASEMENT.

60 0 60 120
1 INCH = 60 FEET

811 Know what's below. Call before you dig. or (800) 227-2600

SHEET INDEX:

LEGAL DESCRIPTION:

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE UNINCORPORATED AREA IN COUNTY OF PLACER, STATE OF CALIFORNIA AND IS DESCRIBED AS FOLLOWS:

TRACT ONE:
ALL THAT REAL PROPERTY SITUATED, LYING AND BEING IN SECTION 3, TOWNSHIP 10 NORTH, RANGE 6 EAST, M.D.B.& M., AND FURTHER DESCRIBED AS BEING A PORTION OF LOT 4 AND LOT 8, AS SHOWN ON THE OFFICIAL MAP OF THE "HICKEN TRACT", ON FILE IN THE OFFICE OF THE COUNTY RECORDER AND MORE PARTICULARLY BOUNDED AND DESCRIBED AS FOLLOWS, TO-WIT: BEGINNING AT A POINT MARKING THE SOUTHWEST CORNER OF THE HEREIN DESCRIBED PARCEL AND WHICH POINT OF BEGINNING IS FURTHER DESCRIBED AS BEING THE SOUTHWEST CORNER OF THE AFORESAID SECTION 3; AND RUNNING THENCE FROM SAID POINT OF BEGINNING NORTH 89° 30' 45" EAST, 280 FEET ALONG THE SOUTH LINE OF SAID SECTION 3; THENCE RUNNING NORTH 00° 27' 15" WEST, 703.80 FEET; THENCE NORTH 89° 33' 45" EAST, 145.10 FEET; THENCE SOUTH 00° 27' 15" EAST, 703.80 FEET TO A POINT ON THE SOUTHERLY LINE OF SAID SECTION 3; THENCE ALONG THE SOUTHERLY LINE OF SECTION 3, NORTH 89° 33' 45" EAST, 273.09 FEET; THENCE NORTH 00° 54' 00" WEST, 1319.92 FEET TO A POINT ON THE NORTH LINE OR THE AFOREMENTIONED "HICKEN TRACT"; THENCE ALONG THE SAID NORTH LINE OF THE "HICKEN TRACT", SOUTH 89° 33' 30" WEST, 888.80 FEET TO THE NORTHWEST CORNER OF LOT 4 OF THE SAID "HICKEN TRACT", WHICH POINT IS FURTHER DESCRIBED AS BEING COMMON TO THE SOUTHEAST CORNER OF LOT 31, AS SHOWN ON THE OFFICIAL AMENDED MAP OF "ROSECREST SUBDIVISION", ON FILE IN THE OFFICE OF THE COUNTY RECORDER, AND RUNNING THENCE SOUTH 00° 54' 45" EAST, 1318.36 FEET TO THE POINT OF BEGINNING. EXCEPTING THEREFROM THE AMOUNT TAKEN FOR COUNTY ROAD ALONG THE SOUTH LINE.

TRACT TWO:
PARCEL 2 AS SHOWN ON THAT CERTAIN PARCEL MAP FILED IN BOOK 25 OF PARCEL MAPS, AT PAGE 4, OFFICIAL RECORDS OF PLACER COUNTY. SAID PARCEL 2 BEING GRANTED TO R & S TRUST, ET. AL. PER DOCUMENT NO. 2010-0049605, OFFICIAL RECORDS OF PLACER COUNTY, TOGETHER ALL OF THE LAND DESCRIBED IN THE GRANT DEED TO IMPACT CHURCH PER DOCUMENT NO. 2011-0003666, OFFICIAL RECORDS OF PLACER COUNTY, BEING A PORTION OF PARCEL 1 AS SHOWN ON SAID PARCEL MAP. SAID PARCELS BEING A PORTION OF FRACTIONAL SECTION 3, T. 10N., R. 6E., M.D.M., EXCEPTING THEREFROM ALL THAT PORTION OF SAID DOC #2011-0003666 BEING DESCRIBED AS FOLLOWS: BEGINNING AT A POINT ON THE NORTH LINE OF SAID PARCEL 1, SAID POINT ALSO BEING ON THE NORTH LINE OF SAID DOC #2011-0003666, FROM WHICH POINT, THE NORTHWEST CORNER OF SAID PARCEL 1 BEARS SOUTH 89° 31' 52" WEST, 336.39 FEET; THENCE FROM SAID POINT OF BEGINNING, ALONG THE NORTH LINE OF SAID DOC #2011-0003666, THE FOLLOWING THREE (3) COURSES AND USE ANGLES: (1) NORTH 89° 31' 52" EAST, 31.19 FEET; (2)SOUTH 00° 28' 19" EAST, 17.33 FEET; AND (3) NORTH 89° 27' 41" EAST, 276.15 FEET. TO THE NORTHEAST CORNER OF SAID DOC #2011-0003666, SAID POINT ALSO BEING ON THE EAST LINE OF SAID PARCEL 1; THENCE ALONG THE EAST LINE OF SAID DOC #2011-0003666 AND THE EAST LINE OF SAID PARCEL 1, SOUTH 00° 28' 19" EAST, 428.80 FEET; THENCE LEAVING SAID EAST LINE, SOUTH 89° 27' 36" WEST, 328.27 FEET; THENCE NORTH 00° 25' 31" WEST, 446.20 FEET, TO THE POINT OF BEGINNING.
THE ABOVE DESCRIPTION ENCOMPASSES ONE LEGAL PARCEL OF LAND AS APPROVED BY MINOR BOUNDARY LINE ADJUSTMENT NO. PLN18-00287, RECORDED APRIL 6, 2017 AS INSTRUMENT NO. 2017-0025722-00, OF OFFICIAL RECORDS.
APN: 473-020-007-000 AND PORTION 473-020-009-000 (OLD)
473-020-013-000 (NEW NOT YET ASSESSED)

PROPOSED LOT AREAS

TOTAL SIZE:	32.04 AC
FLOODPLAIN AREA:	3.82 AC
ROW DEDICATION:	1.57 AC
NET BUILDABLE AREA:	26.65 AC
OPEN SPACE LOT 'E':	4.17 AC
LANDSCAPE LOTS:	1.44 AC (LOTS 'B', 'C', & 'D')
PARK AREA:	1.25 AC (WITHIN OPEN SPACE LOT 'E')
F-DR ZONED LOT 'G':	1.79 AC

DATE OF AERIAL SURVEY:

PRINT CO.
DATE: JUNE 6, 2017

ABBREVIATIONS

AC	ASPHALT CONCRETE
DAE	DRAINAGE ACCESS EASEMENT
DE	DRAINAGE EASEMENT
DI	DROP INLET
BSL	BUILDING SETBACK LINE
CL	CENTERLINE
EAC	EMERGENCY ACCESS EASEMENT
(E)	EXISTING
EP	EDGE OF PAVEMENT
FL	FLOW LINE
GR	GRATE
INV	INVERT
IRR	IRRIGATION
MPE	MULTI PURPOSE EASEMENT
MPTE	MULTI-PURPOSE TRAIL EASEMENT
NAP	NOT A PART
OH	OVER HEAD POWER LINES
PSE	PUBLIC SUPPORT EASEMENT
PUE	PUBLIC UTILITY EASEMENT
(P)	PROPOSED
ROW	RIGHT-OF-WAY
SDMH	STORM DRAIN MANHOLE
SSMH	SANITARY SEWER MANHOLE
TBC	TOP BACK OF CURB
UG	UNDERGROUND
WA	WATER
WM	WATER METER

ENGINEER'S STATEMENT:

THIS VESTING TENTATIVE SUBDIVISION MAP ACCURATELY CONFORMS TO SECTION 16.12.040 OF PLACER COUNTY LAND DEVELOPMENT MANUAL.

SIGNATURE 12/11/2018 DATE

No. C 80623 Exp. 3-31-19 CIVIL STATE OF CALIFORNIA

SURVEYOR'S STATEMENT:

I HEREBY STATE THAT THIS TENTATIVE MAP ACCURATELY DEPICTS THE LOCATION, WIDTH, TYPE, AND RECORDING INFORMATION OF ALL RECORD EASEMENTS LISTED IN THE PRELIMINARY TITLE REPORT ISSUED BY PLACER TITLE COMPANY, ORDER NO. P-172075 DATED MARCH 30, 2017.

SIGNATURE 12-11-2018 DATE

PROFESSIONAL LAND SURVEYOR WILLIAM F. McKINNEY No. 4715 Exp. 09/30/19 STATE OF CALIFORNIA

Access and Circulation

The proposed project would include private streets and a gated entry at Brady Lane. A 30-foot wide emergency vehicle access (EVA) for the site would be provided off Vineyard Road. The internal street pattern would consist of two connecting loops, with a cul de sac at the northwest corner of the site. Only three of the proposed lots along the internal roadway would be located adjacent to the existing tributary along the site's western boundary. The private streets would include separated five-foot sidewalks and three-foot rolled curb and gutter on two 17-foot-wide lanes within a 40-foot right-of-way. Parking would be allowed on both sides of the internal roadways.

It should be noted that the proposed road section deviates slightly from County Plate 105, which specifies a roadway easement of 50 to 58 feet, measured from back of walk. The project proposal is to provide a 40-foot roadway easement, measured from back of curb. The width of the paving, curb and gutter, and sidewalks (outside of the easement) would still conform to County Plate 105. The deviation requires a Design Exception Request and can be approved administratively.

Brady Lane

Brady Lane is located within the City of Roseville. Currently, Brady Lane has been widened to include a parking lane/bicycle lane, curb, gutter, and sidewalk for approximately 210 feet of the northernmost portion of the project's frontage. The existing widening is approximately 22 feet-wide, as measured from the fog line of the existing southbound lane to the lip of gutter.

The proposed project would continue widening of Brady Lane along the project frontage and would provide for curb, gutter, and sidewalk improvements southward to the Brady Lane/Vineyard Road intersection, as generally shown under the "Interim" condition in Figure 6. As shown in Figure 6, the ultimate cross-section of the roadway, as per City standards, would include a 10-foot northbound travel lane, a 14-foot center turn lane, a 10-foot southbound travel lane, with both sides of the roadway containing a five-foot bike lane, curb and gutter, and a five-foot attached sidewalk.

Vineyard Road

At the County's request, the project would include widening of Vineyard Road by approximately 12 to 14 feet to accommodate one-half of a future 14-foot two-way left turn lane, one 12-foot thru lane, a new six-foot bike lane, and an asphalt dike to direct drainage to a bioretention planter for a total width of 25 feet from the striped double yellow centerline (see Figure 7 and Figure 8). The road section would taper to the west, and the proposed on-site trail would terminate at a barricade at the western property line, with a 90-degree angle turn towards the edge of the road. A 30-foot wide emergency vehicle access off Vineyard Road would also provide access to a sewer lift station (Lot A) which would be constructed as part of this project, serving the proposed homes as well as adjacent properties.

Parks, Open Space, Trails, and Landscaping

As part of the proposed project, a total of 4.17 acres of the site would be retained as open space (Lot E), including areas planned for on-site trails, and 1.25 acres planned for development with three linear parks (see Figure 9). In addition, 1.44 acres within the site would consist of landscape lots (Lots B, C, and D). The proposed trails would consist of a decomposed granite trail/sidewalk system that would extend from the northern property boundary, both separated from the streets and adjacent, and connect to the three separate linear park areas. Lawns and benches would be provided within the open space areas. The trail would provide for access to Vineyard Road, with a connection looping eastward back to the main entry road. Fencing along the open space corridor would be a post and cable design where adjacent to the road or trails, and an open iron design where adjacent to residential lots. Each internal street would include street trees, planted with either 15-gallon pistache or London plane trees. The project entry would be accented with low stone walls, while all other fencing within the project site would be six-foot-tall solid wood.

Figure 6
Proposed Brady Lane Interim and Ultimate Sections

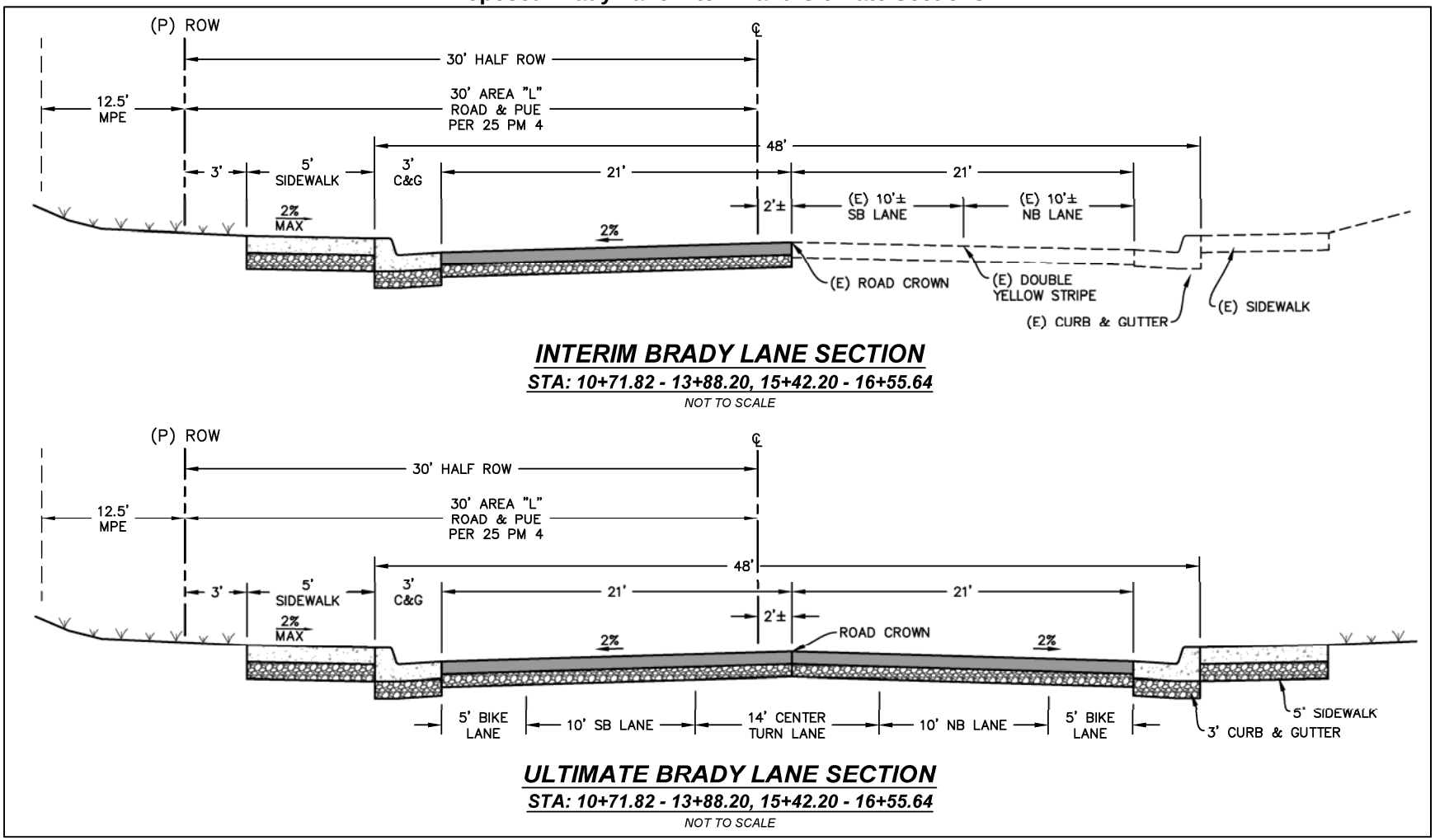


Figure 7
Proposed Vineyard Road Transitional Widening: Full Width to Property Line

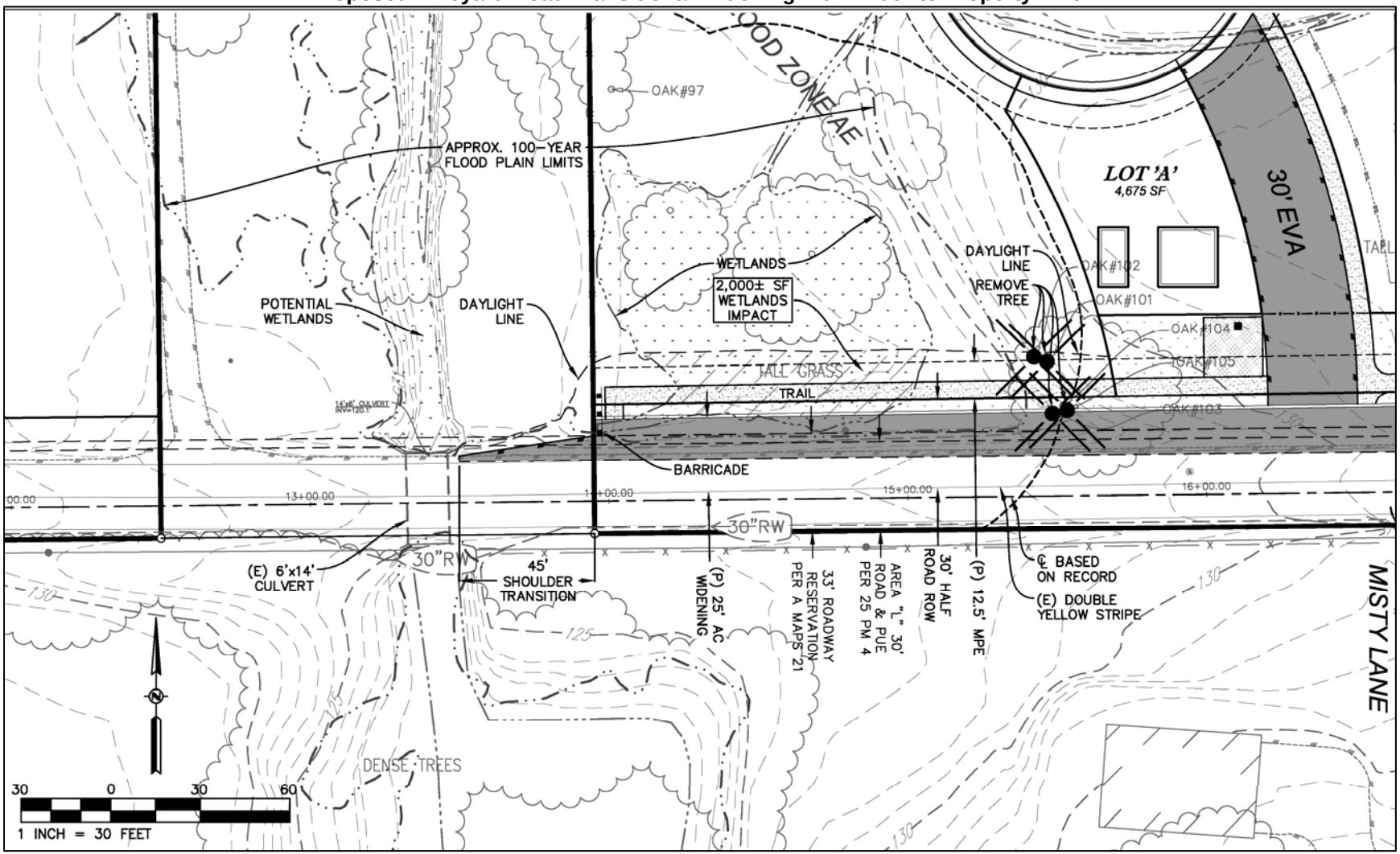


Figure 8
Proposed Vineyard Road Interim and Ultimate Sections

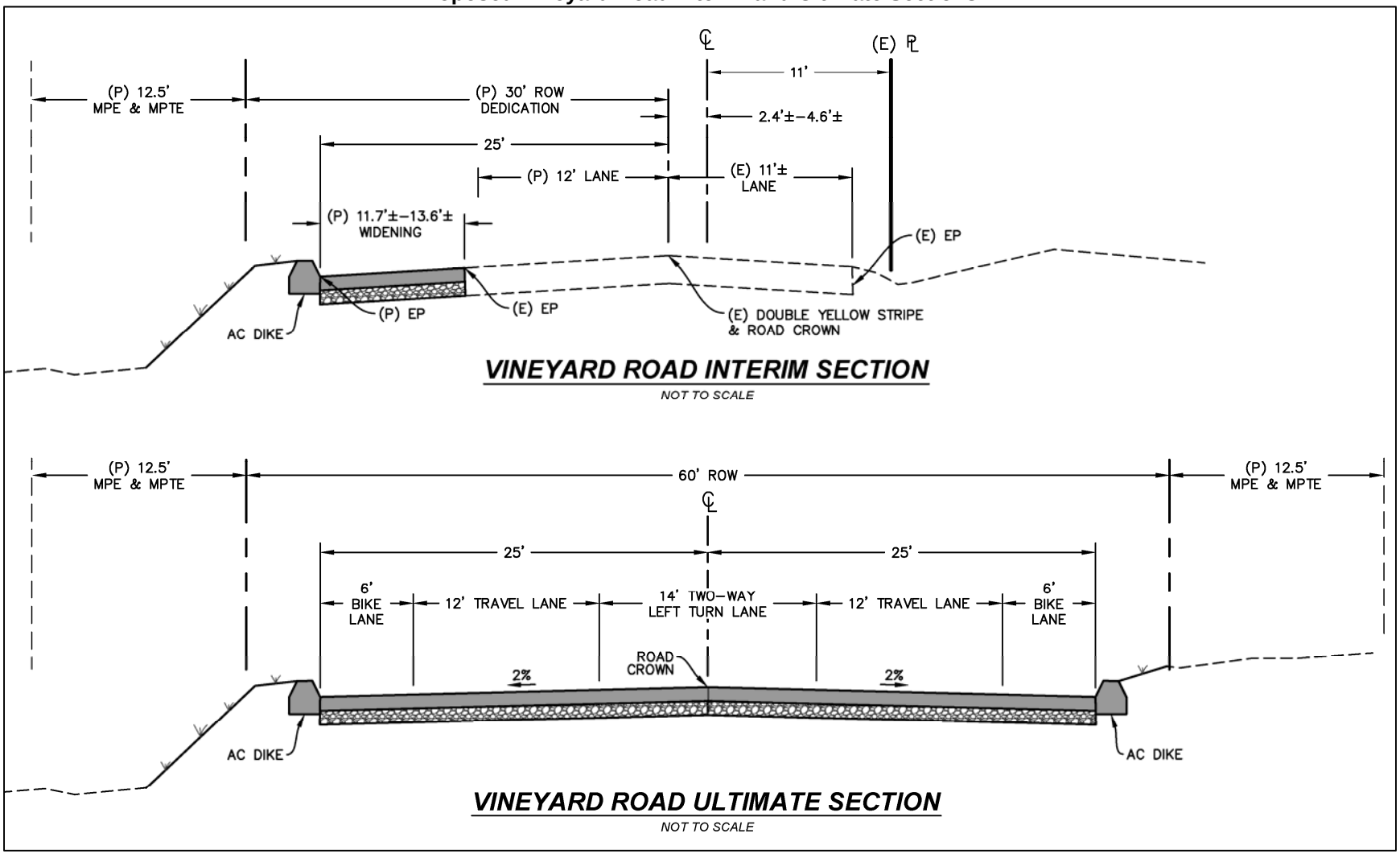


Figure 9
Preliminary Landscaping and Fencing Plan

With the exception of low-voltage, LED, landscape accent lights that would be provided at the gated entry, streetlights and other lighting elements are not proposed along the subdivision streets; however, a streetlight may be required at the intersection of the subdivision road and Brady Lane.

The Vineyard Road frontage would include a setback/buffer of nearly 35 feet (minimum 25-foot from back of right-of-way to southern property line of project site) and would be screened with a landscaped berm between the proposed decomposed six-foot-wide meandering granite path and property line.

The Brady Lane frontage would also include a setback/buffer of nearly 35 feet from the edge of right-of-way to the project's eastern property line. The project would similarly be partially screened by a landscaped berm generally located between the sidewalk and the property line.

Utilities and Public Services

Treated water service for the project would be provided by California American Water (Cal-Am) via its agreement with Placer County Water Agency (PCWA). The project site would be annexed into Placer County Service Area 28, Zone 173, for sanitary sewer service, subject to Placer County Board of Supervisors approval. Figure 10 and Figure 11 provide an overview of the proposed utility improvements.

New public water mains would be installed on-site and along the Brady Lane and Vineyard Road frontages. In addition, the project would include installation of on-site gravity sewer and storm drain collection systems. The on-site sanitary sewer system would flow to a new lift station on Lot A located on the north side of Vineyard Road, east of the on-site tributary and opposite Misty Lane. The lift station, which would be financed by the project applicant, had been previously planned by the County per the Northeast Area Sewer Master Plan and would serve the entire northeast portion of the DCWPCP area. The lift station would pump the wastewater east along Vineyard Road and discharge into an existing 15-inch City of Roseville gravity sewer main in Foothills Boulevard. From there, sewage would gravity flow south and then west to the regional Dry Creek wastewater treatment plant (DCWWTP).

Stormwater generated by impervious areas within the project site would be treated at bio-retention basins located along internal roadways within the site. The bio-retention basins would include drainage outfalls in two locations that would drain to the on-site tributary. As noted previously, the tributary ultimately flows to Dry Creek.

The proposed project would include annexation into the Dry Creek Zone of Benefit (CSA 28, Zone 165) for provision of fire protection services to the project site. Given that fire protection and emergency medical services within Zone 165 are the responsibility of Placer County, the requested annexation would be subject to approval by the County Board of Supervisors. Police protection services would be provided primarily by the Placer County Sheriff's Office.

Variance

Per Sections 17.50.010 and 17.52.040(C)(3) of the Placer County Code, projects with a -B combining district with lot sizes of 8,000 sf or less are limited to site coverage restrictions of 40 percent maximum. The proposed project would require a Variance to increase the allowable building coverage to 50 percent for one-story units, while two-story units would remain at the allowable 40 percent maximum.

Project Phasing and Construction

All site improvements are anticipated to be built in a single phase, with homes constructed over a two- to three-year period. All lots within the project site would be pad graded, with lots adjacent to the 100-year floodplain pad graded a minimum of two feet above the 100-year flood elevation. An estimated 57,015 cubic yards (CY) of cut and 57,015 CY of fill would be required during grading activities, meaning no net import or export material would be required.

Figure 10
Preliminary Utility Plan (North)

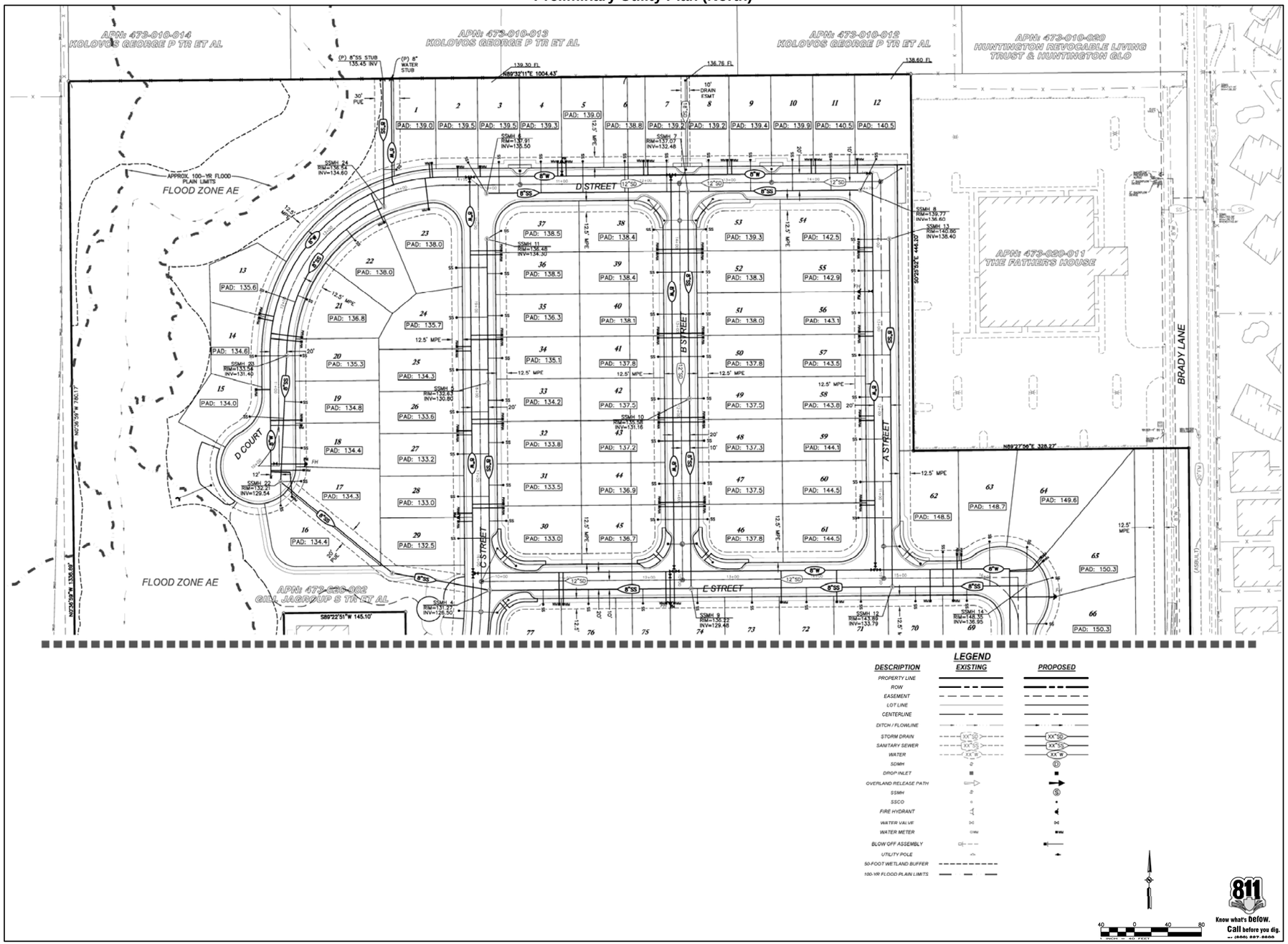
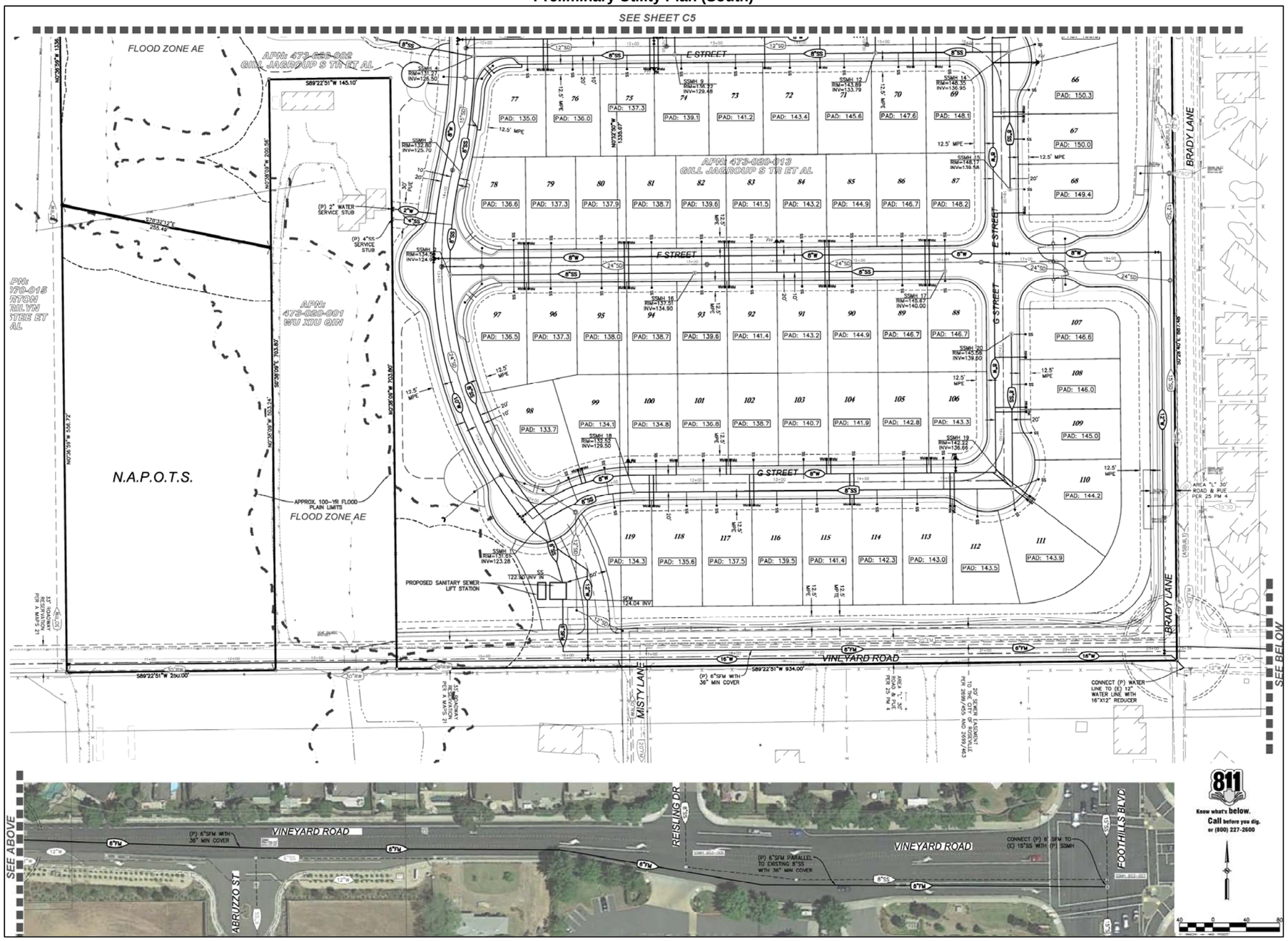


Figure 11
Preliminary Utility Plan (South)



2.0 PROBABLE ENVIRONMENTAL EFFECTS AND SCOPE OF THE EIR

The County anticipates that the EIR will contain the following chapters in accordance with Appendix G and Appendix F of the CEQA Guidelines:

- Aesthetics
- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning/Agricultural Resources/Population and Housing
- Noise
- Public Services and Recreation
- Transportation and Circulation
- Utilities and Service Systems
- Statutorily Required Sections
- Alternatives Analysis
- Effects Not Found to be Significant

Each chapter of the EIR will include identification of the thresholds of significance, identification of project-level and cumulative impacts, and the development of mitigation measures and monitoring strategies, as required. The proposed EIR will incorporate by reference the Placer County General Plan, the Placer County General Plan EIR, and the DCWPCP. In addition to these County documents, project-specific technical studies are being prepared by various technical sub-consultants. An Initial Study will not be prepared for the proposed project, as the EIR will address all CEQA-required environmental topics identified in the CEQA Guidelines.

The following paragraphs summarize the anticipated analyses that will be included in the EIR.

Aesthetics: The Aesthetics chapter of the EIR will summarize existing regional and project area visual character and quality. The chapter will describe project-specific aesthetic issues regarding development of the proposed project, such as scenic vistas, trees, and existing visual character or quality of the site and its surroundings. In addition, the potential for the project to create a new source of substantial light and glare within the vicinity will be evaluated.

Air Quality and Greenhouse Gas Emissions. The air quality and greenhouse gas (GHG) emissions analysis for the proposed project will be performed using the California Emissions Estimator Model (CalEEMOD) software program. Vehicle trip generation data from the project-specific Traffic Impact Analysis will be used as model input data.

The air quality impact analysis will include a quantitative assessment of short-term (i.e., construction) and long-term (i.e., operational) increases of criteria air pollutant emissions of primary concern (i.e., ROG, NO_X, and PM_{10}). The project's cumulative contribution to regional air quality will be discussed, based in part on the modeling conducted at the project level.

The GHG emissions analysis will include a quantitative estimate of operational carbon dioxide equivalent emissions from both stationary and mobile sources. Mobile source emissions from passenger cars and light trucks will be based on estimated vehicle miles traveled (VMT), as derived from the project-specific Traffic Impact Analysis, and as quantified through the CalEEMod program. Construction and demolition emission from the proposed project will also be quantified using CalEEMod.

The significance of air quality and GHG impacts will be determined in comparison to Placer County Air Pollution Control District (PCAPCD) significance thresholds. PCAPCD-recommended mitigation measures will be incorporated to reduce any significant air quality impacts, and anticipated reductions in emissions associated with proposed mitigation measures will be quantified.

Biological Resources. The Biological Resources chapter of the EIR will summarize the setting and describe the potential effects to plant communities, wildlife, trees, and wetlands, including adverse effects on any rare, endangered, candidate, sensitive, and special-status species potentially occurring within the project site. Effects associated with all on-site and off-site improvements will be included in the analysis. Analysis

in the chapter will be based on a Biological Resources Assessment, Arborist Report and Tree Inventory Summary, and Aquatic Resources Delineation Report to be prepared specifically for the proposed project. Mitigation measures for all identified impacts will be developed consistent with applicable laws and regulations.

Cultural Resources. The Cultural Resources chapter of the EIR will summarize the setting and briefly describe the potential effects to any on-site historical, archaeological, and/or paleontological resources due to implementation of the proposed project. The chapter will also assess the potential for tribal cultural resources to be impacted by the project, pursuant to Public Resources Code 21080.3.2. Consultation with Native American tribes pursuant to Assembly Bill 52 and Senate Bill 18 will be conducted. The chapter will be based on a Cultural and Paleontological Resources Inventory and Effects Assessment and a Paleontological Records Search prepared for the proposed project. Effects associated with all on-site and off-site improvements will be included in the analysis.

Geology and Soils. The Geology and Soils chapter of the EIR will summarize the setting and describe the potential effects from earthquakes, liquefaction, expansive soils, and soil erosion, as well as identify any unique geological features within the project area. In addition, the chapter will include a discussion of mineral resources potentially occurring within the project site or the surrounding area, and if present, summarize the potential for the project to result in the loss of availability of mineral resources. The chapter will be based primarily on a site-specific Geotechnical Engineering Study and a Mineral Resources Determination prepared for the proposed project.

Hazards and Hazardous Materials. the Hazards and Hazardous Materials chapter of the EIR will summarize the setting and describe any potential for existing or possible hazardous materials on-site, including but not limited to, above- and below-ground storage tanks, soil contamination, etc. In addition, the chapter will assess the potential for the proposed project to create a significant hazard to the public or environment through the routine transport, use, or disposal of hazardous materials. Wildfire potential will also be addressed based on the new Wildfire section included in the updated Appendix G checklist of the CEQA Guidelines. The chapter will be based on site-specific Phase I and Phase II Environmental Site Assessments.

Hydrology and Water Quality. The Hydrology and Water Quality chapter of the EIR will summarize setting information and identify potential impacts on stormwater drainage and receiving water quality, groundwater, and flooding. The Hydrology and Water Quality chapter will address the proposed project's projected increase in peak flows. It should be noted that consistent with the recommendations per the Placer County Flood Control and Water Conservation District Update to the Dry Creek Watershed Flood Control Plan, the recommended systematic approach to peak flow increases is not provision of on-site attenuation, but rather regional detention facilities. In addition, the chapter will evaluate any impacts associated with alteration of the 100-year floodplain limits and existing drainage patterns. Furthermore, the chapter will address how stormwater will be treated prior to being discharged in the downstream system. Compliance with the requirements of the West Placer Storm Water Quality Design Manual and incorporation of features such as porous pavement, vegetated swales/rain gardens, and cisterns will be discussed in the chapter. The chapter will primarily be based on a project-specific Preliminary Drainage Study & Stormwater Quality Plan.

Land Use and Planning/Agricultural Resources/Population and Housing. The Land Use and Planning/Agricultural Resources/Population and Housing chapter of the EIR will evaluate the consistency of the proposed project with the County of Placer General Plan and DCWPCP. The chapter will include a table that lists all of the applicable General Plan and Community Plan policies and provides corresponding discussions of the project's consistency with said policies, including, but not limited to, compliance with the General Plan policies related to provision of affordable housing. The chapter will further assess the compatibility of the proposed project with the surrounding land uses, both existing and proposed. The chapter will use data from the California Farmland Mapping and Monitoring Program to identify any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the project boundaries. Any conflicts with existing zoning for agricultural use or the County's Right-to-Farm Ordinance will be identified, and the proposed project's compatibility with adjacent agricultural uses will be addressed. In addition, the chapter will include an evaluation of the potential for the project to induce substantial population growth in

the area, either directly or indirectly (i.e., through extension of roads or other infrastructure). The chapter will provide population estimates for the project and compare such estimates to projections for the DCWPCP.

Noise. The Noise chapter of the EIR will be based on a project-specific technical noise report. The chapter will address potential noise impacts resulting from project construction and operation, including off-site sewer alignments. Noise-sensitive land uses or activities, including the adjacent church, residences, and agricultural land, will be identified and several short-term (10-minute) and at least two long-term (72-hour) noise measurements will be conducted at the project site. Long-term measurements will be comprised of three consecutive days of 24-hour noise levels at each long-term site and will be used to establish ambient conditions and to discuss existing noise levels. Traffic counts will be used concurrent with the short-term measurements to calibrate the Federal Highway Administration (FHWA) traffic noise model. The FHWA model will be used with traffic volume information provided by the project-specific Traffic Impact Analysis to predict future traffic noise level increases on off-site roadways attributable to the proposed project. Noise exposure levels will then be compared to applicable significance criteria. Feasible and appropriate mitigation measures to avoid or reduce adverse impacts will be identified, as needed.

Public Services and Recreation. The Public Services and Recreation chapter of the EIR will summarize setting information and identify potential new demand for services, including fire, police, schools, parks and recreation, as well as impacts to public facilities maintenance. In accordance with Appendix G, the focus of the analysis will be on whether the project's demand would require physical alteration of, or need for new governmental facilities, in order to maintain acceptable service ratios, response times, or other performance objectives, the construction of which could cause significant environmental impacts. The chapter will be based on existing information from the Placer County General Plan, the DCWPCP, and information obtained from direct consultation with appropriate service providers.

Transportation and Circulation. The Transportation and Circulation chapter of the EIR will be based on a Traffic Impact Analysis prepared specifically for the proposed project. The following intersections will be analyzed:

1. PFE Road/Walerga Road;
2. PFE Road/Cook Riolo Road;
3. PFE Road/N. Antelope Road;
4. Cook Riolo Road/Vineyard Road;
5. Cook Riolo Road/Creekview Ranch School Access;
6. Vineyard Road/Crowder Lane;
7. Vineyard Road/Brady Lane;
8. Vineyard Road/Foothills Boulevard (Roseville);
9. Baseline Road/Cook Riolo Road;
10. Baseline Road/Brady Lane; and
11. Baseline Road/Foothills Boulevard.

The following roadway segments will be analyzed and current 24-hour counts will be assembled for each location:

1. PFE Road from Walerga Road to Cook Riolo Road;
2. PFE Road from Cook Riolo Road to N. Antelope Road;
3. Cook Riolo Road from Baseline Road to Vineyard Road;
4. Cook Riolo Road from Vineyard Road to Creekview Ranch School;
5. Cook Riolo Road from Creekview Ranch School to PFE Road;
6. N. Antelope Road from PFE Road to Great Valley Drive;
7. Vineyard Road from Crowder Lane to Cook Riolo Road;
8. Vineyard Road from Cook Riolo Road to Brady Lane;
9. Vineyard Road from Brady Lane to Foothills Boulevard; and
10. Brady Lane from Baseline Road to PFE Road.

Current roadway and intersection capacities and operating levels of service (LOS) will be quantified. New traffic count data will be collected as needed at study intersections, which will be conducted while schools are in session. AM and PM peak hour traffic volumes will be established for study area intersections and for associated roadway segments. Operating LOS and roadway system performance will be analyzed using methodologies that are presented in the DCWPCP and are acceptable to the County. Facilities in Roseville will be evaluated based on their adopted methodologies. Current design limitations or safety deficiencies on study area roads will be identified, including evaluation of peak hour traffic signal warrants at un-signalized intersections. The existing setting in regards to pedestrian, bicycle and transit facilities will also be discussed.

The number of automobile trips that may be generated by development of the site will be estimated and the distribution of the trips will be determined. Project trips will be superimposed onto existing volumes to create "Existing Plus Project" conditions. Traffic operating conditions would be calculated for intersections and roadway segments, and the project's effect on alternative transportation modes will be noted. The extent to which project development results in conditions in excess of adopted Placer County level of standards will be determined based on LOS at study intersections and the County's adopted methodology for impact significance, or criteria adopted by the agency with jurisdiction for each location.

The cumulative analysis will address long-term conditions that reflect development under the DCWPCP. The applicable version of the Placer County regional travel demand forecasting model will be used. Applicable adjustments to the model will be made to best address project impacts and local conditions. The cumulative analysis will address two scenarios: "Cumulative No Project" and "Cumulative Plus Project." Long term improvements identified by Placer County will be assumed and resulting intersection and segment LOS, as applicable, will be calculated. A summary of the project's total vehicle miles traveled will be prepared. Mitigation measures required to eliminate current safety problems, to reduce project impacts to a less-than-significant level, or to meet Caltrans or County standards would be identified for each study scenario.

Utilities and Service Systems. The Utilities and Service Systems chapter of the EIR will summarize setting information and identify potential new demand for services on water, sewer, and solid waste. Included as part of the water supply evaluation, the Utilities and Service Systems chapter will discuss water efficient landscaping requirements and the project's compliance with the County's Landscape Design Guidelines. The chapter will address the proposed water and sewer demand for the project and the infrastructure improvements needed to provide water and sewer service to the project site, including construction of the proposed sewer lift station, and whether the existing service providers can accommodate the project within their existing systems. In addition, the chapter will evaluate the ability of regional landfill facilities to accommodate solid waste generated by the project. If existing water, sewer, or solid waste facilities would be impacted, mitigation measures will be identified to ensure that the project's demand can be adequately accommodated.

Statutorily Required Sections. Pursuant to CEQA Guidelines Section 21100(B)(5), the Statutorily Required Sections chapter of the EIR will address the potential for growth-inducing impacts of the proposed project, focusing on whether removal of any impediments to growth would occur with the project. In addition, the chapter will include a discussion of potential energy impacts due to the project and any proposed energy efficiency and/or conservation measures in accordance with Section 15126.4(c) and Appendix F of the CEQA Guidelines. A summary of the significant and unavoidable impacts identified within the EIR will be included in this chapter, as well as a discussion of significant irreversible impacts.

Alternatives Analysis. In accordance with Section 15126.6(a) of the CEQA Guidelines, the EIR will include an analysis of a range of alternatives, including a No Project Alternative. Consideration will be given to potential off-site locations consistent with CEQA Guidelines, Section 15126.6(f)(2), and such locations will be determined in consultation with County staff. If it is determined that an off-site alternative is not feasible, the EIR will include a discussion describing why such a conclusion was reached. The project alternatives will be selected when more information related to project impacts is available in order to be designed to reduce significant project impacts. The chapter will also include a section of alternatives considered but dismissed, if necessary. The Alternatives Analysis chapter will describe the alternatives and identify the

environmentally superior alternative. The alternatives will be analyzed at a level of detail less than that of the proposed project; however, the analyses will include sufficient detail to allow a meaningful comparison of the impacts. Such detail may include conceptual site plans for each alternative, basic quantitative traffic information (e.g., trip generation), as well as a table that will compare the features and the impacts of each alternative.

Effects Not Found to be Significant. This chapter will include discussion of impacts determined not to be significant and warranting detailed analysis in the EIR. For each impact, the chapter will provide justification for why the impact was dismissed.

APPENDIX B

Placer County
AIR POLLUTION CONTROL DISTRICT

110 Maple Street, Auburn, CA 95603 • (530) 745-2330 • Fax (530) 745-2373 • www.placerair.org

Erik C. White, Air Pollution Control Officer

August 27, 2019

SENT VIA E-MAIL: SHerring@placer.ca.gov

Shirlee Herrington,
Environmental Coordination Services
Placer County
Community Development Resources Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report for the Brady Vineyard Subdivision (PLN18-000234)

Ms. Herrington,

Thank you for submitting the **Notice of Preparation of a Draft Environmental Impact Report for the Brady Vineyard Subdivision (PLN18-000234) Project** (Project) to the Placer County Air Pollution Control District (District) for review and comment. The District provides the following comments for consideration.

1. The District's CEQA Thresholds of Significance for criteria pollutants and Greenhouse Gas (GHG) are summarized in the tables below:

Criteria Pollutant Thresholds								
Construction Phase			Operational Phase Project-Level			Operational Phase Cumulative-Level		
ROG	NOx	PM_{10}	ROG	NOx	PM_{10}	ROG	NOx	PM_{10}
(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
82	82	82	55	55	82	55	55	82

Greenhouse Gas Thresholds			
Bright-line Threshold 10,000 MT CO2e/yr			
Efficiency Matrix			
Residential		Non-residential	
Urban	Rural	Urban	Rural
(MT CO2e/capita)		(MT CO2e/1,000sf)	
4.5	5.5	26.5	27.3
De Minimis Level 1,100 MT CO2e/yr			

The District recommends applying the District's adopted thresholds to determine the level of significance for the Project's related criteria pollutants and GHG impacts.

2. The District's California Environmental Quality Act (CEQA) Air Quality 2017 Handbook (Handbook) provides recommended analytical approaches and feasible mitigation measures when preparing air quality analyses for land use projects. The Handbook is available on the District's website at http://www.placerair.org/landuseandceqa/ceqaairqualityhandbook. Except where noted below additional detail relating to the following recommended items can be found within the Handbook.

   - The Project is located within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the District. The SVAB is designated as nonattainment for federal and state ozone (O_3) standards, nonattainment for the federal particulate matter standard ($PM_{2.5}$) and state particulate matter standard

(PM_{10}). Within the Air Quality section of the Initial Study, the District recommends the discussion include the area designations for the federal and state standards for the SVAB.

- The California Emissions Estimator Model (CalEEMod) is recommended when estimating the Project related air pollutants emissions from construction and operational phases. CalEEMod quantifies criteria pollutant emissions, including greenhouse gases (GHGs) from construction and operation (including vehicle use), as well as GHG emissions from energy production, solid waste handling, vegetation planting and/or removal, and water conveyance. In addition, CalEEMod calculates the benefits from implementing mitigation measures, including GHG mitigation measures, developed and approved by CAPCOA. Please contact the District for information on appropriate default settings applicable to the project area.

  The District requests copies of all modeling analysis files during the review of the DEIR for public review and comment.

- In the event the air quality analysis demonstrates the potential for the Project to cause or generate significant adverse air quality related impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. Additional mitigation measures can be found in the District's CEQA Handbook within the following related appendices.

  Appendix A. District Rules and Regulations (Construction and Operational)

  Appendix C. Recommended Mitigation Measures (Construction)

  Appendix E. Recommended Mitigation Measures (Operational)

  Appendix F. Mitigation Measures (Greenhouse Gases)

- As previously stated, the Project is located within the SVAB and is designated nonattainment for the $PM_{2.5}$ standard. PM has been linked to a range of serious respiratory and cardiovascular health problems[1]. Wood burning devices are a source of PM emissions which contribute to the region's air pollution. The District recommends that the construction, installation or use of wood burning devices be prohibited within the Project area. Only natural gas or propane fired fireplace appliances shall be allowed. These appliances shall be clearly delineated on the Floor Plans submitted in conjunction with the Building Permit application.

- The District recommends a CALINE 4 modeling analysis for carbon monoxide (CO) concentration be performed and discussed within the environmental document either of the following scenarios is true for any intersection affected by the project traffic, the project should conduct a site-specific CO dispersion modeling analysis to evaluate the potential local CO emission impact at roadway intersections:

  - A traffic study for the project indicates that the peak-hour LOS on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity will be degraded from an acceptable LOS (e.g., A, B, C, or D) to an unacceptable LOS (e.g., E or F); or

  - A traffic study indicates that the project will substantially worsen an already existing unacceptable peak-hour LOS on one or more streets or at one or more intersections in the project vicinity. "Substantially worsen" includes situations where a delay would increase by 10 seconds or more when project-generated traffic is included.

6. The project description mentions existing buildings . If these buildings are to be demolished, this should be part of the discussion for air quality.

   Be advised, that any demolition or renovation needs to take place under the U.S. EPA's NESHAP requirements. The following should be an advisory note on the improvement plans for this project.

1 http://www.epa.gov/ncer/science/pm/

- The Asbestos National Emission Standard for Hazardous Air Pollutants (Asbestos NESHAP) (Title 40 Code of Federal Regulations, Subpart M § 61.145) establishes requirements applicable to demolition and renovation projects. Generally, these requirements are:

  a. Prior to beginning renovation or demolition, a thorough asbestos inspection must be conducted by a California Division of Occupational Safety and Health (CAL OSHA) Certified Asbestos Consultant or a Site Surveillance Technician.

  b. Owners or operators must submit written notification to the California Air Resources Board (ARB) and the U.S. Environmental Protection Agency at least 10 working days prior to beginning renovation or demolition activity.

     i. **For demolition projects:** Written notification is required for all demolition projects, even if no asbestos is identified in the inspection. State law prohibits local agencies from issuing demolition permits unless the applicant has demonstrated exemption or compliance with the notification requirements of the Asbestos NESHAP (CA Health and Safety Code § 19827.5).

     ii. **For renovation projects:** Written notification is required if the amount of asbestos containing material that will be disturbed during the renovation exceeds 260 linear feet of material on pipe, 160 square feet of material on other facility components, or 35 cubic feet of "off facility components" where the length or area could not be measured prior to disturbance.

- Any regulated asbestos containing material must be removed by a CALOSHA licensed and registered asbestos abatement contractor and disposed of at a landfill approved to receive asbestos-containing waste material.

- For more information or to obtain a copy of the Asbestos NESHAP Notification form for projects located in Placer County, please visit the ARB's Asbestos NESHAP webpage (http://www.arb.ca.gov/enf/asbestos/asbestos.htm) or call ARB at (916) 322-6036 or the U.S.EPA at (415) 947-4182.

7. The use of fire to manage vegetation on the open space property, including fire resiliency is subject to the Placer County Air Pollution Control District's Regulation 3 and should be included as part of the project.

Thank you for allowing the District this opportunity to review the project proposal. Please do not hesitate to contact me at 530.745.2327 or ahobbs@placer.ca.gov if you have any questions.

Sincerely,

Ann Hobbs
Air Quality Specialist
Planning & Monitoring Section

Shirlee Herrington

From: Laura Ball <laurasono1@yahoo.com>
Sent: Tuesday, February 26, 2019 4:39 PM
To: Placer County Environmental Coordination Services
Subject: Brady Vineyard

As a long time resident and recent home buyer in the Dry creek community, I object to the proposal of the a Brady Vineyard project. The residents of Dry creek community want to maintain the unique rural feel that defines our way of life. The lot size is too small! Minimum of 1 acre lots would be ideal. We object to the increase in traffic and the degrading of our rural way of life.

Laura Ball

Shirlee Herrington

From: Shawn Bates <shawnbates@comcast.net>
Sent: Tuesday, February 26, 2019 12:11 PM
To: Placer County Environmental Coordination Services
Subject: Brady Lane/Vineyard Project

Shirley,

My name is Shawn Bates and I have lived in Morgan Creek for the past 15 years. I want to first commend Placer County for the great job they did developing the Morgan Creek project. Morgan Creek is approx. one house per acre. It has 579 units on 545 acres. This leaves open space for walking trails and wildlife. When Morgan Creek was approved they also put in the walking trail along the creek and required it be open to the public during daytime hours.

When the county gives a landowner a rezone to a higher density it is a gift that should be given with some benefits to the community in exchange for this gift. The rezone allows the developer to make more money on their project. I would suggest that the Brady/Vineyard project should, at a minimum, be of equal or greater value to the community at large than Morgan Creek. Yet it seems that Brady Lane project, as proposed, adds no value to the Dry Creek Community. But it does have a whole lot of negatives. The negatives:

1. Road traffic and congestion on Brady and Vineyard. From the submitted plans they do nothing to help mitigate the traffic issues on these two roads. The county even suggest a roundabout but on the plans the developer submitted have future round about. This means they will leave it up to the county to jackhammer their new sidewalks to install a roundabout. They should be required to build roundabout and widen Brady Lane to the same width currently in front of the church. They actually narrow Brady lane down to a choke point in front of this project. This is all to save them money and will cause us (taxpayers) major expenses in the future. The other major choke point is the little one lane bridge on Brady Lane. This should be widened and raised. My guess is it is 15-20 feet wide. This is very narrow for being a main access point for a 100 unit subdivision. This raises the question, should Brady be the main access point and shouldn't they have two points of ingress and egress? I would suggest they need another entry (Non VAC) on Vineyard in case the creek on Brady floods or any accidents happen on Brady. This could easily be accomplished with an entrance on Vineyard and at the same time it would take a lot of pressure off Brady Lane.
2. No community park or even a playground. The kids that live in this neighborhood will have no place to play?
3. No bike trail or access for kids to get to the community school. This has been an ongoing issue. Kids ride down Vineyard Road and the cars go 50-60 miles an hour. The road has no shoulder at all. It took the school district and the county 15 years to put in the bike trail from Creekview school to Baseline. I would like to see the county be proactive and implement a plan to build a bike trail along Vineyard to Cook Riolo Rd. and this developer could be the first to pay into such a plan.
4. Visual appeal from Vineyard and Brady. I would suggest a berm and a bigger set back off Brady and Vineyard and then a requirement for single story only on lots adjacent to Brady and Vineyard. This is the same way Morgan Creek had to do it on the houses fronting Vineyard. I wish they would do this on all developments that front exterior road ways. It would make the community appear much more attractive.
5.

We moved out here with the understanding that Dry Creek was going to remain a rural area. I have attended many Dry Creek MAC meetings and no one that lives in the Dry Creek area wants this growth. I also attend the HOA meetings in Morgan Creek and we are all against this project as proposed. My other major concern is the study you are currently doing will analyze the impact of this project on a stand alone basis. But we all know that once this project gets approved there is 30 acres adjacent to it that is currently up for sale that will get developed next. I would suggest that your traffic studies should figure that that project will have similar density as this project. Dave Cook even said at the last Mac

meeting that they need this project to get developed first so they can put a lift station in and then they can develop surrounding projects.

This project will determine the fate of the Dry Creek community. Do we really want or need another mass of homes or could we put a little effort and make Dry Creek something special?

Shawn Bates
Broker/Owner
North American Realty
Dre#01250983
916-224-1688
Email Shawn@north-american-realty.com
Website https://north-american-realty.com/

Shirlee Herrington

From: George Brown <gbrown@thompson-brown.com>
Sent: Tuesday, February 26, 2019 11:54 AM
To: Placer County Environmental Coordination Services
Subject: Brady Vineyard Subdivision
Attachments: Vineyard plan.docx

To whom it may concern,

My name is George Brown and I have lived in the Dry Creek community since 1994. In, I believe 1997, Supervisor Bill Santucci appointed me to the West Placer MAC, where I spent 12 years as a member. Myself and two additional members subsequently resigned from the MAC after approval of The American Vineyard Village by the Board of Supervisors in 2009 (located at Brady and Vineyard Way). That plan was unanimously rejected at the MAC level and stirred intense negative response from the community at large (please see attached news article) . One of the primary arguments made against the plan at the MAC level was the negative precedent set by this approval. We argued that any subsequent development proponents would use this development to seek increased density for their development plan based upon their plan's compatibility to the American Vineyard Village Plan and not the Dry Creek Community Plan or neighbors to the north and west of the plan which are all lots of acres or more. The Brady Vineyard Subdivision request is doing just that.

Aside from the plan disregarding the Dry Creek Community Plan there are real concerns that the transportation infrastructure is not compatible with developments this dense. Vineyard is a rolling two lane country road with multiple blind sight lines. Adding density will only increase an already overused road system in Dry Creek.

George Brown

Tuesday Jan 20 2009
0 comments

Proposed Dry Creek development spurs anger, resignations

Amended community plan allows high-density housing project; three MAC members leave posts

By: Jon Brines Special to The Press-Tribune

-A+A

Residents of the Dry Creek community said they're angry and frustrated after the Placer County Board of Supervisors allowed a developer to bring high-density housing to their rural community. The design for the proposed American Vineyard Village subdivision calls for 140 homes on 19.2 acres, according to county documents. "I think the density is too high," said Dry Creek resident Dave Anderson. "The county is interested in the property-tax revenue it generates." Placer County officials disagree. "What you have is a difference of opinion," said Placer County Planning Director Mike Johnson. "The Planning Commission and the Board of Supervisors concluded this was an appropriate design solution for the project site." Erico Orsi's house is surrounded on two sides by the property, which JMC Homes owns, at the corner of Vineyard Road and Brandy Lane in Roseville. Orsi said he is not only concerned about the density but increased traffic for Vineyard Road and falling housing values. He's also concerned why the county would turn their back on the community's wishes. "It's not progress, it's greed," Orsi said. "The developers want to make all the money they can get. The county is letting them do it." Representatives of JMC Homes, project developer, insist American

Vineyard Village is well designed and compatible with the surrounding neighborhoods. “We are excited about the project,” said Steve Schnable, a spokesman for JMC Homes. “I’m surprised. It’s a relatively small project but it’s gotten some attention.” Orsi signed a petition with more than 90 other neighbors opposing the development. During the county’s review process, JMC Homes officials met with the West Placer Municipal Advisory Council three times, officials said. “In six years on the MAC, I have never seen the level of community opposition that I saw on this project,” said West Placer MAC chairman Barry Stillman. “It is the first time we’ve written a letter saying we oppose this project in the strongest possible terms. It doesn’t just fail to comply; it totally sabotages the community plan.” Developed by the area residents, the West Placer/Dry Creek Community plan was adopted by the Placer County Board of Supervisors in 1990 as a guide for future development. Residents fiercely defend the plan as a vision for the community. Last month, the Placer County Board of Supervisors voted unanimously to amend the community plan to allow the American Vineyard Villages subdivision to be rezoned from R-2, or two houses per acre to R-8, eight houses per acre. “That is not a slight difference,” said West Placer MAC member George Brown. “This was just a blatant, in your face. (It was like saying), ‘we don’t care what the community plan says, this is what we’re doing.’” Rocky Rockholm, county supervisor representing the Dry Creek District, said the project has another advantage residents hadn’t considered. “A project of smaller-sized lots is better-suited to this current economy,” Rockholm said. MAC members say it’s more about principal than design. And they feel so strongly, some have resigned in protest. “Is it a community plan, or a planning commission plan?” Brown said. “That’s why I resigned.” In addition to Brown, MAC members Stillman and Terry Dee Webb all resigned from the council in protest. “We’re just puppets at this point,” Webb said. “We’re just in their way.” Other MAC members agree. “It is a power grab,” Brown said. “They are trying to make the MACs irrelevant. The rest of the county MACs need to stand up and take notice.” Johnson did not comment on the resignations. “The staff did take the MAC’s recommendation into consideration,” Johnson said. “It is not necessary for the Planning Commission or the Board of Supervisors to adhere to the MAC’s recommendation.” The three outgoing MAC members said the county needs to listen to its citizens. Rockholm said the project allows a transition from the urban feel of the city of Roseville, which is to the west of the project. “I understand why MAC members feel proud and protective of the West Placer Community Plan and don’t want it changed,” Rockholm said. “I understand and respect the goal of keeping this area as rural as possible, but in this case I believe we can better protect rural lands by encouraging infill development, as this is.” Former MAC member and Vineyard Road resident Chuck Barsdale is calling for a grand jury investigation. “I’m beyond mad about this,” Barsdale said. “I want them to investigate whether any campaign violations were done. I want to get to the bottom of this.” Rockholm has not taken campaign donations by JMC Homes or John Mourier Construction Inc. in the last three years, according to county election documents. However, campaign records for the last six months were not available as the filing deadline falls in February, county officials said. Rockholm has accepted more than $32,000 in campaign contributions from the North State Building Industry Association, according to county election documents. The North State BIA represents 700 homebuilders, of which JMC Homes is a member, in advocating public policies that promote a healthy building climate, according to its Web site. Rockholm said he does not value the wishes of developers over residents. “Absolutely not,” Rockholm said. “While I represent District One, I must also serve the whole county. In this case, growth has already come to this area.” Stillman and Webb are now concerned the amendment to the community plan creates a precedent for other developers to follow. “The crack is

in the dike," Stillman said. "It is very disappointing," Webb said. "The whole thing has taken off. Now there is no limit, there is no community plan anymore. That's why I resigned."

Mark T. Brune, MD
1801 Vineyard Rd
Roseville, CA 95747
mbrune1502@charter.net
775-721-0468

February 26, 2019

Environmental Coordination Services
Placer County Community Development Resource Agency

Shirlee Harrington,

As a property owner at 1801 Vineyard Rd, I am writing in response to the proposed Brady Vineyard Subdivision Project. The property referenced is high density, and does not conform to surrounding land use, or that of current property owner's rights and expectations. The development will have negative effect on the environment and quality of life thru:

1. Increase in traffic and danger to the public
2. Noise pollution
3. Light pollution
4. Air pollution
5. Water run off with flooding of surrounding properties
6. Negative effects on water table and quality, thereby effecting our wells (such as mine)
7. Creating a sense of confinement to local residents, thus "walling off" their view of open spaces.

In summary, this "Postage Stamp Development" will violate the rights of current residents who expect rural and not metropolitan development. I would strongly recommend redesign of the project to a development design that incorporates larger lots with open spaces and lack of view obstruction. This type of transitional design would be more aesthetically pleasing to the current rural quality of the area.

Thanks You,

Mark T. Brune, MD

Mark T. Brune, MD

February 26, 2019

To: The Placer County Planning Commission and Placer County Board of Supervisors

From: Laura Bullard, 2065 Carol Lane

Re: The proposed subdivision on Brady and Vineyard

This letter is to voice the opposition of my family to the proposed development at Brady and Vineyard. My family has owned property in this general area for over 55 years and is extremely opposed to the proposed development for several reasons.

It is our belief that the proposed development is going to bring **undue traffic congestion** to what is an **area that has a semi-rural feel**. **People who purchased land in this area over the years specifically bought it because of that semi-rural feel** and to allow for the density that is being proposed will significantly **undermine the value of those properties** that were **purchased under the guidelines established long ago in regards to housing density.** Rules should not be randomly cast aside for the purpose of enhancing the wallet of a few individuals or corporations over those who purchased under long established guidelines.

If for some reason the Commission wished to consider development, **it should be more in line with previous density guidelines so that the character of the area is maintained and those who currently live there would not be so negatively impacted by traffic and their housing values would not decline** due to the high density that is being proposed. For example, on the other end of town in the Granite Bay area, development was allowed on previous rural areas but those properties were subdivided on much greater lot sizes than are being proposed in this project.

Another concern with the proposed development is the fact that these children will attend **Dry Creek Elementary School district schools**. If those students are pushed down Vineyard Road to Creekview School (which is already overcrowded), that will force **additional traffic down both Vineyard and Cook-Riolo**, which already are jammed with traffic in the school commute hours. This would create additional concerns for residents along these roads as well as commuters trying to make their ways to any of the main arteries during these times of day. If this development would force a **new school** to be built at the end of Vineyard, there would be an **additional traffic impact along Vineyard**. Alternatively, if these students would be sent to Heritage Elementary, this would create more traffic congestion along Baseline and the need to put in an additional stoplight at Brady **making additional stops for residents going down Baseline** (as our family has to do) or create an additional traffic nightmare with potential collisions from residents going out onto Baseline from Brady. And since the housing density that is proposed is likely to bring a younger cliental, the chances of this development impacting the schools is significant. A **lower density, on the other hand, would bring a greater mixture of residents**—putting less of a strain on the schools

and roads--and also maintain a more rural atmosphere—which is what those who have previously purchased in this area desire.

So as originally stated, it is the belief of our family that this proposal is not one that the Commission should consider. **Any new development to the area should be done in a way that maintains the rural character of the area and also maintains the property values of those who have already established in the area.**

DEPARTMENT OF TRANSPORTATION
DISTRICT 3
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www.dot.ca.gov/dist3

Making Conservation a California Way of Life.

February 28, 2019

GTS# 03-PLA-2016-00398
03-SAC-080 PM 17.953

Shirlee Herrington
Placer County Community Development Resource Agency
3091 County Center Drive, Suite #190
Auburn, CA 95603

Brady Vineyard Subdivision

Dear Shirlee Herrington:

Thank you for including the California Department of Transportation (Caltrans) in the environmental/application review process for the project referenced above. The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development-Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

The project proposes a residential development spanning a total of 35.08 acres to be developed in two phases of residential single-family neighborhoods. Phase I will contain 119 lots averaging 6,383 sqft with a minimum lot size of 5,000 sqft and a maximum of 11,799 sqft. Phase II will contain 5 lots averaging 12,540 sqft with a minimum lot size of 8,576 sqft and a maximum of 16,665 sqft. The project is located at the northwest corner of Vineyard Road and Brady Lane in Placer County. The following comments are based on the Notice of Preparation for an Environmental Impact Report (NOPEIR) received.

Traffic Forecasting and Modeling and Traffic Operations

This project is expected to generate approximately 89 am peak hour trips and 119 pm peak hour trips or more from the 119 single-family lots and it is anticipated that this project would contribute congestion to the State Highway System (SHS) which may impact the I-80 at Riverside Ave./Auburn Blvd., I-80 at Antelope Rd., and I-80 at Douglas Blvd interchanges. Typical traffic during the weekday morning and afternoon commute periods shows vehicles already queueing on both state and local facilities.

The environmental document should include an analysis of the multimodal travel demand expected from the proposed project. This analysis should also identify potentially significant adverse impacts from such demands and avoidance, minimization, and mitigation measures

needed to address them. The scope of the analysis should include State Route I-80 mainline, ramps, and ramp intersections. The study should cover both merge/diverge and length of vehicle queue for off/on ramps. At a minimum, the analysis should analyze:

- Trips generated and distributed from the project site
  - Existing traffic condition without the project
  - Existing traffic condition with the project
  - Future Cumulative traffic condition without the project
  - Future Cumulative traffic condition with the project.
- Vehicle Miles Travelled (VMT) Analysis
  - VMT per capita
  - Average VMT per capita for the surrounding area
- Elements of multi-modal transportation system.

The project should contribute its fair share toward the improvement of these interchanges to increase vehicle storage during ramp metering operations and mainline transitions. We request that an analysis of the project's impacts and mitigation include information regarding the local and/or regional impact fee program. The analysis should identify if those programs include improvements to pedestrian, bicycle and transit infrastructure or that could be considered representative of the project's likely TDM mitigation measures. If no such fee exists, we would appreciate exploring with you the establishment of VMT-based transportation impact fee programs.

Please provide our office with copies of any further actions regarding this project or future development of the property. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any question regarding these comments or require additional information, please contact David Smith, Intergovernmental Review Coordinator for Placer County, by phone (530) 634-7799 or via email to david.j.smith@dot.ca.gov.

Sincerely,

KEVIN YOUNT, Branch Chief
Office of Transportation Planning
Regional Planning Branch—East

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
North Central Region
1701 Nimbus Road, Suite A
Rancho Cordova, CA 95670-4599
916-358-2900
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

February 28, 2019

Patrick Dobbs, Senior Planner
Placer County
Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603
cdraecs@placer.ca.gov

Subject: BRADY VINEYARD SUBDIVISION PROJECT
NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT
SCH# N/A

Dear Mr. Dobbs:

The California Department of Fish and Wildlife (CDFW) received and reviewed the Notice of Preparation of an Environmental Impact Report (EIR) from Placer County for the Brady Vineyard Subdivision Project (Project) in Placer County pursuant the California Environmental Quality Act (CEQA) statute and guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish, wildlife, plants and their habitats. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may need to exercise its own regulatory authority under the Fish and Game Code (Fish & G. Code).

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802.). Similarly, for purposes of CEQA, CDFW provides, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

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1 CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

CDFW may also act as a **Responsible Agency** under CEQA. (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381.) CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT DESCRIPTION SUMMARY

The Project site consists of approximately 35 acres located at the northwest corner of Vineyard Road and Brady Lane in Placer County, California. The site is located adjacent to the City of Roseville city limits, within the Dry Creek-West Placer Community Plan (DCWPCP) area. The site is identified by Assessor's Parcel Numbers (APNs) 473-020-002 and -013. The southwestern-most three acres of the Project site are "not a part of this subdivision" (NAPOTS) and would become a separate parcel created by a boundary line adjustment.

The proposed Project would include subdivision of the Project site to develop a total of 119 single-family lots and various associated improvements, including, but not limited to, parks, trails, landscaping, and utility installation. Circulation system improvements would include a newly gated entry at Brady Lane, which would connect to an internal system of private roadways. In addition, the Project would include widening of Brady Lane and Vineyard Road along the Project frontages.

The Project description should include the whole action as defined in the CEQA Guidelines section 15378 and should include appropriate detailed exhibits disclosing the Project area including temporary impacted areas such as equipment staging areas, spoils areas, adjacent infrastructure development, and access and haul roads if applicable.

As required by section 15126.6 of the CEQA Guidelines, the EIR should include an appropriate range of reasonable and feasible alternatives that would attain most of the basic Project objectives and avoid or minimize significant impacts to resources under CDFW's jurisdiction.

COMMENTS AND RECOMMENDATIONS

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (i.e., biological resources). CDFW offers the comments and recommendations presented below to assist Placer County in adequately identifying and/or mitigating the Project's significant, or potentially significant, impacts on biological resources. The comments and recommendations are also offered to enable CDFW to

adequately review and comment on the proposed Project with respect to impacts on biological resources. CDFW recommends that the forthcoming EIR address the following:

Assessment of Biological Resources

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. To enable CDFW staff to adequately review and comment on the Project, the EIR should include a complete assessment of the flora and fauna within and adjacent to the Project footprint, with emphasis on identifying rare, threatened, endangered, and other sensitive species and their associated habitats. CDFW recommends that the EIR specifically include:

1. An assessment of all habitat types located within the Project footprint, and a map that identifies the location of each habitat type. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following *The Manual of California Vegetation*, second edition (Sawyer et al. 2009). Adjoining habitat areas should also be included in this assessment where site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

2. A general biological inventory of the fish, amphibian, reptile, bird, and mammal species that are present or have the potential to be present within each habitat type onsite and within adjacent areas that could be affected by the Project. CDFW recommends that the California Natural Diversity Database (CNDDB), as well as previous studies performed in the area, be consulted to assess the potential presence of sensitive species and habitats. A nine United States Geologic Survey (USGS) 7.5-minute quadrangle search is recommended to determine what may occur in the region, larger if the Project area extends past one quad (see *Data Use Guidelines* on the Department webpage www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data). Please review the webpage for information on how to access the database to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the Project. CDFW recommends that CNDDB Field Survey Forms be completed and submitted to CNDDB to document survey results. Online forms can be obtained and submitted at: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data.

   Please note that CDFW's CNDDB is not exhaustive in terms of the data it houses, nor is it an absence database. CDFW recommends that it be used as a starting point in gathering information about the *potential presence* of species within the general area of the Project site. Other sources for identification of

species and habitats near or adjacent to the Project area should include, but may not be limited to, State and federal resource agency lists, California Wildlife Habitat Relationship (CWHR) System, California Native Plant Society (CNPS) Inventory, agency contacts, environmental documents for other projects in the vicinity, academics, and professional or scientific organizations.

3. A complete, *recent* inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern and California Fully Protected Species (Fish & G. Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. The EIR should include the results of focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable. Species-specific surveys should be conducted in order to ascertain the presence of species with the potential to be directly, indirectly, on or within a reasonable distance of the Project activities. CDFW recommends the lead agency rely on survey and monitoring protocols and guidelines available at: www.wildlife.ca.gov/Conservation/Survey-Protocols. Alternative survey protocols may be warranted; justification should be provided to substantiate why an alternative protocol is necessary. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary. Some aspects of the Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought or deluge.

4. A thorough, recent (within the last two years), floristic-based assessment of special-status plants and natural communities, following CDFW's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (see www.wildlife.ca.gov/Conservation/Plants).

5. Information on the regional setting that is critical to an assessment of environmental impacts, with special emphasis on resources that are rare or unique to the region (CEQA Guidelines § 15125[c]).

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The EIR should provide a thorough discussion of the Project's potential direct, indirect, and cumulative impacts on biological resources. To ensure that Project impacts on biological resources are fully analyzed, the following information should be included in the EIR:

1. The EIR should define the threshold of significance for each impact and describe the criteria used to determine whether the impacts are significant (CEQA Guidelines, § 15064, subd. (f)). The EIR must demonstrate that the significant environmental impacts of the Project were adequately investigated and discussed and it must permit the significant effects of the Project to be considered in the full environmental context.

2. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by Project activities especially those adjacent to natural areas, exotic and/or invasive species occurrences, and drainages. The EIR should address Project-related changes to drainage patterns and water quality within, upstream, and downstream of the Project site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project site.

3. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Conservation or Recovery Plan, or other conserved lands).

4. A cumulative effects analysis developed as described under CEQA Guidelines section 15130. The EIR should discuss the Project's cumulative impacts to natural resources and determine if that contribution would result in a significant impact. The EIR should include a list of present, past, and probable future projects producing related impacts to biological resources or shall include a summary of the projections contained in an adopted local, regional, or statewide plan, that consider conditions contributing to a cumulative effect. The cumulative analysis shall include impact analysis of vegetation and habitat reductions within the area and their potential cumulative effects. Please include all potential direct and indirect Project-related impacts to riparian areas, wetlands, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and/or special-status species, open space, and adjacent natural habitats in the cumulative effects analysis.

Mitigation Measures for Project Impacts to Biological Resources

The EIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. CDFW also recommends that the environmental documentation provide scientifically supported discussion regarding adequate avoidance, minimization, and/or mitigation measures to address the Project's significant impacts upon fish and wildlife and their habitat. For individual projects, mitigation must be roughly proportional to the

level of impacts, including cumulative impacts, in accordance with the provisions of CEQA (Guidelines § § 15126.4(a)(4)(B), 15064, 15065, and 16355). In order for mitigation measures to be effective, they must be specific, enforceable, and feasible actions that will improve environmental conditions. When proposing measures to avoid, minimize, or mitigate impacts, CDFW recommends consideration of the following:

1. *Fully Protected Species*: Several Fully Protected Species (Fish & G. Code § 3511) have the potential to occur within or adjacent to the Project area, including, but not limited to: white-tailed kite (*Elanus leucurus*). Fully protected species may not be taken or possessed at any time. Project activities described in the EIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the EIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends that the Lead Agency include in the analysis how appropriate avoidance, minimization and mitigation measures will reduce indirect impacts to fully protected species.

2. *Sensitive Plant Communities*: CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDB and are included in *The Manual of California Vegetation* (Sawyer et al. 2009). The EIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts.

3. *Mitigation*: CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the EIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed.

   The EIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, proposed land dedications, long-term monitoring and management programs, control of illegal dumping, water pollution, increased human intrusion, etc.

4. *Habitat Revegetation/Restoration Plans*: Plans for restoration and revegetation should be prepared by persons with expertise in the regional ecosystems and native plant restoration techniques. Plans should identify the assumptions used to develop the proposed restoration strategy. Each plan should include, at a minimum: (a) the location of restoration sites and assessment of appropriate reference sites; (b) the plant species to be used, sources of local propagules, container sizes, and seeding rates; (c) a schematic depicting the mitigation area; (d) a local seed and cuttings and planting schedule; (e) a description of the irrigation methodology; (f) measures to control exotic vegetation on site; (g) specific success criteria; (h) a detailed monitoring program; (i) contingency measures should the success criteria not be met; and (j) identification of the party responsible for meeting the success criteria and providing for conservation of the mitigation site in perpetuity. Monitoring of restoration areas should extend across a sufficient time frame to ensure that the new habitat is established, self-sustaining, and capable of surviving drought.

   CDFW recommends that local onsite propagules from the Project area and nearby vicinity be collected and used for restoration purposes. Onsite seed collection should be initiated in the near future in order to accumulate sufficient propagule material for subsequent use in future years. Onsite vegetation mapping at the alliance and/or association level should be used to develop appropriate restoration goals and local plant palettes. Reference areas should be identified to help guide restoration efforts. Specific restoration plans should be developed for various Project components as appropriate. Restoration objectives should include protecting special habitat elements or re-creating them in areas affected by the Project. Examples may include retention of woody material, logs, snags, rocks, and brush piles. Fish and Game Code sections 1002, 1002.5 and 1003 authorize CDFW to issue permits for the take or possession of plants and wildlife for scientific, educational, and propagation purposes. Please see our website for more information on Scientific Collecting Permits at www.wildlife.ca.gov/Licensing/Scientific-Collecting#53949678-regulations-.

5. *Nesting Birds:* Please note that it is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). CDFW implemented the MBTA by adopting the Fish and Game Code section 3513. Fish and Game Code sections 3503, 3503.5 and 3800 provide additional protection to nongame birds, birds of prey, their nests and eggs. Sections 3503, 3503.5, and 3513 of the Fish and Game Code afford protective measures as follows: section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by the Fish and Game Code or any regulation made pursuant thereto; section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or

destroy the nest or eggs of any such bird except as otherwise provided by the Fish and Game Code or any regulation adopted pursuant thereto; and section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Potential habitat for nesting birds and birds of prey is present within the Project area. The Project should disclose all potential activities that may incur a direct or indirect take to nongame nesting birds within the Project footprint and its vicinity. Appropriate avoidance, minimization, and/or mitigation measures to avoid take must be included in the EIR.

CDFW recommends that the EIR include specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The EIR should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. If pre-construction surveys are proposed in the EIR, CDFW recommends that they be required no more than three (3) days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted earlier.

6. *Moving out of Harm's Way:* The Project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, the lead agency may condition the EIR to require that a qualified biologist with the proper permits be retained to be onsite prior to and during all ground- and habitat-disturbing activities. The qualified biologist with the proper permits may move out of harm's way special-status species or other wildlife of low or limited mobility that would otherwise be injured or killed from Project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety (i.e., CDFW does not recommend relocation to other areas). It should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for habitat loss.

7. *Translocation of Species*: CDFW generally does not support the use of relocation, salvage, and/or transplantation as the sole mitigation for impacts to rare, threatened, or endangered species as these efforts are generally experimental in nature and largely unsuccessful.

The EIR should incorporate mitigation performance standards that would ensure that impacts are reduced to a less-than-significant level. Mitigation measures proposed in the EIR should be made a condition of approval of the Project. Please note that

obtaining a permit from CDFW by itself with no other mitigation proposal may constitute mitigation deferral. To avoid deferring mitigation in this way, the EIR should describe avoidance, minimization and mitigation measures that would be implemented should the impact occur.

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). CDFW recommends that a CESA Incidental Take Permit (ITP) be obtained if the Project has the potential to result in "take" (Fish & G. Code § 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of state-listed CESA species, either through construction or over the life of the Project. CESA ITPs are issued to conserve, protect, enhance, and restore state-listed CESA species and their habitats.

CDFW encourages early consultation, as modification to the Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP or otherwise demonstrate compliance with CESA.

The Project area as shown in the NOP includes habitat for State and/or federally listed species. If during the environmental analysis for the Project, it is determined that the Project may have the potential to result in "take", as defined in Fish and Game Code section 86, of a State-listed species, the EIR shall disclose the potential for "take". In order to receive authorization for "take", an Incidental Take Permit (ITP) or a consistency determination (Fish & G. Code, §§ 2080.1 & 2081) may be obtained and the EIR must include all avoidance and minimization measures to reduce the impacts to a less than significant level. If take of a listed species is expected to occur even with the implementation of these measures, CDFW recommends the EIR propose additional mitigation measures to fully mitigate the impacts to State-listed species (Cal. Code Regs., tit. 14, § 783.2, subd.(a)(8)) as an ITP will require that the take be minimized and fully mitigated. CDFW encourages early consultation with staff to determine appropriate measures to offset Project impacts, facilitate future permitting processes and to engage with the U.S. Fish and Wildlife Service to coordinate specific measures if both State and federally listed species may be present within the Project vicinity.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) (Fish & G. Code §1900 *et seq.*) prohibits the take or possession of state-listed rare and endangered plants, including any part or product thereof, unless authorized by CDFW or in certain limited circumstances. Take of state-listed rare and/or endangered plants due to Project activities may only be permitted through an Incidental Take Permit (ITP) or other authorization issued by CDFW pursuant to California Code of Regulations, Title 14, section 786.9 subdivision (b).

Lake and Streambed Alteration Program

The EIR should identify all perennial, intermittent, and ephemeral rivers, streams, lakes, other hydrologically connected aquatic features, and any associated biological resources/habitats present within the entire Project footprint (including access and staging areas). The environmental document should analyze all potential temporary, permanent, direct, indirect and/or cumulative impacts to the above-mentioned features and associated biological resources/habitats that may occur because of the Project. If it is determined that the Project will result in significant impacts to these resources the EIR shall propose appropriate avoidance, minimization and/or mitigation measures to reduce impacts to a less-than-significant level.

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: 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 debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water.

Upon receipt of a complete notification, CDFW will determine if the Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement will include measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify the Project that would eliminate or reduce adverse impacts to fish and wildlife resources.

CDFW's issuance of an LSA Agreement is a "project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if one is necessary, the EIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the Project may be required to avoid or reduce impacts to fish and wildlife resources. To obtain an LSA notification package, please go to https://www.wildlife.ca.gov/Conservation/LSA/Forms.

Please note that other agencies may use specific methods and definitions to determine impacts to areas subject to their authorities. These methods and definitions often do not include all needed information for CDFW to determine the extent of fish and wildlife resources affected by activities subject to Notification under Fish and Game Code section1602. Therefore, CDFW does not recommend relying solely on methods developed specifically for delineating areas subject to other agencies' jurisdiction when mapping lakes, streams, wetlands, floodplains, riparian areas, etc. in preparation for submitting a Notification of an LSA.

CDFW recommends lead agencies coordinate with us as early as possible, since potential modification of the proposed Project may avoid or reduce impacts to fish and wildlife resources and expedite the Project approval process.

CDFW relies on the lead agency environmental document analysis when acting as a responsible agency issuing an LSA Agreement. Addressing CDFW's comments ensures that the EIR appropriately addresses Project impacts facilitating the issuance of an LSA Agreement.

The following information will be required for the processing of an LSA Notification and CDFW recommends incorporating this information into any forthcoming CEQA document(s) to avoid subsequent documentation and Project delays:

1. Mapping and quantification of lakes, streams, and associated fish and wildlife habitat (e.g., riparian habitat, freshwater wetlands, etc.) that will be temporarily and/or permanently impacted by the Project, including impacts from access and staging areas. Please include an estimate of impact to each habitat type.

2. Discussion of specific avoidance, minimization, and mitigation measures to reduce Project impacts to fish and wildlife resources to a less-than-significant level. Please refer to section 15370 of the CEQA Guidelines.

Based on review of Project materials, aerial photography and observation of the site from public roadways, the Project site supports an unnamed tributary to Dry Creek and its associated riparian habitat. CDFW recommends that the EIR fully identify the Project's potential impacts to the stream and/or its associated vegetation and wetlands.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDB). The CNNDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be submitted online or mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov.

FILING FEES

The Project, as proposed, would have an effect on fish and wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be

operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

Pursuant to Public Resources Code sections 21092 and 21092.2, CDFW requests written notification of proposed actions and pending decisions regarding the Project. Written notifications shall be directed to: California Department of Fish and Wildlife North Central Region, 1701 Nimbus Road, Rancho Cordova, CA 95670.

CDFW appreciates the opportunity to comment on the NOP of the EIR for the Brady Vineyard Subdivision Project and recommends that Placer County address CDFW's comments and concerns in the forthcoming EIR. CDFW personnel are available for consultation regarding biological resources and strategies to minimize impacts.

If you have any questions regarding the comments provided in this letter, or wish to schedule a meeting and/or site visit, please contact Angela Calderaro, Senior Environmental Scientist (Specialist) at 916-767-3993 or Angela.Calderaro@wildlife.ca.gov.

Sincerely,

for Jeff Drongesen
Environmental Program Manager

ec: Kelley Barker, Senior Environmental Scientist (Supervisory)
Angela Calderaro, Senior Environmental Scientist (Specialist)
Department of Fish and Wildlife

Office of Planning and Research, State Clearinghouse, Sacramento

Literature Cited

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. A Manual of California Vegetation, 2nd ed. California Native Plant Society Press, Sacramento, California. http://vegetation.cnps.org/

CITY OF ROSEVILLE CALIFORNIA

Development Services Department
Planning Division
311 Vernon Street
Roseville, California 95678-2649

February 28, 2019

Ms. Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603

Subject: Brady Vineyard Subdivision Project - Notice of Preparation (NOP) Comments

Dear Ms. Herrington:

This comment letter is in response to the County's January 30, 2019 Notice of Preparation for the Brady Vineyard Subdivision project.

Fire Protection
The City of Roseville Fire Department is currently providing a disproportionate level of service for calls for service to Placer County. This project has the potential to increase the need to provide mutual aid. Project specific impacts to the demand for fire protection services should be quantified in the EIR. Mitigating details should identify the project's contribution to fire station siting, construction, and size, how it will be funded, and timing for construction; all critical components of the project so the City and County can ensure impacts to the City of Roseville Fire services are being mitigated.

Wastewater
The City would not provide sewer service for the project. The County will provide this service. Under the regional agreements with the County and upon request from the County, the City will provide treatment service and allow for County connection into the City's infrastructure.

NOP (page 14) – Utilities and Public Services Section: The NOP states that wastewater from the development shall be pumped east along Vineyard Road and discharge into an existing 15-inch City of Roseville gravity sewer main in Foothills Boulevard for conveyance to the DCWWTP. The project should analyze, current plus project, and buildout plus project impacts to the 15-inch sewer (and any sewers downstream of this main) to ensure adequate conveyance capacity. Any conveyance capacity limitations should be addressed in the EIR.

NOP (page 14 of 21) – Utilities and Public Services Section: The NOP states that project flows will be conveyed to the DCWWTP. The project should analyze the capacity of the treatment plant to accommodate the additional flows. The analysis should include current plus project, and buildout plus project. Any treatment capacity limitations should be addressed in the EIR.

Water

NOP (page 14) – Utilities and Public Services Section : states that Treated water service for the project would be provided by California American Water (Cal-Am) via its agreement with Placer County Water Agency (PCWA). The EIR should clarify if the water service already accounted for is part of the wheeling agreement based on PCWA delivery through the City of Roseville's water distribution system; that there is sufficient wheeling capacity within the established 10-mgd wheeling agreement.

Electric

This project site is outside of Roseville Electric's service territory and would be fed electrically from PG&E.

Per Figure 5 (The Vesting Tentative Map), the City/County line is proposed to remain in the center of Brady Lane. The City requests that two streetlights be placed on the western side of Brady (see attached picture). If the City/County line is moved so that the entire width of Brady Lane becomes City property, the two lights would be fed from Roseville Electric.

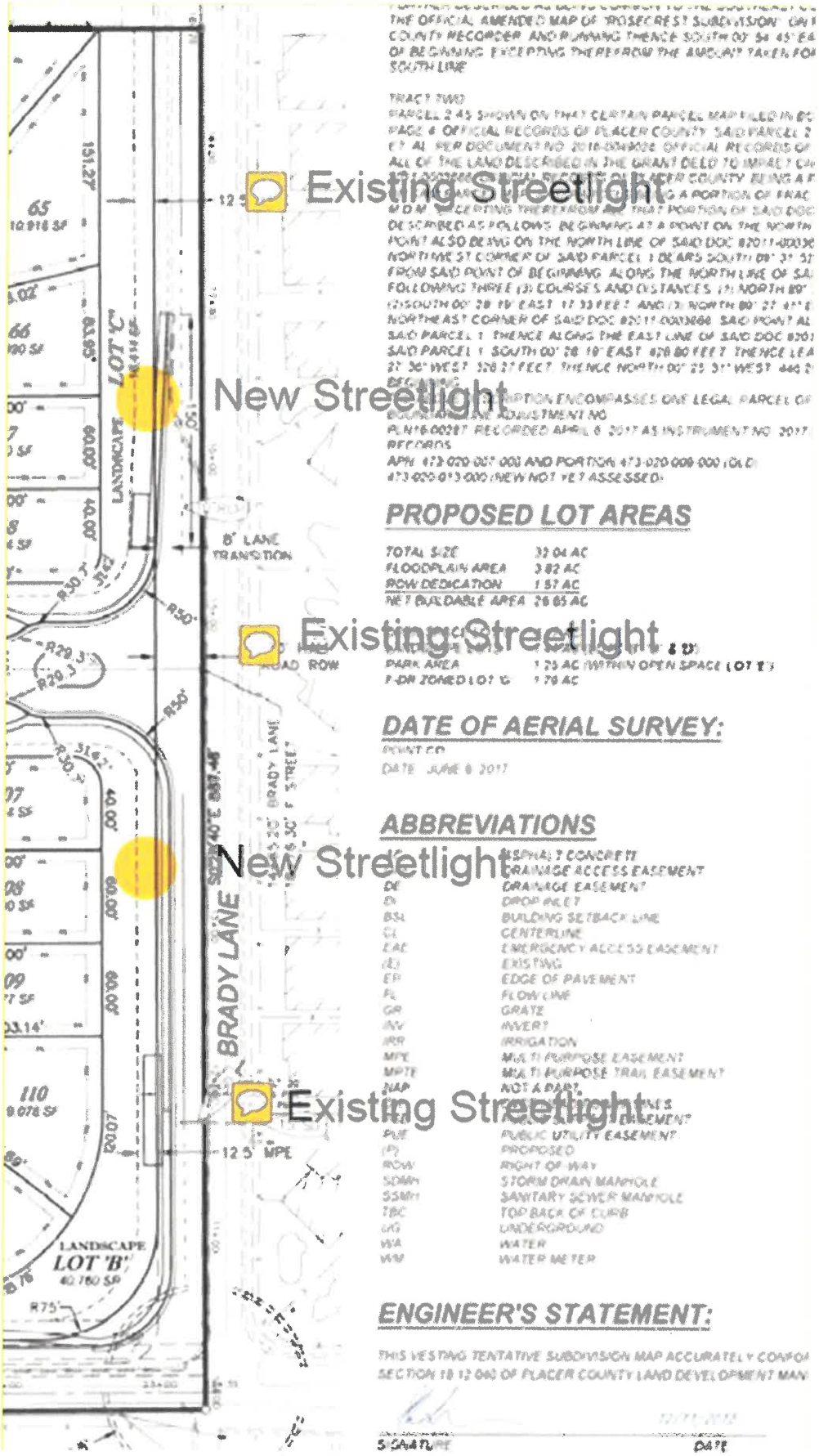
NOP (page 9) – The first sentence in the second paragraph, under section Brady Lane should be modified to include streetlights in the list of improvements.

NOP (page 14) – The first sentence states that "a streetlight may be required at the intersection of the subdivision road and Brady Lane". There is a streetlight directly across from that intersection on the east side of Brady Lane, however, two additional lights are required on the western side per the attached exhibit to provide proper roadway lighting.

Should the County have any questions concerning these comments, please contact me at (916) 774-5536.

Sincerely,

Terri Shirhall
Environmental Coordinator


Existing Streetlight
New Streetlight
Existing Streetlight
New Streetlight
Existing Streetlight
LOT 'C'
LANDSCAPE
8' LANE TRANSITION
BRADY LANE
LANDSCAPE
LOT 'B'
40,760 SF
12.5' MPE
PROPOSED LOT AREAS
TOTAL SIZE 32.04 AC
FLOODPLAIN AREA 3.82 AC
ROW DEDICATION 1.57 AC
NET BUILDABLE AREA 26.65 AC
PARK AREA 1.25 AC (WITHIN OPEN SPACE LOT 'E')
DATE OF AERIAL SURVEY:
DATE JUNE 8 2017
ABBREVIATIONS
DE DRAINAGE EASEMENT
BSL BUILDING SETBACK LINE
CL CENTERLINE
EAE EMERGENCY ACCESS EASEMENT
(E) EXISTING
EP EDGE OF PAVEMENT
FL FLOWLINE
GR GRATE
INV INVERT
IRR IRRIGATION
MPE MULTI PURPOSE EASEMENT
MPTE MULTI PURPOSE TRAIL EASEMENT
NAP NOT A PART
PUE PUBLIC UTILITY EASEMENT
(P) PROPOSED
ROW RIGHT OF WAY
SDMH STORM DRAIN MANHOLE
SSMH SANITARY SEWER MANHOLE
TBC TOP BACK OF CURB
UG UNDERGROUND
WA WATER
WM WATER METER
ENGINEER'S STATEMENT:
SIGNATURE
DATE

Shirlee Herrington

From: Brandon Crawford <bran.crawford@gmail.com>
Sent: Tuesday, February 26, 2019 1:41 PM
To: Placer County Environmental Coordination Services
Subject: Vineyard and Brady Rezoning

Dear Shirley,

I am writing you to express my concerns for the proposed housing development and rezoning on Vineyard and Brady. I feel that allowing a development of that size will dramatically change the dynamic of the area. It will result in congested roads, stores and schools. The dynamic of the Dry Creek area will be irreparably changed for the worse. A lot of the appeal of that has drawn homeowners is the rural feel it has. I understand that growth is inevitable and necessary. I feel that the zoning laws should not be changed and should continue to be zoned 1 home per acre as it has been. This has drawn us and many others to the area and we now feel like the appeal that made us want to move to the area is being changed solely for profit to squeeze as many houses as possible into a small area to increase revenue. Please hear our plea to keep Dry Creek a beautiful, quiet area.

Sincerely
Brandon Crawford

RECEIVED
FEB 25 2019
CDRA

CALIFORNIA
Water Boards

GAVIN NEWSOM
GOVERNOR

JARED BLUMENFELD
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

21 February 2019

Shirlee Herrington
Placer County
3091 County Center Drive, Suite 140
Auburn, CA 95603

CERTIFIED MAIL
7018 1830 0001 0062 4142

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, BRADY VINEYARD SUBDIVISION (PLN18-000234) PROJECT, SCH#2019012050, PLACER COUNTY

Pursuant to the State Clearinghouse's 30 January 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Brady Vineyard Subdivision (PLN18-000234) Project, located in Placer County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases,

the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues.

For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan

(SWPPP).

For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ.

For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements.

If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications.

For more information on the Water Quality Certification, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation.

For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Regulatory Compliance for Commercially Irrigated Agriculture
If the property will be used for commercial irrigated agricultural, the discharger will be required to obtain regulatory coverage under the Irrigated Lands Regulatory Program. There are two options to comply:

1. **Obtain Coverage Under a Coalition Group.** Join the local Coalition Group that supports land owners with the implementation of the Irrigated Lands Regulatory Program. The Coalition Group conducts water quality monitoring and reporting to the Central Valley Water Board on behalf of its growers. The Coalition Groups charge an annual membership fee, which varies by Coalition Group. To find the Coalition Group in your area, visit the Central Valley Water Board's website at: https://www.waterboards.ca.gov/centralvalley/water_issues/irrigated_lands/regulatory_information/for_growers/coalition_groups/ or contact water board staff at (916) 464-4611 or via email at IrrLands@waterboards.ca.gov.

2. **Obtain Coverage Under the General Waste Discharge Requirements for Individual Growers, General Order R5-2013-0100**. Dischargers not participating in a third-party group (Coalition) are regulated individually. Depending on the specific site conditions, growers may be required to monitor runoff from their property, install monitoring wells, and submit a notice of intent, farm plan, and other action plans regarding their actions to comply with their General Order. Yearly costs would include State administrative fees (for example, annual fees for farm sizes from 11-100 acres are currently $1,277 + $8.53/Acre); the cost to prepare annual monitoring reports; and water quality monitoring costs. To enroll as an Individual Discharger under the Irrigated Lands Regulatory Program, call the Central Valley Water Board phone line at (916) 464-4611 or e-mail board staff at IrrLands@waterboards.ca.gov.

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order.

For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit.

For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

DRY CREEK NEIGHBORS

HELP STOP HIGH DENSITY DEVELOPMENT

drycreekneighbors.com

Brady Vineyards Subdivision will destroy the rural lifestyle we enjoy in our Dry Creek community. We support STOPPING the High Density General Plan Amendment, rezoning, and tentative subdivision map for small non-conforming lots.

DRY CREEK NEIGHBORS - SIGNATURES - 1/17/2019

	NAME	ADDRESS	EMAIL	DATE SIGNED	COMMENT
1	GARY VOET	CA	garyvoet@gmail.com	12/28/2018	For all the reasons stated why this petition is being generated -- pollution, traffic congestion, water, etc. -- keep rural areas rural.
2	Craig Hobday	2480 Vineyard Road Roseville Ca	Craig@chobday.com	12/29/2018	Keep our rural lifestyle, to much traffic on our rural streets.
3	Matt Reginato	California	grassroots916@yahoo.com	12/29/2018	Traffic
4	chuck and lois barsdale	2810 vineyard roseville ca.	loisv8@gmail.com	12/29/2018	maintain our rural liffestyle
5	Steven Powell	3828 Oakland Bay	stevenepowell@me.com	12/29/2018	To effect change
6	BRIAN MCDOWELL	3622 SHINGLE CREEK CT.	bmcdow4696@aol.com	01/02/2019	This land is being proposed for high density housing and should remain in a more rural atmosphere.
7	Dave Herson	2510 Vineyard Rd	dave.herson@outlook.com	01/05/2019	Because it changes the zoning laws already in place. I feel this may open the floodgates for other land owners in the area.
8	Angeline and Alfred Scott	9391 Courtney Way, Roseville, CA	Alnangi@yahoo.com	01/05/2019	We purchased our home because of the neighborhood and its beautiful surroundings. This development proposal threatens the uniqueness and beauty we enjoy, not to mention the imminent decline of value and ambiance we currently enjoy.
9	Chuck Anderson	2219 Carol Lane	cdanderson14@comcast.net	01/05/2019	Quality of life issue.
10	Andy Timothy	4009 Wakehurst Court, Roseville, CA. 95747	andy.timothy@yahoo.com	01/06/2019	Vineyard Road is a rural, two lane county road. Adding high density development using this road will overwhelm this area with traffic.
11	ANDREW LITTLE	4122 Grice CT Roseville	rocklin662@gmail.com	01/06/2019	There is too much development and traffic in this area
12	Richard Riedman	8430 Eva Ln	Riedmanranch@comcast.net	01/07/2019	The traffic on vineyard both pedestrian and vehicles. Also our rural lifestyle is being destroyed. I realize development of some type is inevitable. However it should enhance our community not degrade it. If that development is allowed where does it stop. It should stop at the city limits.
13	Diane Kerr	CA	diane-kerr@hotmail.com	01/07/2019	Too much traffic, will impact already over crowded schools.
14	Mark Mossawir	CA	memossawir@comcast.net	01/07/2019	We moved here to get away from San Jose which was destroyed by knocking down the orchards and plowing under the fields and building houses up to the curbside. High density development destroyed the rural environment in San Jose. Don't need it here.
15	Sarah Little	CA	slsexton101@gmail.com	01/07/2019	With more and more housing being built, the natural landscape is being destroyed. I understand it's all about money. I would like the pollution, increased traffic, noise, crime and litter to not ruin what is left of dry creek. Please build, if you must, fewer houses on larger lots.
16	MICHAEL SYSUM	CA	msysum@gmail.com	01/07/2019	I have lived out here my entire life, I have watched Roseville grow from 16k people to what it is today. When it was time for me to move out of my parents house I decided to live in this community because of the lifestyle. Open land, agriculture, peace and quiet. Please Please stop this I am even discouraged with the development on the corner of Vineyard and Cook Riolo.
17	Terry Benson	3060 Jimmy Way Roseville, CA	tbenson986@gmail.com	01/08/2019	We moved from Palo Cedro, CA where we owned 3 acres in January of 2017. We moved to this location because it was a good transition for us. Still in Roseville but in a more rural setting. We like the quiet, less traffic and rural atmosphere.
18	Jay Garnett	9365 Pinehurst Drive	3jng@comcast.net	01/08/2019	There is way too much building going on already for this area. Traffic is already getting worse and there is already thousands of new homes being built in the area. We don't need more urban sprawl.
19	Mary Anne Bates	CA	maryannebates@comcast.net	01/08/2019	Oppose high density lots.
20	Tiffany Schell	3693 Westchester Dr.	schelltc@gmail.com	01/08/2019	I don't want to loose the rural feel of our area.
21	Sean Smith	2800 Vineyard Rd	sean.smith3268@gmail.com	01/08/2019	Traffic impact on Vineyard Rd. Impact to Creekview Ranch school. Did I mention traffic

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22	Shawn Bates	CA	shawnbates@comcast.net	01/08/2019	If this project gets approved as submitted the traffic on Vineyard and Brady lane will become terrible. The project is not adding anything for the community but traffic and urban sprawl. At the very least they should have a community park.
23	Bryan Alcorn	8515 Santiago Circle	balcornius@gmail.com	01/08/2019	Excess congestion and water issues.
24	Paula Agostini	3663 Westchester Dr, Roseville	hapisle@sbcglobal.net	01/08/2019	Will increase, traffic, pollution and won't be supported by infrastructure.
25	Kristen Meyers	8120 Carolyn Court	krissyanderik@yahoo.com	01/08/2019	we bought a home in dry Creek specifically to live in a rural area. We don't want to see this destroyed, there are plenty of homes available in many other areas, please don't destroy this beautiful area!
26	Deborah McSherry	CA	debmcsherry@gmail.com	01/08/2019	I live in Morgan Creek where the owner of the golf course has also submitted plans to develop the golf course into houses. I moved here for the open space, nature areas and limited building. It seems once the door is open the flood happens, we in Morgan Creek are here to help our Dry Creek Neighbors! My parents lived on Glaser Lane for years, I understand our area, I support our area!
27	Robert Raetz	8473 Eva Lane, Roseville California 95747	braetz@comcast.net	01/08/2019	We moved out here to get away from the hustle and bustle of high density city life. It was one house per acre or one house per two acres. Now the traditional lot size has been thrown out for new development while owners of existing houses cannot subdivide to the same standards of the proposed development. In addition, the traffic and noise that will come with the high density development will substantially reduce our quality of life.
28	John Hill	CA	jhillconstruction@mac.com	01/08/2019	My wife and I recently moved to this neighborhood to live in a rural setting, everyone that comes to our home comments on how they cannot believe how it feels like they are in the country. If subdivisions continue to build out in this area we will not have the country feel and our housing values will also decline.
29	Kathy Fields	CA	katfields@comcast.net	01/08/2019	I grew up in a rural setting and was thrilled to find a home of my own for the last 25 years in our little piece of country! I am discouraged to see the continued intrusion of high density housing closing in around me. The wildlife I enjoy is slowly being pushed out, the traffic congestion on Vineyard is ever increasing and becoming dangerous, there is no attention paid to traffic signs, and the noise is changing from sounds of nature to sounds of nonstop traffic. I would rather hear the sound of a cow mooing, than a harley rapping its motor! I don't want to be surrounded by any more houses or people. Please stop this development! No more!!
30	Megan Kilpatrick	8621 San Lucas Circle	megankilpatrick@surewest.net	01/08/2019	I want to maintain our current lifestyle and landscape.
31	Robin Parker	California	parker4@surewest.net	01/08/2019	Want rural community with minimal traffic and people.
32	Michael Vechtomov	9471 Billy Mitchell Blvd. Roseville, CA 95747	mvechtomov@gmail.com	01/08/2019	last year I bought 2.5 acres lot in Dry Creek community, planning to build a house and enjoy rural lifestyle for my family, I have choose this place keeping in mind that zoning wont allow to have high density development in this area, otherwise I would not invest my money in property I bought
33	Ed and Roxana Khachadourian	4011 Ravensworth Place	2khach@earthlink.net	01/08/2019	Would totally ruin the ambiance of the area. Also the roads are not sufficient to handle the increased traffic.
34	Anthony Rocha	CA	tvr100@hotmail.com	01/08/2019	I don't want the area to lose the rural feel.
35	Ashley Kittle	1741 bamboo street roseville ca 95747	ashleykittle1@gmail.com	01/08/2019	Already too congested
36	Flo Peck	3793 Westchester Drive	Flo.peck@yahoo.com	01/08/2019	Our streets will not be able to handle these houses, overcrowding, need to conserve what little land we have left.
37	William Carter	9725 Sword Dancer Dr.	william.carter@mac.com	01/08/2019	High density housing is not necessary nor beneficial to this rural community.
38	john williamson	8360 Eva Lane	johnwilliamson@surewest.net	01/08/2019	It is in my neighborhood just down the street.
39	Carol Fisher	CA	carolfisherstockman@yahoo.com	01/08/2019	Want to maintain the rural lifestyle. This will not increase our property values. It goes against the community plan.

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40	Frances Elliott	1454 Lorimer way	Francesde@surewest.net	01/08/2019	I feel we don't need anymore houses in Roseville. This use to be a nice quiet town, now the streets are so busy, we too many accidents, the schools are over crowded, and the cost of living here in Roseville as gone up so much people are going to start leaving. I remember when it was just Hulett Packard and Walmart, all the new additions are nice, but it's beginning to be ridiculous and overwhelming.
41	Jerry Olson	8520 Manor Road, Roseville, CA 95747	jovoh2o@sbcglobal.net	01/08/2019	This high density housing is completely contrary to the rural like area where we live. I live here specifically for this relaxed and quiet region. There already is too much non local high speed, noisy, and stop sign running traffic that uses Vineyard and other nearby streets for shortcuts through the neighborhood. There is plenty of other nearby areas being developed with dense housing as well as a great amount of open and available land rather than squeezing a dense housing development within our semi-rural peaceful area.
42	Lily Holy	Wakehurst Court	lily.holy@yahoo.com	01/08/2019	There is a rareity to the Dry Creek area that makes it so beautiful, peaceful and enjoyable to live in. To lose that would be a tragedy.
43	MRS PEGGY SARINA	9485 PINEHURST DR	psarina@mycci.net	01/08/2019	A subdivision with that density will create traffic congestion "big time" on a two lane road. There's a school near by and it will create a danger for the children walking to school. This is a rural area and the noise, air pollution, and water problems will destroy that life style. Halt this disaster!
44	Gina Nielsen	9260 Pinehurst Dr., Roseville, CA 95747	gjnielsen1519@yahoo.com	01/08/2019	noise, traffic, pollution, and destruction of open space.
45	Elizabeth Waters	California	danlizwaters@gmail.com	01/08/2019	I have rural property in the area and am interested in preserving the zoning and rural lifestyle that we came here for in the first place.
46	sergey cheban	3211 Lori ct	scheban21@gmail.com	01/08/2019	traffic, noise, air pollution,water problem and destroy our rural lifestyle
47	Paul Mocny	3220 Central Ave.	PaulMocny@yahoo.com	01/08/2019	We don't mind building within the current zoning requirements but rezoning for higher density is unacceptable. Too much traffic as it is.
48	Molly Naake	Roseville, CA	mollynaake@gmail.com	01/08/2019	My family and I are long time Dry Creek Community residents and are very sad to see all of the development and changes over the years.
49	Carole Piombo	3847 Muirwood Lane	Cpiombo@surewest.net	01/08/2019	We moved to the area the rural life. High density development will add more traffic, crime and people.
50	Gilbert and Josette Humpherys	2642 Central Ave	Gjhumpherys3648@gmail.com	01/08/2019	To preserve our lifestyle and rural community.
51	Tracy Herson	2510 Vineyard Riad	tracy.herson@outlook.com	01/10/2019	Concerned about traffic and environmental impacts in our area.
52	Arden Shaw	1431 Kingswood Dr Apt 21q	Catmom55@Comcast.net	01/15/2019	I would like to see nature areas kept wild.
53	Dan Lopp	9401 Courtney Way	dan.lopp@comcast.net	01/15/2019	Development is okay if guide lines reasonable. High density is not reasonable. Minimum lot side should be 1/3 acre. these zero lot lines are not acceptable. Consider single story homes for our aging community, 50+ min age.
54	Mark Smith	8112 Stickles Lane	newmarksmith@gmail.com	01/15/2019	Don't want the extra traffic or high density housing on vineyards or cook riolo.
55	Arthur Baird	3843 Kenwood Way	artgbaird@gmail.com	01/15/2019	potential traffic increase
56	Jackie Fierros	Kenwood Way	fierros2@yahoo.com	01/15/2019	Quality of life.
57	LeighAnn Jordan	CA	leighann.zero5@gmail.com	01/15/2019	Traffic issues and drainage issues it will cause to my property.
58	Nanette Frink-Porta	2108 Carol Lane Roseville CA	nanettefrink@yahoo.com	01/15/2019	Important for people to have quiet and space between homes- this hasn't ever been a congested area and the new gated developments on Main Street and ones with HOA's are built too close together-I don't want to hear my neighbors that much!
59	Nasrin Bakir	8500 Manor Rd	nasrin5500@yahoo.com	01/15/2019	Nature, ranches, quiet surroundindings, less traffic, and clean air characterize this area; thats why we bought our house here .
60	Della Walker	3967 Muirwood Lane	farmgirl60@gmail.com	01/15/2019	This area is impacted enough. Already have a traffic problem. Hate to see it get worse.
61	Tiffany Fimbres	110 Clinton Avenue Roseville CA 95678	Tiffanyfimbres@gmail.com	01/15/2019	To keep our neighborhood quiet and less traffic.

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62	Lorna Sysum	8130 Cook Riolo Road	jlsysum@surewest.net	01/15/2019	We have live here for over 50 years and seeing the lifestyle we moved out here for slip away is sad. It seems no one wants to represent what our community wants. I will sign this petition with little faith that it will do anything to prevent the greed of the developers from moving on. This City is already way overcrowded what use to take 10-15 minutes to get to now can take 30-45 minutes. I really hope someone will represent what the people of this community truly want
63	Teresa Gustafson	3095 Vineyard Road	Jtgusjuly@gmail.com	01/15/2019	I live within walking distance of this proposed development. There is already too much traffic on Vineyard Rd. Where will the water come from to support the development and the people moving in? Police, Fire, Schools, natural inhabitants living on the property- these are also concerns. And many more!
64	Matthew Saunders	9428 Eagle Springs Court	mjbsaunders@gmail.com	01/15/2019	I moved into the area about one year ago from San Francisco, looking for the charm of a quiet rural community and which is what I have enjoyed for this past year. The Dry Creek area is a mazing beautiful rural landscape and I'm hoping we can preserve it that way!
65	Joe Reding	8391 Eva lane	Rosevillejoe@gmail.com	01/15/2019	Support of it.
66	Simran Bagri	3433 Lanie Ct	Simran_bagri1@yahoo.com	01/15/2019	Rural lifestyle, home values, and over congestion
67	Sonja Sorbo	8534 Brackenwood Court, Roseville, CA 9574	ssgasdoc@yahoo.com	01/15/2019	I would like to see the Dry Creek area maintain its rural feel; large open spaces like the property in question are what gives character to the area. Additionally, this open area supports a variety of wildlife, particularly hawks and pheasants.
68	Jamie Rebo	1421 Billington Lane	jturtle2001@yahoo.com	01/15/2019	They will destroy the wildlife in this area. Plus water! We have had multiple droughts over the years. How can we build more houses with potential droughts upon us?
69	Juli Hilton	3836 Muirwood Lane, Roseville, CA 95747	julihilton21@gmail.com	01/15/2019	to preserve our rural lifestyle and the open space around us
70	Lihong Liu	CA	liulihong70@yahoo.com	01/15/2019	too crowed, too much traffic within rural dry creek community
71	Sharon Murray	9789 Sword Dancer Drive	Smurray2470@gmail.com	01/15/2019	Impacts the roads and infrastructure along with an increase in crime and loss of property values.
72	Shannon Knight	8610 San Lucas circle	6george@msn.com	01/15/2019	The proposed Development would cause congestion that cannot be supported by the current infrastructure. Would negatively impact (Livestock, horse property)
73	Jennifer Lamson	9490 Pinehurst drive Roseville ca 95747	Jenjup@gmail.com	01/15/2019	I want to preserve our natural habitat
74	kiran dugal	California	kirandugal@hotmail.com	01/15/2019	I like the way it's now, quiet and open
75	Lisa Mendenhall	8525 Manor Rd, Roseville	lisam.mendenhall@gmail.com	01/15/2019	Preserving the rural area
76	Jocelyn Sarmiento	840 Shearer Street	Mamajoce@gmail.com	01/15/2019	My kids go to Creekview Ranch and my family has lived in Roseville for 20 years. I don't want to see that beautiful stretch of land destroyed by traffic and congestion. I also don't want to overcrowd my kids already crowded school. Thank you, Jocelyn Frago- Sarmiento
77	Roger Snyder	CA	kogersnipter@gmail.com	01/15/2019	We moved to this area to be more remote, less traffic and keep a country feel to our daily lives. Roger Snyder
78	Ruben Lucero	9330 Eagle Springs Place Roseville, CA	lumac@me.com	01/15/2019	Overcrowded schools and roads.
79	Mark Walike	8911 Belford Ct Roseville CA 95747	markwalike@gmail.com	01/15/2019	Too much housing being built which increases traffic and decreases quality of life in a rural setting.
80	Renee Cornell	CA	reneecornell7@yahoo.com	01/15/2019	We love the rural feel of neighborhood and surrounding areas. We do not want a subdivision which will take away one of the reasons we purchased in this area nor do we want the additional traffic congestion that will accompany a housing development as large as this proposed development.

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81	Sheila Lopez	CA	sschultz786@gmail.com	01/15/2019	My husband and I just moved to Morgan Creek recently only to discover the owner/builder has plans to close the golf course & put high density housing there. We should stop this overreach now.
82	Olga Smirniva	1601 vineyard rd Roseville	Dessert75@gmail.com	01/15/2019	I live close to this community. It is an island of rural area in a busy City. Roseville lost a lot of that in the past few years. We do not the one Dry Creek to lose that too. It is unique and very special and need to be preserved.
83	Savithri Kunnath	9716 sword dancer drive	Kunnathsavithri@yahoo.com	01/15/2019	To prevent congestion and maintain the calm and rural life style
84	Noe Fierros	Kenwood way	tapirhd@yahoo.com	01/15/2019	because
85	Laura Bullard	2065 Carol Lane	bullardll@aol.com	01/15/2019	This area is a county area that people moved into to be part of a rural atmosphere. It was zoned 2 acre minimum and now developers are simply walking around the standards that were set years ago--and hoping that no one is paying attention. It is time to stop this invasion of the lifestyle that people bought into and will now be ruined by a few individuals trying to make a buck--at the expense of everyone else.
86	Gary Burnett	4034 Ravensworth Place Roseville	garynburnett399@comcast.net	01/15/2019	keep home values and preserve rural lifestyle
87	Peter Cooper	9270 Pinehurst Drive	petecooper03@yahoo.com	01/15/2019	I live nearby
88	April Go Forth	3200 Mercedes Place, Roseville, CA 95747	rise@citlink.net	01/15/2019	There are few areas left with agriculture potential in this community, being rural and yet convenient to services. Impacts of rezoning and dense population in this community will literally destroy Dry Creek as it has so many rural, quality-of-life areas that are now congested, polluted, paved and environmentally eroded. We must band together to protect a quality of life we sought in this area.
89	Suzanne Wendorf	CA	Szwnd12@live.com	01/15/2019	I don't support the extra congestion of traffic, we moved out here to have some peace and quite in a safe area. Build some place else, not here in country living.
90	Cathie Kirschke	CA	cathiekirschke@yahoo.com	01/15/2019	We are in rural area for a reason. Push it away from this area please. Also our road system with existing bridges are only one lane and already back up horribily.
91	Christian Huntington	110 Eriswell Court	christianhuntington@gmail.com	01/15/2019	My mother lives on Brady Lane.
92	Katherine Roberts	4821 Waterstone Drive	kwroberts@surewest.net	01/15/2019	I moved to this rural area because its rural. It's one of the few left in Roseville. Why does greed have to destroy beauty.
93	Song Hee Cha	3913 Creekstone Ct.	songheecha@yahoo.com	01/15/2019	I would like to keep rural lifestyle.
94	Barbara Torgerson	United States	torgerson@surewest.net	01/15/2019	I live in this specific area and have been her since 1986. Moved to be in a rural community!
95	Vance Valencia	2866 PFE Road, Roseville, Ca 95678	vvalencia05@yahoo.com	01/15/2019	Do not want our land to be over built and over congested with so many people, we bought out here to get away from over crowded neighborhoods.
96	Bruce Wilson	3610 Hazeltine Lane, Roseville	bwilson223@yahoo.com	01/15/2019	This will create traffic congestion, noise, air pollution and ruin our rural life style.
97	Don Kennedy	California	djk@surewest.net	01/15/2019	I live here and want to stop high density development.
98	joe sanfilippo	CA	morganckvilla@comcast.net	01/15/2019	I don't mind development of the property in question, but it is the high density portion of the plan that I object to. We bought here specifically for the rural lifestyle and proximity to city amenities. Let's keep it that way.
99	Tim Murphy	California	radtaz39@aol.com	01/15/2019	The roads that support this area will no handle additional traffic with their current condition and design. Putting a high density housing project without the infrastructure in place will make this rural area unsafe and lose the appeal. Development is coming to this area, I would rather see the lot size increase to better match the development that is in the area.

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100	Dee Johnson	8300 Cook Riolo Rd	santoi6429@aol.com	01/15/2019	More land taken away from wild life and gives them no place to go and makes them more of a nuisance around homes, not their fault, they are driven out of their homes. The creek near by attracks them. lots of traffic on Cook Riolo is not good and there is enough now and with children walking home from school with more traffic is not good for the kids either. More air pollution which is not good for any of us. Our natural lifestyle is what we moved here for and one of the most beautiful areas in Roseville still giving us land for our animals and the way of life we moved here for. please do not let the subdivision ruin this for us, Will be more costly as we may be forced to hook up to sewers and water and not everyone can afford this especially when retired and on fixed incomes. Please keep this one beautiful lifestyle in Roseville the way it is, a rural lifestyle we moved here for.
101	Lorene Scott	8148 Cook Riolo Road	msysum@outlook.com	01/15/2019	I am 97 and have lived in this community for over 50 years we need to keep it the way it is to preserve the life everyone moved her for.
102	Daniel Gehweiler	2785 Liberty Lane	Carolgehweiler@yahoo.com	01/15/2019	Live in the Dry Creek area, I don't want to see our rural lifestyle disappear. Traffic is getting bad already without bringing in more homes to the area, as well as all the other problems this will generate.
103	Erik Meyers	8120 Carolyn Ct	erikmeyers@me.com	01/15/2019	Our neighborhood is unique in that it is rural suburban. This development works against that. I also have concerns about how this will effect our water table.
104	Leah Mudron	3200 Mercedes place	Leahgoforth@hotmail.com	01/15/2019	No more traffic keep our rural area rural we don't need more houses cramped on top of each other
105	Regan J.	CA	rwwjd@comcast.net	01/15/2019	Just make it less dense. Too difficult to subtract. half the proposed houses along with better ingress/egress.
106	Sandra Hughes	3940 Crystal Downs Court	sanhughes_2000@yahoo.com	01/15/2019	Am concerned about traffic, noise, etc. Also that developers will try to built new homes on the Morgan Creek Golf course.
107	Susan and Greg McAtee	8393 Bianchi Rd	Gsmcatee84@gmail.com	01/15/2019	We live in the neighborhood
108	Joshua Go Forth	1917 morella cir roseville ca 95747	Joshgoforth@hotmail.com	01/15/2019	My family lives nearby, my children go to creekview ranch. We all moved to this area of Roseville to get away from the congestion. Enjoy the rural area. The area has already expanded dramatically, without fully understanding the impact and giving sufficient time to note the effects. Every plot of land does not need to be built on in places county.
109	Kara Keister	CA	karakeister@msn.com	01/15/2019	We moved here because of the rural community and large lots in the area. We are disappointed and are considering moving out of this area due to the continuous development of these types of properties.
110	Roberta and Richard Matteis	3350 Central Avenue	robmatteis@comcast.net	01/15/2019	It is essential that we retain the rural character of our community.
111	willie pruitt	8555 edenbridge wy	wbpruitt@aol.com	01/15/2019	It is important to maintain a "rural" environment. Also, this plan will create a terrible traffic problem.
112	Pauline Sakai	2151 Baseline Road	sakaip@surewest.net	01/15/2019	I have been a resident of Roseville since 1982 and was attracted to the rural lifestyle. This subdivision is exactly the opposite to why I moved here. The housing is too dense and the traffic is getting to be terrible.
113	Chuck Barsdale	CALIFORNIA	chuckbars1@gmail.com	01/15/2019	preserve my rural life style
114	R Bell	Country Place Drive	imabell22@yahoo.com	01/15/2019	Concerned about traffic.
115	Matt Russell	1975 Vineyard Rd.	mdrussell77@hotmail.com	01/15/2019	We moved to this area to be in the country and enjoy having our quiet space filled with trees, land and wildlife.
116	Summer Beaman	3650 Bridlewood way	sjbeaman@msn.com	01/15/2019	I would like to stop it because it will be busyier and the animals NEED homes too!!
117	Shaun Hilton	3836 Muirwood Ln Roseville CA 95747	hilton@mac.com	01/15/2019	High density developments will change the character of the dry creek community for the worse. We do not want Brady Vineyards to go in nor any development like it in Dry Creek. Thank you

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118	Joyce Burnett	CA	joyceburnett399@comcast.net	01/15/2019	We would like to preserve the country atmosphere.
119	Ramon Lopez	3663 Westchester Drive, Roseville, CA 95747	rlopezini@gmail.com	01/15/2019	Development needs to be limited/controlled and supporting infrastructure need to be in place before building commences.
120	Sundeep Tumber	8727 Wentworth Ct, Roseville 95747	Stumber@hotmail.com	01/15/2019	Lack of resources (schools, parks), congestion, traffic, police, and disturbance to quality of life.
121	Derek Kirm	8537 indianwood way, roseville ca	realestate@derekshomes.com	01/15/2019	I live within 1/2 mile of proposed development.
122	Don & Khin Libolt	9380 Rawhide Ln	donlibolt@gmail.com	01/15/2019	Crime & Traffic
123	Michael Thornburg	2345 Baseline Rd	info@lavendesign.com	01/15/2019	
124	richelle ocon	9741 Sword Dancer Drive Roseville Ca 95747	rich74_ny3@yahoo.com	01/15/2019	congestion, traffic, public safety
125	Charlie Chaleunsy	9813 Sword Dancer Dr. Roseville , ca	Charway789@yahoo.com	01/15/2019	Protecting home values
126	Keith Rose	4443 Cheval Way, 95747	keitha320@me.com	01/15/2019	Why is there such a push to build more homes when we are in a Drought? This plan is greed driven. We don't need more congestion.
127	Svetlana Hanjiev	CA	lanak_17@yahoo.com	01/15/2019	The entire reason I moved to this area was for the rural life style.
128	Michael McKenna	8511 St. Germaine Ct.	mike@mckennafire.com	01/15/2019	Too many people and too much traffic will result of this project.
129	Andre Mako sky	4309 Slr Barton Ct	makovsky_a@yahoo.com	01/15/2019	This area is already over developed and over congested. When we take kids to school in the morning there is constantly traffic. The reason of why we bought a home in Dry Creek is because its quiet rural area and I want to keep it that way.
130	Sheila Smith	CA	pantherpwr@juno.com	01/15/2019	I live here and want to stop high density development.
131	Patrrick Faddis	2780 central ave.	Patrick.faddis@gmail.com	01/15/2019	Want to stay rural
132	Collin Robinson	California	cdrobinson55@gmail.com	01/15/2019	I love living here, please stop trying to make it such a big city.
133	Tien Nguyen	8700 Oakmere Ct, Roseville, CA 95747	tienws@yahoo.com	01/15/2019	Maintain rural environment and limit traffic and noise.
134	Barry Stillman	3180 Tiny Lane	barryandpatti@comcast.net	01/15/2019	1. Compliance with community plan 2. Vineyard Road cannot take that much traffic.
135	Beth Frkovich	CA	bfrky1968@yahoo.com	01/15/2019	Congestion and increased traffic on Vineyard.
136	Dale Tindel	8500 Indianwood Way	daletindel48@gmail.com	01/15/2019	This is a rural area and I would like it to stay that way.
137	Frederick Besana	California	fredbesana@gmail.com	01/15/2019	Stopping the high density growth in the rural setting of where we live is important....
138	Dyan Hogan	1765 Booth Rd	Mdhogan_1@msn.com	01/15/2019	I have lived here for 46 years and have slowly watched our small rural area be gobbled up by high density living. Roseville has so many new neighborhoods, and no infrastructure to support them. Our roads are too crowded, the crime has increased, the schools are impacted. There are so many new neighborhoods in Fiddyment Farms, I see no need to jam 130 more homes into this very small corner of land. I would rather see it divided into 1 to 5 acre parcels with homes, as those types of residences are in high demand in our area.
139	PATRICK MEADE	8534 SANTIAGO CIRCLE	pat.meade@earthlink.net	01/15/2019	LETS NOT TURN OUR DENSITY INTO Southern California
140	William O'Neil	CA	billoneil@surewest.net	01/15/2019	We are expanding too fast and need to slow down instead of maximizing land density. larger lots mean less people and better water supply.
141	Jon Fenske	2729 Country Place Dr, Roseville CA 95747	jpfenske@gmail.com	01/15/2019	Negative impact on traffic, air quality, historical nature and ambience of Dry Creek area.
142	Amanda Richardson	1441 Everett Way Roseville ca 95747	Manda8229@aol.com	01/15/2019	This will cause a burden not only on our neighborhood but our schools. They are already close to being overwhelmed to add this many would surely make it worse.
143	Marc Silva	4042 Kenwood Way	mrmarc2385@yahoo.com	01/15/2019	Property Values
144	Victor Radican	8190 Brady Lane	Vickiea7325@hotmail.com	01/15/2019	Because I live on Brady and have been here for 40 years.

	NAME	ADDRESS	EMAIL	DATE SIGNED	COMMENT
145	Amanda Buccina	2820 Pfe rd Roseville CA 95747	amandabuccina@yahoo.com	01/15/2019	I live in the Dry Creek neighborhood and am sickened by every field and open space containing a Development Proposal sign. I don't want more traffic and more people. I don't want every open space to be a housing development. I want the open/empty spaces left alone.
146	Mark Glaner	3808 Saint Julien Way. Roseville, CA 95747	mark.glasner@gmail.com	01/15/2019	Dry Creek is the last rural oasis in a part of Roseville surrounded by out of control residential development.
147	Brooks Whitehead	4485 Seabiscuit Drive, Roseville, CA 95747	Rbrookswhitehead@gmail.com	01/15/2019	This will generate traffic congestion, noise, air pollution, localized water problems and destroy our rural lifestyle.
148	DALBAG & TEJINDAR RAN	CA	tkrandh@gmail.com	01/15/2019	This is important to me since we built our home 10yrs ago, we have raised our children in a quite uncrowded neighborhood.
149	stanley del dotto	8390 cook riolo road roseville ca 95747	standd@gmail.com	01/15/2019	we are country not city
150	Vicki Kondrad	2200 Vineyard Road	vkondrad@gmail.com	01/15/2019	I've lived in this dry Creek area for about 11 years now. It's special to me and my family. It's usually quiet and plenty of room for my daughter to play.
151	Irina Makovsky	4309 Sir Barton Ct	imatushevskiy@hotmail.com	01/15/2019	Every morning there is traffic on PFE. There was no traffic like this when we first bought our home. We want to keep this area safe and rural. Thanks!
152	Randy Rich	9421 eagle springs court	rrich@kloveair1.com	01/15/2019	I moved into thi area to have a real country feel. In 8 years I have watched 5 subdivisions go up around us. Roads aren't capable of handling the traffic.. already overcrouded
153	Brandon Morgan	CA	brandon.morgan2177@yahoo.com	01/15/2019	I have lived along Vineyard Lane all of my life and so has my family 60 years before. Over time more and more housing developments have been popping up, prompting animals to be pushed out of their homes into smaller and smaller areas. Vineyard Lane is a nice stretch of calm rural road and it is sad to see it become more and more crowded and stuffed with buildings.
154	Carol Storemski	4333 Majestic Prince Way Roseville 95747	Caski28@aol.com	01/15/2019	We have enough homes in this area and to lose all these acres which a lot have cows and beautiful trees is a shame to see gone. It will bring more traffic noise and ruin this wonderful countryside which we all enjoy living next to. Save Roseville!!
155	Guowei Li	CA	liguowei70@yahoo.com	01/15/2019	Keep traffic and crowd out of dry creek community
156	Lynda Rocha	9210 Pinehurst dr roseville ca 95747	lk.r100@hotmail.com	01/15/2019	Imoved out here to out in the County. The traffic will be horrible. The people already drive way dangerously fast on vineyard.
157	Martin Mudron	3200 Mercedes Place	mudronmartin@gmail.com	01/15/2019	Congestion, lack of roads. It's bad enough with the traffic already, now had at least another 127 cars. That adds noise, pollution. We moved here to be away from subdivisions. That is at least 127 more cars speeding down vineyard.
158	Saab Bagri	3433 Lanie Ct	Saab.bagri@yahoo.com	01/15/2019	Rural feel and home value
159	Carl Foote	2175 Central Ave, Roseville, Ca 95747	footecarole@hotmail.com	01/15/2019	We have lived in this area for over fifty years and like the rural atmosphere. We do not need more growth, traffic or housing. It is extremely difficult getting onto Baseline Road now and I would hate to see what it will be like with all these proposed homes.
160	Sean Zhong	California	sz_uop@yahoo.com	01/15/2019	Preserve our life style
161	John Eslinger	8527 Indianwood Ln, Roseville CA 95747	John@buildersadv.com	01/15/2019	Quality of life
162	Jackie Willard	Anacapa Dr.	snowbunny2612@yahoo.com	01/15/2019	Roseville is my home and there are already too many people here that our roads cannot handle all the new traffic!
163	Terry Sherrill	1546 Misty Lane	tdszinman@gmail.com	01/15/2019	Just moved to the neighborhood and would like to keep it the way it is. There is plenty of room for high density development west of here down Baseline Rd.
164	James Treis	8390 Eva Lane	Treis_Family@hotmail.com	01/15/2019	Increased traffic on Vineyard leading to more cars running the stop sign at Vineyard and Eva Lane.
165	Martin Calderon	4340 Whirlaway Court	WGcalderon@aol.com	01/15/2019	Roads wil be overcrowded.

	NAME	ADDRESS	EMAIL	DATE SIGNED	COMMENT
166	Anne-Marie Farr	1607 Revere Dr	Amlfarr@yahoo.com	01/15/2019	Those that live in that area chose that area to live because they wanted more land and less development.
167	David Hanjiev	California	dhanjiev@gmail.com	01/15/2019	I do not want to live near dense housing.
168	Kimberly Johnson	California	Kijohnson0907@gmail.com	01/15/2019	We would like to keep the rural feel to our neighborhood and avoid all the additional traffic this would bring to the community
169	Krissy West	3200 Central Ave Roseville	krissyw77@gmail.com	01/15/2019	I love our little rural community and the open pastures we have remaining.
170	Shirley Yang	CA	mcsky8@gmail.com	01/15/2019	Maintain our current rural lifestyle.
171	Brittany Gordon	1652 Alnwick Dr	brittanygordon911@gmail.com	01/15/2019	I grew up in this small community. It is heart breaking to watch the farm land slowly become large city. With high density housing comes crime and destruction of natural resources.
172	Sandra Smith	4070 PFE Road Roseville CA 95747	Smithasandra@yahoo.com	01/15/2019	To preserve our rural community!
173	Joe Peck	3793 Westchester Drive	joepeck7975@comcast.net	01/15/2019	The local infrastructure cannot support this additional expansion. Also, the proposed development appears to be poorly planned with extremely small lot sizes.
174	Isabel Herrera	2860 Central Ave	Mrs59rag@gmail.com	01/15/2019	I am against over crowding
175	Liz Crawford	3220 Central Ave.	palominoowner@yahoo.com	01/15/2019	Will be too much traffic. And I have safety concerns over the impact.
176	Shawna Snyder	4333 Secretariat Way	shawna_93257@yahoo.com	01/15/2019	We moved to keep away from the daily traffic, loud streets and enjoy a country feel .
177	Dave Killer	9000 Pinehurst Dr	killerdr7@yahoo.com	01/15/2019	Keep property values up and retain the look and feel of the area. I'm not against development but would like to see a lot size minimum of 1 acre and a range of 1 to 3 acres.
178	James Dennis	CA	sixofsix@aol.com	01/15/2019	This area is designated a rural housing area and is surrounded by large rural lots. This high density development, if approved, will impact the rural lifestyle of the surrounding neighborhood, increase traffic on a road not designed for that amount of traffic, increase the urban "light blight" in the area, and potentially impact already overcrowded neighborhood schools.
179	Steve Micheli	CA	stevemicheli@comcast.net	01/15/2019	quality of live in Roseville as we now it and not starting a trend of over building
180	William Finger iii	8080 Milnes Ave	Wfinger@msn.com	01/15/2019	I like my country living go build down baseline at Watt
181	Robert Townsend	4630 Waterstone Dr., Roseville, Ca. 95747	fundctr@comcast.net	01/15/2019	The additional traffic that will be created will have to use Crowder to exit, or Vineyard. If Vineyard was extended to Walerga I would feel differently.
182	John Bustos	8903 Caspian Court	jbustos@surewest.net	01/15/2019	Over Congestion
183	Ahnieveree Walker	CA	aviwalker@comcast.net	01/15/2019	.
184	Laura Smith	3180 Glen lane.	Bootiekay@gmail.com	01/15/2019	I have lived here for 37 years and have seen a lot of growth, we need to maintain what was put into the plan many years ago and that was 2 acre minimum . We moved here to be in the country. But as I have seen many times before money talks. And the developers don't live here.
185	Dana Murray	4631 Waterstone Drive	danabmurray@yahoo.com	01/15/2019	To keep the larger lots and semi rural feel that makes this area different. There can be tract development but this appears to be so cookie cutter. Break things up make the homes semi custom so it feel unique. What about much larger lots with grapes planted on them. After all it is on Vineyard. From Baseline south to the county line and Watt east to Foothill Blvd should all be of a larger custom home type and feel with grapes and equestrian thrown in the mix. Dana Murray
186	Kathleen Read	2995 Baseline Rd	kathleen.l.read@gmail.com	01/15/2019	There is already far too much traffic on Baseline and Cook Riolo. Adding another development will increase the traffic further.
187	Laura Ball	8109 oak ave roseville ca	laurasono1@yahoo.com	01/15/2019	I live in this neighborhood

	NAME	ADDRESS	EMAIL	DATE SIGNED	COMMENT
188	Cathy Rich	9421 Eagle Springs Ct	cathy_89128@yahoo.com	01/15/2019	I have moved here for the rural structure and spacious lots. Dense zero lot line developments contradict that and will reduce my property value.
189	Lena Calderon	4340 Whirlaway Court	lenabobena46@aol.com	01/15/2019	To avoid congestion!
190	Michele Loftin	1210 Chenin Blanc Circle	Mrloftin@me.com	01/15/2019	I live next to the proposed development. It will create too much traffic.
191	Stacy Robinson	3876 Muirwood Lane	smrobinson22@gmail.com	01/17/2019	I grew up in the Dry Creek community and am raising my own family here because of the childhood I had. With the imminent destruction of historic Dry Creek Elementary and the efforts to rezone the area for mass development, I'm watching everything beautiful about this place get systematically destroyed in the name of so-called "progress". It has to stop NOW, before the damage is irreparable.
192	Tiffany Latino	2050 Central Ave Roseville, CA 95747	tiffanylatino@comcast.net	01/17/2019	We have lived in this neighborhood since 1993 and the reason we live here is because it is Rural. It's a piece of heaven for us to feel like we live in the country but the convenience of the grocery store etc. is right near by. Putting a high density neighborhood right in the middle of us would definitely hurt our quality of life.
193	Alexandra Cadena	CA	aleja_sjsu@yahoo.com	01/17/2019	I live in this community and I like the peacefulness of it. It's quite and there aren't too many areas in the world that are quite. The ecosystem here is nice as well.
194	Dave Skelton	3200 Central Ave	dskelton30@yahoo.com	01/17/2019	Want to preserve our rural neighborhood!
195	John Schaefer	4031 Ravensworth Pl.	schaeferss@comcast.net	01/17/2019	Placer County created an open, low density, rural environment as an attractive life and recreation area for all to enjoy. We bought a home in Morgan Creek, in the protected Dry Creek area to enjoy the environment and community that Placer created. The area is protected by the Dry Creek Community Plan, zoning, and density restrictions. We want Placer County to continue to protect the area that they established and we chose to live in.
196	Shawn Schneider	9165 Pinehurst Drive Roseville Ca	sschneiderkeebler@yahoo.com	01/17/2019	We have too many homes being built in our community.
197	Connie Roberts	8300 Cook Riolo Rd	annefan22@gmail.com	01/17/2019	Would increase traffic and pollution in our area.
198	Barbara Osella	2765 Vineyard Rd	jbo@surewest.net	01/17/2019	High Density is my objection- not in line with how property should be developed in our area
199	Jennifer Padilla	9690 Canopy Tree Street	jloffman@hotmail.com	01/17/2019	Dry Creek needs to be kept low density, as promised in the master plan.
200	Rebecca Rodgers	Country place dr	rebeccarodgers@hotmail.com	01/17/2019	The impact of all the houses and traffic are NOT feasible for that area
201	JOHN CASTRO	CA	johnwcastro@gmail.com	01/17/2019	I like Roseville the way it is
202	Debbie Freeman	CA	a1shopper1@yahoo.com	01/17/2019	We live in Morgan Creek and love that is rural and no traffic. Would love it to stay that way.
203	Dave Bourne	3432 Lanie Ct	DAVE.BOURNE6@GMAIL.COM	01/17/2019	We've seen the impacts to traffic from the new subdivisions along PFE from Cook-Riolo to Walerga. This appears to be even higher density and would feed Creekview Middle School where traffic is becoming an issue as well.
204	Kay Davis	1820 Frosty Place Roseville CA 95747	kaydavis2000@aol.com	01/17/2019	Do not want to see - Lower property appraisal, more traffic, change of lifestyle.
205	melinda ortiz	8060 Milnes Ave.	melindamortiz@gmail.com	01/17/2019	1) One acre minimum lot size 2) Rural community 3) don't want city sized housing tracts in our country living.
206	Randy Wootton	8993 Creekstone Circle	rcwootton@comcast.net	01/17/2019	It would be a shame to see this beautiful area and lifestyle for the people who already live here destroyed by over development. There are plenty of opportunities for developers in communities such as Roseville and Antelope that welcome high density overbuilding, traffic, and crime issues. It would be nice to see Dry Creek remain a rural hold out.
207	Sylvis Redondo	3200 Central Ave, Roseville 95747	sylredondo51@gmail.com	01/17/2019	Want to keep the rural setting in this area and don't want more traffic.
208	Alyssa Basden	Santa Fe Cir.	Alyssamocny@gmail.com	01/17/2019	My parents have lived in the Dry Creek area for 10+ years and I also work in the Dry Creek area. It is very important to me to keep Dry Creek rural.
209	Li Lau	3612 Shingle Creek Court	lau3833@gmail.com	01/17/2019	Want to preserve the rural area around here.

	NAME	ADDRESS	EMAIL	DATE SIGNED	COMMENT
210	Stacey Santos	1465 E Hidalgo Cir	Staceysantos86@gmail.com	01/17/2019	We drive this road every day and we enjoy seeing all the wildlife and farm lands there. It takes us away from the cookie cutter homes and enjoy the peaceful drive. You would be destroying this place for our wildlife and taking away the beauty of the farms
211	Jonathan Basden	1400 Santa Fe Cir	Jonathanbasden@me.com	01/17/2019	My family lives here and we would like to keep dry creek as it is.
212	alex morse	4621 Waterstone Dri	morsealex11@gmail.com	01/17/2019	The will have an undesirable impact on noise, traffic congestion, and destroy the limited rural lifestyle forever.
213	Michael McKenna	8511 St. Germaine Court	mckna@comcast.net	01/17/2019	I have lived in Morgan Creek for 9 years and love it here, but the planned development will make it just like anywhere else. Crowded and busy.
214	charles harrod	2890 vineyard rd,roseville ca.95747	raln777@surewest.net	01/17/2019	keep things the way they were.loved it back in the old days

Shirlee Herrington

From: katfields <katfields@comcast.net>
Sent: Thursday, February 28, 2019 9:02 PM
To: Placer County Environmental Coordination Services
Subject: Brady Vineyard Project

Dear Ms. Herrington.
I live in the Dry Creek Community, in Placer County, on the corner of Vineyard Rd. and Eva Lane. I am writing to you to state my adamant opposition to the planned Brady Vineyard housing project.

My spouse and I have lived in our home for 25+ years. We purchased our property because we loved (and still do) the rural lifestyle. We have 2 acres on which we have had a variety of goats, geese, chickens, birds, dogs, and cats over the years. We were both raised in a similar environment, hence we were excited to find our little corner of country. We are surrounded by neighbors with horses, cattle, sheep and other livestock. In addition, we enjoy the area wildlife, such as deer, peacocks, Canadian geese, pheasants, hawks, rabbits and other native species. We love the fields, pastures, creeks, trees and wildflowers.

Sadly, I fear Placer County is slowly bowing to the almighty developers and the promise of a payday because the dollar speaks louder than the hearts of the country dwellers. I have emotional reasons for my objection to this project, but I also have very real environmental concerns. Following are just a few of my major concerns.

Our rural community does not have the infrastructure to support 119 more homes in the Brady Vineyard corridor. Vineyard is a 2 lane road with no curbs, sidewalks, gutters, or shoulder. It can hardly handle the current traffic. There is no room for pedestrians now and the dangerous driving habits of some people are going to cause a serious accident or someone is going to be hit by a car some day. There is no room to widen it without encroaching on existing residents' properties.

In addition, the native wildlife are being pushed into a smaller and smaller living, breeding and life sustaining area. With the developments of the Westpark area, Morgan Creek, PFE road, etc. the fields where many of the birds of prey hunt; other birds nest; cattle eat; and deer, rabbits, raccoons, possums, and skunks live and breed, is being eaten away by concrete, asphalt, shopping centers and houses.

Water run-off and local flooding is already starting to be a problem for some rural residents. The more concrete and asphalt added will only make it worse. We are currently on a well and septic system that could be impacted with a saturation of run-off from further development.

I guess I could sit back and let "progress" make its way into our rural community. Or I could even sell my house and move to get away from it. But I choose to stand and fight this project with my heart and soul. I love where I live and breathe!

Please forward this to anyone and everyone who has input and /or approval authority over the Brady Vineyard housing project.

Thank you for your time in reading this. I appreciate any feedback.

Sincerely,
Kathy Fields
katfields@comcast.net

(916) 771-3009

Sent from my Verizon, Samsung Galaxy smartphone

Shirlee Herrington

From: David Hanjiev <dhanjiev@gmail.com>
Sent: Wednesday, February 27, 2019 6:36 AM
To: Placer County Environmental Coordination Services
Subject: Brady Vineyard Subdivision EIR comment

I live across the street from the proposed development. We have constant issues with water run off from the latest development on Vineyard. This development encroaches on our rural lifestyle. I have seen magnificent wild life on this land; deer, foxes, mountain lions, and falcons. The wildlife in our area depend on this land. Please consider the pollution, wildlife, traffic, and water runoff impacts. I oppose the medium density zoning proposal. Please retain existing agricultural zoning.

David Hanjiev
1811 Frosty Place

Shirlee Herrington

From: Tiffany Latino <tiffanylatino@comcast.net>
Sent: Thursday, February 21, 2019 6:26 AM
To: Placer County Environmental Coordination Services
Subject: Brady Vineyard

Hello,
I am writing today to oppose the Brady Vineyard housing project. I have lived in the Dry Creek community since 1993. The reason I live here is because I love feeling like I live in the country but I'm still close to grocery store etc.
This project will ruin the way of life the people who live here love so much. Please protect our rural community.
Sincerely,
Tiffany Latino
2050 Central Ave
Roseville, CA 95747
916-799-3126

Sent from my iPhone

Shirlee Herrington

From: Tiffany Latino <tiffanylatino@comcast.net>
Sent: Thursday, February 21, 2019 12:04 PM
To: Placer County Environmental Coordination Services
Subject: Brady Vineyard

Hello,
I sent a message earlier opposing the Brady Vineyard project but I didn't talk about how much Wildlife lives in that area. We have deer, turkey, coyote, skunk, possum, fox, and much more living in that area. That is another reason we love where we live. Please don't destroy their habitat.
Thank you for listening,
Tiffany Latino
2050 Central Ave
Roseville, CA 95747

Sent from my iPhone

Shirlee Herrington

From: guowei li <liguowei70@yahoo.com>
Sent: Wednesday, February 27, 2019 12:40 PM
To: Placer County Environmental Coordination Services
Subject: Please consider twice and STOP "Brady Vineyard Subdivision"

Hi Shirlee

As Morgan Creek resident for many years, i am against "Brady Vineyard Subdivision" project because:

(1) Huge environmental impact - I am morning jogger and used to run along vineyard road around brady lane. I noticed a few times the following animals at that lot: peacocks, two to three deers, yes, one Giant Garter Snake, not to mention coyote, or something like that. So now I try not to run around that area to void unnecessary encounter.

(2) Traffic impact - Brady Lane is Local Rural Residential based on it's roadway width and R/W width. Without widening Brady Lane all the from Vineyard Rd and Baseline Rd, it has not capacity to handle future Average Daily Traffic (ADT). If development is necessary, low-density will be only choice for this area.

Thanks so much!

Guowei Li
916-667-2223

Shirlee Herrington

From: Sarah Little <slsexton101@gmail.com>
Sent: Wednesday, February 27, 2019 2:57 PM
To: Placer County Environmental Coordination Services
Subject: Brady Lane Proposed Development

Shirlee Herrington,

Early last year I noticed four or five loads of site/fill dirt dumped at this site. I pointed it out to my husband as we drove by on our way home. He said that they were going to use it to fill the creek that runs through the property so they can sell it. I was incredulous. Sure enough about six months later all the trees, oak and cottonwood, along the creek were leveled and the creek filled in.

We live in the Dry Creek Estates HOA off of PFE and Billy Mitchell. First they leveled the property to put in a golf course. Then they pulled up a bunch of trees to make way for the new bridge on Cook Riolo. After that was the cutting down of massive oaks along Dry Creek and Walerga for who knows why. Now we have green space destroyed on the south side of PFE for additional housing. The noise, crime, pollution, litter and traffic has increased tremendously in the last 10 years. Now they want to start on Brady Lane and Vineyard with a gated community of McMansions.

I understand developers want to make money. I also understand that building houses provides jobs. Not long term permanent jobs, but for a while at least. I am not naive enough to believe our once beautiful bit of Placer County would stay undeveloped forever, but for the love of God, give us a rest for a bit. Give the environment a rest. Save some of the natural habitat and green space as natural habitat and green space. Dry Creek has a rough time of it as it is with the railroad dumping petroleum products and the goats eating the natural understory.

Can we decrease the number of houses, size of developments and speed at which developers are getting rich while nature suffers?

Sincerely,
Sarah LIttle
slsexton101@gmail.com
5156643441
4122 Grice Ct
Roseville CA 95747

Shirlee Herrington

From: Vanessa Luna <info@vanessaluna.com>
Sent: Tuesday, February 26, 2019 2:48 PM
To: Placer County Environmental Coordination Services
Subject: Shirley Herrington:

Hello Shirley!

My name is Vanessa Luna and I am writing this email in regards to the Brady/Vineyard Subdivision. My family and I have lived in the Dry Creek area since 1996 and cherish the rural area feel that surrounds us. We strongly oppose that this subdivision come to fruition because of the amount of congestion and change in culture that this will cause. There are way too many homes being proposed! We live on two acres and hold this area close to our heart because of the unique country-feel in the Roseville community. Continuing the current zoning with one home per acre will help maintain our pocket of land in a fast growing city . Do not make the change!!! Please take into consideration the voice of the people that currently live here and those starting families making Dry creek their roots.

I appreciate your time.

Best,

Vanessa Luna
Lead Artist,
Vanessa Luna Makeup

M (916) 837-3005

Shirlee Herrington

From: Paul Mocny <paulmocny@yahoo.com>
Sent: Wednesday, February 27, 2019 3:58 PM
To: Placer County Environmental Coordination Services
Subject: Vineyard / Brady Development Plan

TWIMC,

We moved to Roseville in 1996 into the housing tracts on the North side of Baseline. We had a plan to move up the hill towards Auburn to get into a more peaceful rural setting.
Luckily we found a home in the Dry Creek area that provided us the best of both worlds. A rural environment but still in town so our kids could stay at Woodcreek HS.
All of us living in the Dry Creek area moved here for the rural feel and this development at Brady & Vineyard will destroy that. We understand the current zoning with one home per acre such as the development at Vineyard and Cook Riolo is proposing. This is keeping in line with a non-tracthome feel.
Please don't allow a rezoning for this development. There are thousands of acres in West Roseville that can be used for this proposed housing density that wouldn't affect anything but barren land.
Dry Creek is established as a rural area, please keep it that way.

Thanks,
Paul Mocny

Shirlee Herrington

From: Mark Mossawir <memossawir@comcast.net>
Sent: Tuesday, February 26, 2019 11:17 AM
To: Placer County Environmental Coordination Services
Subject: Brady Subdivision

I object to the density of this development. The Dry Creek Community has had extensive open space and low density as a buffer between it and the high density of the City of Roseville and I believe the low density show be maintained. The parcel on Vineyard and Cook Riolio at 37 homes on 37 acres is reasonable. This proposal on Brady is not.

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov
Twitter: @CA_NAHC

RECEIVED
FEB 14 2019
CDRA

February 12, 2019

Shirlee Herrington
Placer County
3091 County Center Drive, Suite 140
Auburn, CA 95603

RE: SCH# 2019012050 Brady Vineyard Subdivision Project, Placer County

Dear Ms. Herrington:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
    a. A brief description of the project.
    b. The lead agency contact information.
    c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
    d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
    a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
    a. Alternatives to the project.
    b. Recommended mitigation measures.
    c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
    a. Type of environmental review necessary.
    b. Significance of the tribal cultural resources.
    c. Significance of the project's impacts on tribal cultural resources.
    d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
    a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
    b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
    a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
    b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
   a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
   b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
   a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
   b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
   c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:

Sharaya.Souza@nahc.ca.gov.

Sincerely,

for Sharaya Souza
Staff Services Analyst

cc: State Clearinghouse

Shirlee Herrington

From: Joe Osella <jbo@surewest.net>
Sent: Wednesday, February 27, 2019 6:47 AM
To: Placer County Environmental Coordination Services
Subject: Brady-Vineyard Subdivision

Thank you for letting us voice our objection to the proposed project called Brady-Vineyard Subdivision. We are not opposed to development because it is inevitable but the amount of homes on this project is our objection. It was always our understanding that the general plan for this community was to keep the integrity of country living with larger house plots. If this is approved what is going to stop the next piece of property in our area to develop in the same manner which would completely change this community. We speak for our whole Dry Creek Community when we say there is an abundance of pride as home and property owners in the area and this is evident in how well every property is presented and kept. We strongly oppose the density of this proposed project and would like to see it developed as part of this beautiful community and not another city subdivision.

Thank you,
Joe and Barbara Osella
2765 Vineyard Rd
Roseville CA 95747
916-771-0267

Pacific Gas and Electric Company

Plan Review Team
Land Management

PGEPlanReview@pge.com

6111 Bollinger Canyon Road 3370A
San Ramon, CA 94583

February 28, 2019

County of Placer
c/o Patrick Dobbs, Senior Planner
3091 County Center Drive, Suite 190
Auburn, CA 95603

Re: Proposed Brady Vineyard Subdivision Project
Corner of Vineyard Rd and Brady Ln

Dear Patrick:

Thank you for giving us the opportunity to review the subject plans. The proposed Brady Vineyard Subdivision Project is within the same vicinity of PG&E's existing facilities that impact this property. There are overhead electrical distribution lines located on the west side of the development. The overhead line runs parallel, north to south, with the property line. That same line continues easterly, across your proposed Lots E & G, to connect service to the existing structures located at 1940 Vineyard Rd. There is no specified width to advise you of, however, please refer to CPUC General Order 95 to be in compliance with regulations.

As a reminder, please contact Underground Service Alerts (USA) by calling 811 prior to commencing any construction activities so all underground utilities may be accurately located and marked.

Please contact the Building and Renovation Center (BRSC) for facility map requests at BRSCSSR@pge.com and PG&E's Service Planning department at www.pge.com/cco for any modification or relocation requests, or for any additional services you may require.

If you have any questions regarding our response, please contact me at jult@pge.com.

Sincerely,

Jose Antonio Lopez, Jr
Land Management
925-328-6116

Shirlee Herrington

From: BOB RAETZ <braetz@comcast.net>
Sent: Monday, February 18, 2019 8:08 PM
To: Placer County Environmental Coordination Services
Subject: Brady Vineyard Housing Proposal - EIR

It is difficult to contact Placer County regarding this proposed development. I cannot get any of the "links" to forward me anywhere. I hope this comment will get to the appropriate site/person.

This project is another nail in the coffin for the traditional rural lifestyle that the current residents of the Dry Creek Community bought into when we moved here. We have lived here for 25 plus years and have endured the increased traffic, noise and trash that has followed each assault (project development) on our rural lifestyle. We moved here based on the zoning requirements of one house per acre, two acres or five acres. Now, the proposed project Brady Vineyard project is proposing about four houses per acre. Are the current parcel owner going to be allowed to sub-divide our acreage to allow the same density of housing? If four houses per acre is the new norm, shouldn't current residents be allowed to profit from the new zoning? The benefits listed of parks and trails won't benefit anyone outside of the new development as it will be a gated community. Also, the project will only widen Brady Lane and Vineyard Road as they front the project and then funnel the additional traffic on to existing inadequate roadways. The children of the new neighbors will attend the Dry Creek schools. This will cause additional traffic as children are taken to and from schools. Or they will walk/bike in the vehicle lanes of the narrow roadways. Lastly, will the EIR take into consideration the impacts on the wild and domestic animals. This area is home and habitat to many forms of wildlife: deer, turkeys, peacocks, pheasants, ducks geese, raccoons, skunks, opossums, rabbits and coyotes. This development will put additional pressure on these animals as they are already being forced out of areas the city is developing. Domestic animals: dogs, cats, cattle, horses, goats, sheep and chickens will be exposed to the additional noise and pollution the increased traffic will bring.

And there are other development proposals in the wings!

Kathy Fields

Bob Raetz

8473 Eva Lane

Roseville, Ca. 95747

Shirlee Herrington

From: TEJINDAR RANDHAWA <tkrandh@gmail.com>
Sent: Tuesday, February 26, 2019 8:20 PM
To: Placer County Environmental Coordination Services
Subject: Brady-Vineyard-Subdivision

Hello Shirlee, we live on Vineyard Rd, Roseville for the last 11yrs with our children and had built our home in a rural setting for better health without pollution and a natural way of life. we have already seen traffic growing over the years with all the homes built around, Baseline and Fiddyment area. There is a rise in noise and pollution instead of a quiet neighborhood. Enough is enough, I see animals also suffering with all this building going on. Please help our neighborhood stay the way it is. Green and healthy.

Thank you,
Tejindar Randhawa

Shirlee Herrington

From: Connie Roberts <annefan22@gmail.com>
Sent: Tuesday, February 26, 2019 12:02 PM
To: Placer County Environmental Coordination Services
Subject: Dry Creek Development Proposal

We moved to this area in 1979 for the rural setting, and for the peace and quiet of the area. We have seen tremendous growth all around us with increased traffic, pollution, and crime. Another high density housing project will increase traffic, pollution, and will diminish the rural setting of this area. Because of already increased traffic on Cook Riolo Rd., we can often smell gas fumes from passing cars and buses. Things will only get worse if this proposed project is approved.
C. Roberts

Sent from Mail for Windows 10

Date: February 21, 2019

To: Community Development/Resource Agency, Environmental Coordination Services

Re: Brady Vineyard Subdivision

Shirlee Herrington,

My name is Matt Russell, I live at 1975 Vineyard Rd. across the street from the planned development. Also known as APN 473-03-001. My comments and concerns to the planned subdivision are as follows:

Storm Water Run Off

The unnamed creek running through the subject property flows directly though my property. What will the impact of the additional storm water be to my property? I already have a decent amount of erosion with the current volume of water during a storm. With an additional 25 acres of hardscape run off into the creek I'm concerned about the effect it will have to my property. Not only in volume of additional water, but there will be an increase of pollution as well. All the oils, grease, fertilizer, and garbage that runs through the developments storm drains will end up in my yard.

Traffic and road improvements

With the additional traffic to Vineyard and Brady, how is the County planning to prepare for the additional wear and tear to Vineyard and Brady? It appears only the north half of Vineyard is being improved. Why not the south side? The development will affect the whole road and not just the north half. The County needs to think ahead. The smaller properties on the south side of Vineyard are not likely to be developed into subdivisions and thus the cost to improve the south side will fall on the County when and if they ever decide to make such improvements and complete the road. Why not make that a condition of approval for this development?

Rezoning

I'm not against development of this property. I am against re-zoning it from Residential Single-Family, combining Agriculture, minimum Building Site of 20,000 square feet (RS-AG-B-20) to RS-B-X-5,000. This is crazy to me. What is the point of zoning designation if someone can just come in a rezone for the right amount of money. I moved to this area for it's rural feel and I wouldn't mind is they were to create 20,000 sq.ft. lots, but to come in and completely undermine the current plan and add 124 high density postage stamp lots is very concerning to me. If you were to look at the rest of Vineyard avenue, West of Brady, the proposed subdivision does not fit the community.

Sincerely,

Matt Russell

Shirlee Herrington

From: Matt Russell <mdrussell77@hotmail.com>
Sent: Friday, February 22, 2019 8:50 AM
To: Placer County Environmental Coordination Services
Subject: Re: Brady Vineyard Subdivision public comment

Thanks Shirlee,
I attended the public meeting last night and I'd like to add a request if I could. I live down stream from the planned subdivision and I will be directly affected by the additional storm water runoff this subdivision will create. I'd like the firm who's conducting the EIR come out to my property to evaluate the effect the planned development will have on my property. The creek runs through my property from the northwest corner of my lot and exits at the southwest corner, so it cuts my property in to two areas. During a storm event the creek runs at capacity and any additional water will have a significant effect on erosion and could take out the bridge which is my only access to the other side of my property. Let me know if this can be arranged. I will be able to coordinate with their schedule.

Thank you.
Matt Russell

From: Shirlee Herrington <SHerring@placer.ca.gov> on behalf of Placer County Environmental Coordination Services <CDRAECS@placer.ca.gov>
Sent: Thursday, February 21, 2019 3:36 PM
To: Matt Russell
Cc: Emily Russell
Subject: RE: Brady Vineyard Subdivision public comment

Thank you for your interest in the subject project and for taking the time to provide comments. This is to confirm that your comments have been received. Also, you are now on our master email and/or USPS distribution list for the subject project and, as such, you will receive updates and notifications of future opportunities for public participation and input.

Thanks.
.....
Shirlee Herrington
Community Development Technician
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190, Auburn, CA 95603
530-745-3132 fax 530-745-3080
.....

From: Matt Russell [mailto:mdrussell77@hotmail.com]
Sent: Thursday, February 21, 2019 12:32 PM
To: Placer County Environmental Coordination Services
Cc: Emily Russell
Subject: Brady Vineyard Subdivision public comment

Please see the attached word document for my comments on the Brady Vineyard Subdivision.

-Matt Russell

February 23, 2019

RECEIVED
FEB 28 2019
CDRA

Ms. Shirlee Herrington
Environmental Coordination Services
Placer County Community Development Resource Agency
3091 County Center Drive, Suite 190
Auburn, CA 95603

Dear Sirs:

As a retired resident of Morgan Creek, I strongly encourage you to disapprove the proposed Brady Vineyard Subdivision development. This high density development is not in keeping with the Placer County guidelines and requirements for this rural area, and will negatively impact the environment for all surrounding communities.

The Dry Creek – West Placer Community Plan establishes many goals, policies, guidelines, objectives, and directives for development in this area. All reflect Placer County's commitment to establishing an open, rural, peaceful area for residents and the public in general. These elements of the Plan include:

- " ... minimal adverse effect on the natural resources of the area."
- " ... provide for valuable open space."
- "Limit high and medium density residential development to areas ... which are compatible with surrounding land uses." (Existing surrounding homes are on one-half to several acre lots.)
- "Encourage compatibility between neighboring land uses."
- " ... retention of important open space features is critical to the future quality of life in the Plan area."
- "Encourage the use of greenbelts or landscaped areas along roadways as a design feature of a development in order to mitigate noise impacts and provide valuable open space."
- "Lots in subdivisions shall be of adequate size ... without ... creating a feeling of overcrowding."
- "Protect the natural beauty and minimize disturbance of the natural terrain and vegetation."

The above are only a small sample of the specific goals and policies to be complied with to preserve the Dry Creek Corridor environment that has been established as a protected area for all to enjoy. The proposed Brady Vineyard Subdivision development violates all these county objectives, and adversely impacts all who live in the area.

My wife and I moved to Morgan Creek in 2009 when I retired. We chose the area because it is peaceful, uncrowded, low traffic, and naturally beautiful. We assumed that the existing Placer County plans, guidelines, and policies would ensure that the area remained so. We hope that we will not be disappointed to find that Placer County did not mean it.

Please disapprove the proposed development.

Sincerely,

John Schaefer

John Schaefer
4031 Ravensworth Place
Roseville, CA 95747

Shirlee Herrington

From: Laura Smith <bootiekay@gmail.com>
Sent: Friday, March 01, 2019 8:51 AM
To: Placer County Environmental Coordination Services
Subject: Dry creek

I can’t believe that people who don’t even live in our area have control over what happens in our area. We the people do not want high density we have spoken and we need to be listening to who do you think you are to change our lifestyle we have been here for 37 years and have raised our family and deserve to keep Dry Creek a ruralarea , you people don’t even live here and all you’re concerned about is money we are concerned about our every day life and the impact that all those houses are going to have on our streets our school and mostly our lifestyle please please listen to the people.

Sent from my iPhone

Shirlee Herrington

From: Sean Smith <sean.smith3268@gmail.com>
Sent: Wednesday, January 30, 2019 7:40 PM
To: Placer County Environmental Coordination Services
Subject: Proposed "Brady Vineyard Subdivision"

I live on Vineyard Rd. I have grown up in the Dry Creek community area. I thought we had 2 acre minimums. Why is it that developers with money can come into our community and ruin it? 119 homes on 24 acres. That's HORRIBLE. The impact to the traffic on Vineyard Rd is going to be HUGE as Creekview Ranch will be their school.

I understand that development and change will occur and I'm not trying to stop it. However, don't ruin our community just for money by cramming 119 homes in there. The developers don't have to live with the aftermath. Please preserve our unique community that we've had to fight to hold onto. 2 acre minimums is the standard.

I plan on attending the meeting on 2/21 @ 3pm to voice my opinion and concerns. Please hear the voice of the people of the community before proceeding.

--

Sean Smith
2800 Vineyard Rd, Roseville, CA 95747
916-719-8324